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Industry Impact Studies

TEXTILE AND CLOTHING

draft report

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1. DESCRIPTION OF THE INDUSTRY

1.1 Definition

The textile industry according to the NACE definition covers the preparation, spinning, weaving and knitting of natural (wool, cotton, silk, linen, flax, ramie, jute) and man-made fibres (synthetic or cellulosic). It is also covers the process of textile finishing, the production of made-up articles bed and table linen and blankets, the manufacture of carpets, and the production of a few knitwear products, such as panty-hose, stockings, and pullovers. The industry produces intermediate products such as yarns and fabrics for the clothing industry, industrial textiles for other industries and sectors, and made-up products for the consumer [25].

The other field of study covered in this report concerns the clothing industry. NACE defines the clothing industry as manufacturers of woven and knitted garments and clothing accessories. The industry's products are classified in a number of ways, for example, into men's, women's and children's wear, outerwear, formal and casual or sportswear, or low, medium or high quality wear. The production of clothing involves a number of different stages: design (styling, prototyping, development of collections), sourcing of fabrics, planning of cutting, manufacture (cutting, sewing, assembly, pressing, finishing), and packing [25]. Some business units produce innovative, high fashion apparel while others concentrate on adoptions of styles that are gaining acceptance with consumers and for which design can be reasonably projected. Still other firms produce apparel having longer production runs, such as basic underwear or T-shirts, whose styles do not change as rapidly and for which demand can be predicted more accurately.

The manufacture of final products in the textile and clothing industry could be divided into several broad categories of activities. The first stages covers the production of natural and man made fibers. The second and third stages are spinning, weaving and knitting. The final stage is the production of clothing and other household items, such as carpets and other man-made articles. Some of the production process does not involve spinning or weaving (for example, non-woven), whereas articles made from woven or knitted fabrics involve all four stages. These stages may be separated geographically within or across national borders. Furthermore the individual items at each stage use material, capital and labor in widely divergent proportions. The textile and clothing industry is still commonly thought of as labor intensive. On the other hand, in the clothing industry capital intensity is significantly lower than in textiles (see Figure 1)

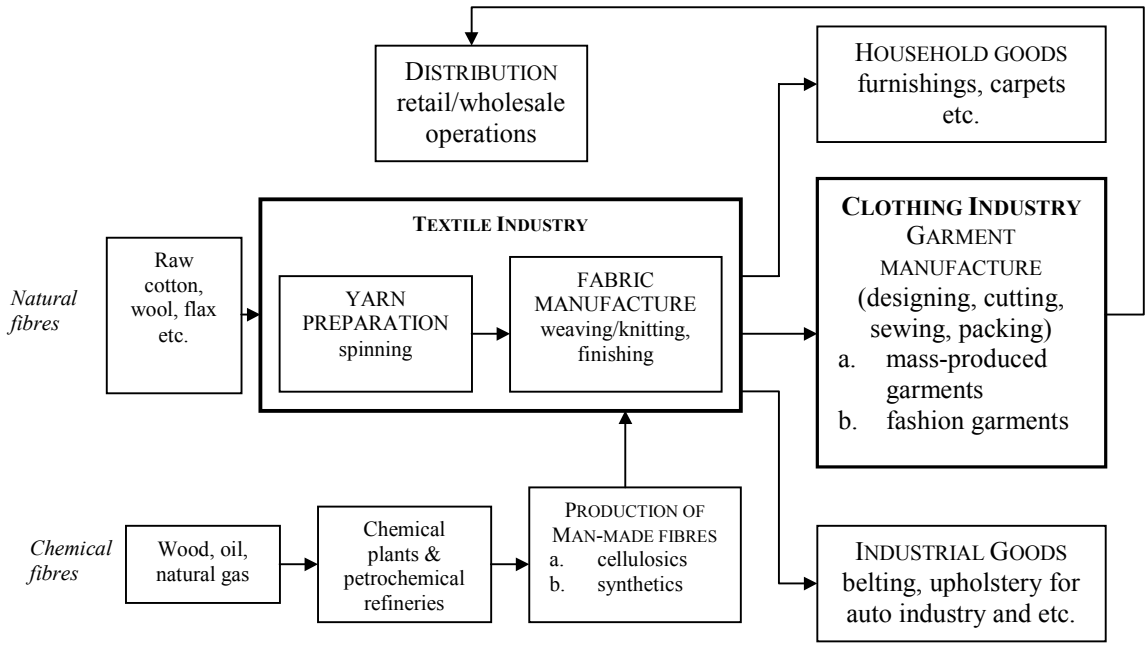

Figure 1 The textiles-clothing production system [10, p. 234]

To a considerable degree the analyzed industry is heterogeneous with respect to both product and process characteristics; different subsectors have evolved differently and face varying prospectus.

1.2 Industry structure

Large number of small and medium size firms especially in the sewing sector could characterize the structure of the industry. The lack of economies of scale in the majority of sectors does not encourage concentration of enterprises. Instead, the problem is how to increase the size of series and quantities for each product and how to reduce the time taken to adjust machinery, and this tends rather to encourage specialization among production units and enterprises. Nevertheless, the majority of them in Lithuania issues the production of great diversity. Thus, commonly industrial centralization in the textile and clothing industry is lower comparably to other industries.

Over the last decades the global trend towards oligopolistic market structures become evident particularly in the upstream[1] segment of man-made fibres which benefit from research and development activities and firsthand knowledge and fashion trends as well as changing fiber preferences. In the downstream segment this advantage dissipates rapidly due to greater number of firms, less favorable scale economies, less efficient production and greater labor intensity.

[1] Activities that are closely related to textile and clothing industry a) upstream: specialized supply of inputs including fibre textile machinery, dyestuff and so on, and b) downstream: wholesale and retail trade, fashion industry and so on.

In Lithuania 18% of enterprises in the textile and 20% in the sewing industry are considered as small size companies. Accordingly 33% in the textile and 43% in the sewing industry are medium size companies[2]. SME in the textile industry employs 4,4% of the textile industry employees, while *11 biggest* companies employing separately more than 500 employees account for the majority of the whole textile industry production (60% of turnover). In the sewing industry there are 9 biggest enterprises selling 60% of the industry's production and employing 44% of employees in the same industrial activity.

In 1994 the EU textile industry operated with 75% enterprises that have less than 20 workers. These smaller firms employed 19% of total workforce and generated about 15% of total turnover. While *10 largest* account for about 11% of the EU textile industry total turnover. In the clothing industry 85% of companies employ less than 20 workers [25].

Apparently it can be anticipated that The Lithuanian textile and clothing industry is still rather concentrated (see Appendix 7). Nevertheless, the trend in creating flexible industry capacities is evident especially in the sewing branch as well as in textiles with constantly diminishing size of employees and the new more efficient equipment being installed.

1.3 Industry sectors

Referring to the previous chapters the textile and clothing industry to a considerable degree is heterogeneous in respect of both product and process characteristics; different sub-sectors have evolved differently and face varying level of specialization. Therefore it is difficult to categorize the industry in one particular respect and draw clear borders between them.

The textiles industry itself consists of two major operations: the preparation of yarn and the manufacture of fabrics. Both stages are performed by firms of all sizes, from the very small domestic enterprise to the very large subsidiary of the transnational corporation. The general trend, however, has been for textile manufacturing to become more and more capital-intensive and for large firms to be increasingly important. The output of the textiles industry goes to three types of end-use, of which the clothing industry is by far the most important. Approximately more than 50 per cent of all textiles production goes into the manufacture of garments.

The clothing cluster remains far more fragmented than the textiles industry and is less sophisticated technologically. It is also an industry in which subcontracting is especially prominent. The design and even cutting process are performed quite separately from sewing process, the latter being particularly amenable to international subcontracting. The clothing industry itself produces an enormous variety of often rapidly changing products. Particularly important distinctions are between mass-produced staple garments on the one hand and fashion garments on the other. Finally, although no part of the production sequence itself, the role of the distributors of

[2] According to the Law of Small and Medium Seize Enterprise Development adopted by Seimas in 1998, the companies employing no more than 9 people are considered small ones, and these employing no more than 49 people are medium size companies.

garments-particularly the retailers-is of considerable and growing importance. The increasing dominance of much retail trade by very large firms has enormous implications for the organization and the geography of the clothing manufacture.

This industry in Lithuania can be referred as encompassing three main subsectors in the broad scale: leather processing, textile and knitting, sewing and fur dressing. The majority of enterprises at present are involved in sewing and fur dressing activities (see Figure 2).

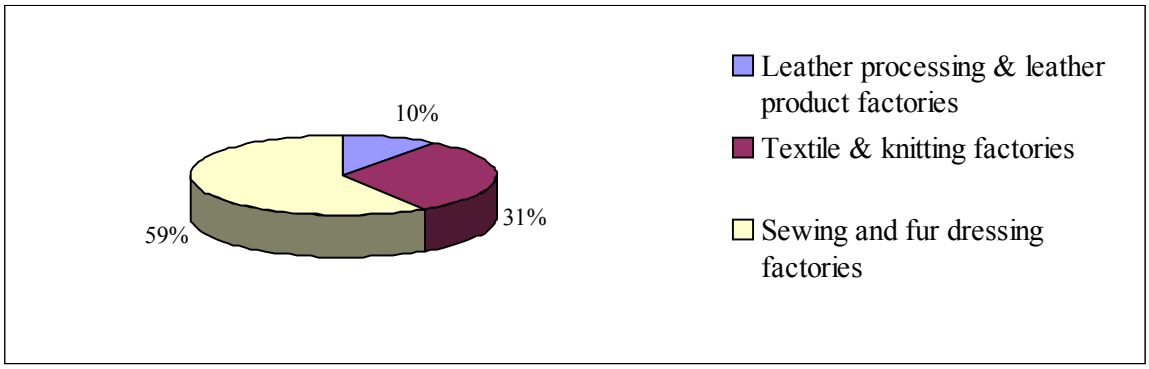

Figure 2 Structure of the textile and clothing industry enterprises in 1998 [3, p.13]

While the latter subsector employs only 38% of all labor force in the textile and clothing industry. The majority of workers are concentrated in the textile and knitting factories (see Figure 3).

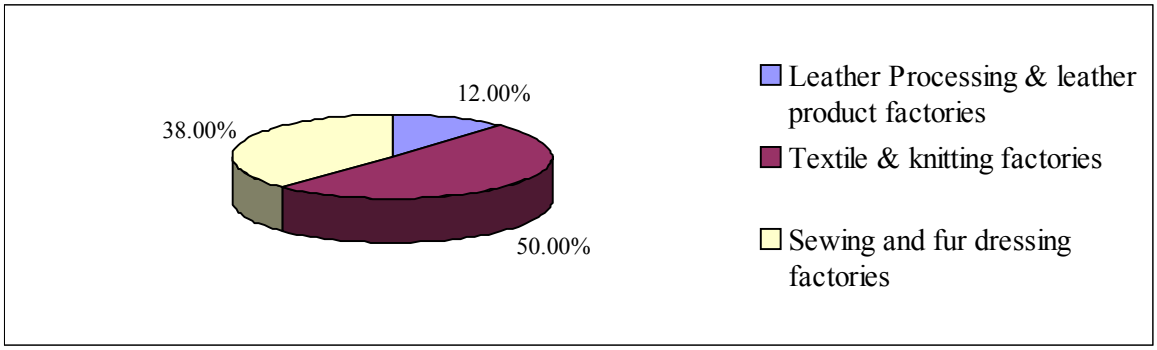

Figure 3 Distribution of workers in the textile and clothing industry according to industrial branches in 1998 [3, p.14]

The more detailed overview of the textile and clothing industry identifies greater variety of industrial subsectors, which indeed differ in production, and number of activities performed which are to the some extend highly interrelated. Thus, it is very difficult clear up contiguity of each subsector. Nevertheless, there are basic activities under which enterprises to different extent of specialization are working in.

The biggest factories in respect of employment and capital amount are involved in processing textile fibres and yarn from wool, linen, cotton, silk and synthetic material as well as some factories encompassing the whole technologic process from primary raw material treatment to the weaving, finishing and manufacture of made-up textile as well as woven and non-woven articles, home textile and textile haberdashery. Manufacture of knitted and crocheted fabrics and articles is another subsector

markedly distinguishing in number of enterprises of various sizes. Knitwear enterprises' activities usually cover processing of knitted fabrics and sewing for finished outerwear or underwear articles as well as articles for household goods. The last large sector of the industry includes sewing enterprises. Within these main sectors business units could be divided into subsectors according to their specialization and production characteristics (men's, women's children apparel, specialized working clothes) as well as the nature of raw material used (cotton, linen, wool and etc.) (see Figure 4).

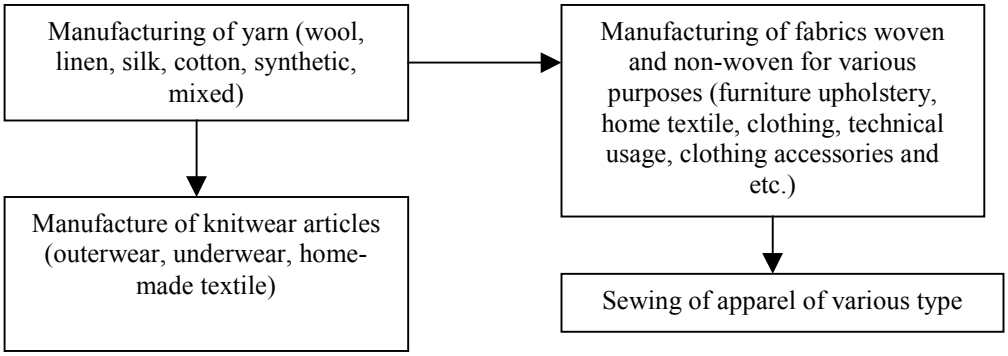

Figure 4 Textile and clothing industry subsectors

1.4 Enterprise types

The majority of big textile enterprises in Lithuania are organized as public companies. Some of them have formed joint ventures, which indicate the nature of foreign capital. The former type of enterprises creates a possibility to raise capital by stock emission and ensures another possibility to invest into the new machinery, which is of main importance for the textile companies to survive (see Box 1).

Box 1

Joint Stock company "Trinyčiai" recently has invested into new machinery more than 3 mln. Lt. The obsolete park of equipment ensured rather low quality of spun yarn production, which in turn allowed competing only with Southeastern Asian producers. The new technology is supposed to strengthen companies ability to reach higher production value and competitiveness level.

The investment has been financed by emission of stock in 4mln Lt which have been acquired by the ERDB.

High number of small enterprises organized as individual (personal) enterprises could characterize, apart public companies, The Lithuanian textile and clothing industry. These usually belong to the single owner who is liable to the full extent of his or her assets for all debts resulting from business operations. The flexibility of such type of enterprise as well as simplified legal obligations tends to be the most appropriate for small family based activities. The number of sole proprietors usually is not included into official statistical figures.

Common company forms in Lithuania are as follows:

- An individual (personal) company belongs to a single owner, or jointly and equally to spouses. Not-for-profit organizations having the rights of a legal person

may also own a personal enterprise. Owners are liable to the full extent of his or her "personal property" for all obligations resulting from enterprise business operations. The firm must be identified by the name of the owner.

- A general partnership is an enterprise with unlimited liability established on the basis of a partnership agreement by several individuals or legal persons. The general partnership is created through the transfer of property from individual ownership to co-ownership within the partnership with the purpose of conducting business activities under a common name. The co-owners of a general partnership are jointly liable for all obligations resulting from business operations of the partnership. It is an enterprise with unlimited liability. A general partnership, however, is not liable for the obligations of its partners if such obligations are incurred through activity unrelated to the activities of the general partnership.

- A limited partnership is a business of one or more general partners who have unlimited liability and one or more limited partners who are liable only to the extent of their contribution to the partnership. A limited partnership must have at least one general and one limited partner.

- A public company is required to have a minimum authorized capital of 100,000 LTL (US$ 25,000). A private company must have not more than 50 shareholders. Both public and private companies may be single-member companies. The minimum authorised capital of private company is 10,000 LTL (US$ 2,500). Companies are legal persons and their owners (shareholders) enjoy limited liability. The company is liable for its obligations only to the extent of its assets. The shareholders are liable only to the extent of the amounts due to be paid for their own shares.

- State and municipal enterprises have the rights of a legal person, and limited liability. The State or municipal unit is not liable for the obligations of the enterprise, and the enterprise is not liable for the obligations of the State or municipal unit.

- A co-operative society is an economic entity with changeable composition and capital. It is established on a voluntary basis by a group of individuals, or individuals and legal persons, for the purpose of satisfying their collective business, economic and social needs. A co-operative society is a legal person.

- An agricultural company is an enterprise deriving at least 50% of its income through the sale of agricultural products or service in the field of agriculture. An agricultural company is a legal person and the enterprise that is formed has limited liability. Thus, the company's property can be separated from the property of its individual owners, and the obligations of the company are limited by the amount of the company's capital.

According to the *Law on Foreign Investment*, foreigners have the right to invest capital of foreign origin in Lithuania by:
- establishing an enterprise;
- acquiring shares in a going concern.

Foreign enterprises are entitled to establish their subsidiaries in Lithuania as legal entities, or open representative offices that will not be legal entities and will not have the right to engage in independent commercial activities.

1.5 Related industries

The supply chain empowers the textile and clothing industry contribute to the activities of various related industries. While the relationship between some of the industries are very weak and temporary it covers very heterogeneous branches.

In terms of input industries textiles is closely related to agriculture (flax, wool, and cotton) primarily or through wholesale distributors especially in case of wool and cotton supply in Lithuania. Manufacturing of textile and finishing process requires input of chemical products and energy (electricity, water). Producers of acetate yarn receive raw input from wood processing industries (acetyl-cellulose). Petroleum refining industry is the main supplier for synthetic fibre manufacturers.

Machinery and equipment producers together with R&D and educational institutions ensure the technological level of the textile and clothing industry and these related industries are of primary importance in creating competitive advantage in the textiles and clothing activities.

The textile and clothing industries if considered as separate economic activities are very closely linked. With the former as yarn and woven fabric supplier and the latter accounting for finishing textile articles and for adjusting them for various utilization in other industries or end up consumption.

The textile industry is the supplier for furniture producers as well as producers of different vehicle (seats upholstery). Carpet and home textile producers are related with local hotel, restaurant and other service providers through direct contracts. The clothing industry may be considered as supplier for individual consumers or distribution network as well as contractor for government institutions (hospital, army, fire stations, police and other services).

As every industry the textile and clothing sector is also closely influenced by the whole economic infrastructure as well as retail and wholesale network within and outside the country.

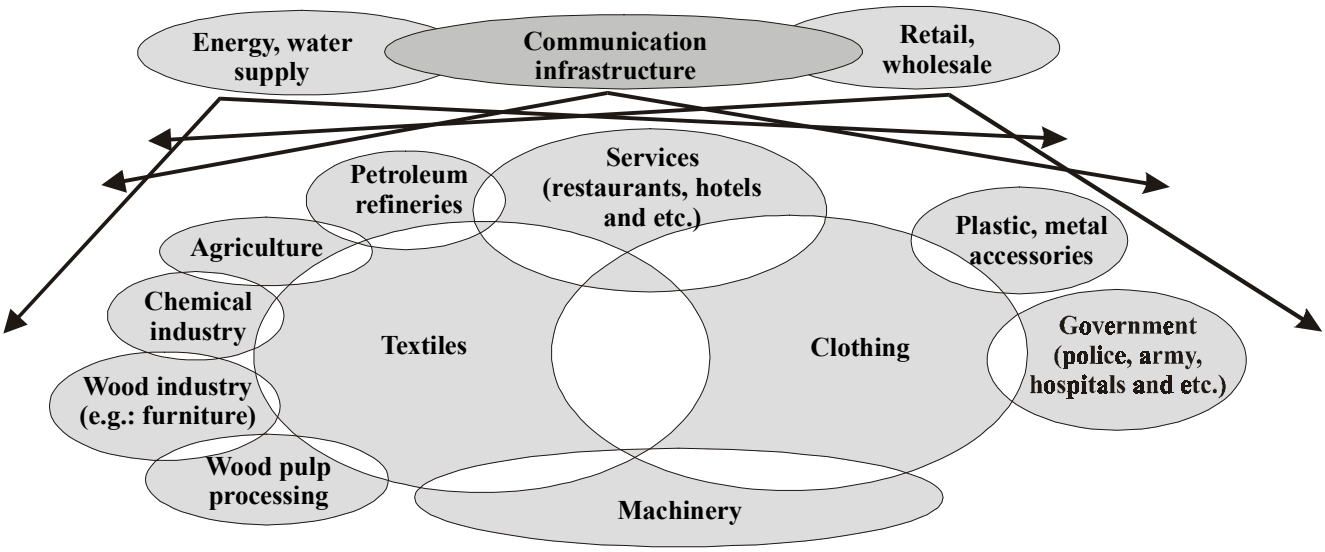

Figure 5 Industrial cluster for textiles and clothing

1.6 The market trends

In recent years production and employment in the textile industry have developed less favorably than in the manufacturing sector as a whole in European countries. The main reasons for this have been the sluggish development of consumption in the EU and the further growth of imports of textile and clothing products from low-cost developing countries. Most imports of textile products come from a limited number of big supplier countries, with a rising share from China, Turkey, India, Indonesia and Pakistan [40, p.4-9]. The rapid development of textile technology level (the majority of advanced textile equipment produced in Germany or Switzerland are bought by Southeast Asian and USA textile producers) as well as the productivity level in Asia leads to more fierce competition pressures in Europe, which in turn tries to protect its market under tariff and non tariff barriers (see). Free inflows of cheap production from Asian countries in Lithuania vastly hindered the local textile industry at the early stages of economic restructuring. Lack of consistent government consideration on imported textile and apparel production of low quality and safety standards still keeps hardening the conditions for further development of the industry and penetration of the local markets.

Fundamental changes in structure and the nature of the market for both intermediate (yarn and textile) and final products (garments) have left to a shift away from man-produced, standard products to demand for a differentiated set of products, characterized by higher quality and lower volumes. This transformation of the structure of demand has also led to a shift in the marketing and production strategies of retailers and manufacturers in the industrial countries. This has resulted in fierce competition and cost minimizing response by companies. One of the measures was to import directly certain products at the lover quality range replacing local production or to relocate a part of the production to low-wage neighbor countries. In most cases it has taken the form of outward processing, but there were also investments in joint

ventures, allowing the direct control of production or subcontracted production in neighboring low-wage countries [25, p 4-21].

Traditionally as countries become more industrialized real production costs rise drawing in real wages and energy costs. Manufacturers in turn are forced to seek for new sources of competitiveness and might be challenged by less industrialized new comers. This tendency is evident especially among sewing companies that gradually fosters idea strengthened by emerging possibilities to spillover high labor consuming activities to Belarus and Ukraine. Nevertheless, economic and political uncertainty in the mentioned countries hold up incentive that might be undertaken by local enterprises while not excluding the EU competitors which also try to catch up with new costs reduction possibilities.

Box 2

Recent Global Trends in Textile Industry and Trade.

The textiles and clothing industries were perhaps the first manufacturing industries to take on a global dimension. They are the most geographically dispersed of all industries across both developed and developing countries. They are organizationally very complex, containing elements of both very new and very old organizational practices. They are changing very rapidly in their geography, their organization and their technology, and these changes are causing intense political friction. Indeed, global shifts in the textiles and clothing industries exemplify many of the intractable issues facing today's world economy, particularly the trade tensions between developed and developing economies.

In the last fifty years, the consumption of textiles and apparels world-wide, measured in terms of volume of fibres consumed, has grown at approximately 4% per annum. However, since 1973 there has been deceleration in growth of consumption to about 2.5% per annum, associated with the slow-down in world economic growth and consumption expenditures. This relatively modest global growth rate of consumption has, however, been overshadowed by the rapid globalization of the industry, sweeping changes in world trade in textiles and apparels, and significant shifts in capacity and production between individual countries. Since 1960, the EEC has closed more than half of its textile and apparel industry, and substantial capacity has also disappeared in the USA and Japan. In contrast, capacity in Asia has more than doubled over the same period, with a small number of countries growing the most rapidly. These shifts of production capacity towards developing countries have led to greater international specialization.

Although production and consumption of cotton has continued to increase, its percentage share in the total fibre consumption has stabilized around 50%. Today, manmade/synthetic fibre constitutes just under half of total fibre use. Interestingly, there have also been important changes in the share of various products. The most important recent trend has been the share of polyester staple and filament. More importantly, there have also been significant movement in the location of production for manmade/synthetic fibres from W. Europe to Asia in the last two decades.

A global change in the economic order is taking place. During the 90s and the 21st century a remarkable rate and extent of growth of economics of Eastern Asian Countries is expected. Signs of such growth are apparent in the case of textile trade. At present, the Asian NIES (i.e. Korea, Taiwan and Hong Kong) account for one fourth of the total volume of world textile trade and one third of the total apparel trade. However, it will be difficult for the Asian NIES to maintain high-growth rate in textile exports during 1990s due to higher wage-cost and increasing domestic demand.

On the other hand exports of ASEAN (Thailand, Indonesia, Singapore, Philippines and Malaysia) is expected to register high rate of growth and the leadership of world textile and apparel export trade will shift to ASEAN from Asian NIES.

In this process of development, the most important point is that the share of the ASEAN and South East Asia including India will increase while that of NIE's will decrease.

The Asia Pacific region in 1996 accounted for almost 60% of the world's textile and clothing exports, for almost 60% of world's exports to North America and for more that 40% of the world's export to the EU. Countries like Indonesia have annual clothing exports of around 6billion USD, while Bangladesh's exports account for one T-shirt for every two EU citizens. [37].

The rapid expansion of textile and garment exports from developing countries to developed economies resulted in increasing projectionist sentiments particularly in the world's two largest textile importing areas, the EEC and North America leading to the establishment of what has come to be known as Multi-Fibre Arrangement (MFA). Many in developing countries view MFA as an embarrassing breach of the GATT principles. Moreover, the impact of MFA upon textile and apparel trade has been the subject of considerable speculation. Although it is generally argued that each renewal of the MFA has tightened access of developing country producers to developed country markets, it remains true that significant changes in the pattern of trade have occurred. The MFA has also provided an incentive for exporting countries to restructure their industries to upgrade quality and value-added of exports to maximize earnings from volume quotas [38].

1.7 Brief history of the textile and clothing industry in Lithuania

Since Lithuanian weaving history reaches far II-IV century, in XVI century Lithuanian linen and woolen fabrics have already been wide known all over the West European countries. In early XVII-XVII centuries the first manufactories appeared in

the biggest feudal manors such as Tyzenhaus weaving workshop, Oginski manufactory and others. 1907 has considered to mark the beginning of industrialized textile development together with the first textile mill established in Juodupė borough that have been followed with establishment of other companies which formed the industrial basis for further textile development [69, p.4] (Appendix 2).

The historic development of textile and clothing industry in Lithuania breaks into three main stages with distinct contribution in each of them.

The first stage begins with the first mill establishment and lasts till 1940, Lithuania's occupation. The huge inspiration for the textile industry development was Lithuanian government's policy concerning protection duties on finished production and low for raw material (since the majority of raw material (65-68%) was imported) as well as license system. Promotion of the industry in many developing countries has been done in the same way through a number of measures starting with infant industry protection (through tariffs on textile, yarns and fabrics), sectoral aid measures (modernization assistance, subsidies for the purchase of inputs, tax based incentives and provision of software infrastructural support) and export promotion measures. With the latter measures are waiting to be applied nowadays.

Regardless of economic crisis in the world (1931-1935) The Lithuanian textile industry continues to expand, the number of new small and medium size enterprises grows vastly. It should be noted that enterprises had rather good and modern Western equipment that enabled to produce quite complicated structure fabrics that kept in line with World quality and fashion requirements. Until 1930 enterprises were consulted by foreign experts since Vytautas Magnus University launched the first courses for preparing textile specialist. The successful development of the industry was broken down by occupation of Klaipėda and later of the whole country [25].

The second stage started with radical restructuring of the whole industry that was severely damaged during the Second World War. It encompassed centralizing and joining smaller companies into bigger ones. During this period sewing industry developed as an important subranch of the light industry with creating command relations between fabric producers and sewing companies. In order to maintain fashion the centralized design center "Vilniaus modelių namai" was established. Nevertheless, creating huge capacity of textile and clothing industry with ready markets distorted producer's incentive, which is of major importance under market economy. This historic period that lasted for 50 years left notable influence on further industrial development after regaining Independence. Inertial trade with CIS countries lasted till 1994 and still fed the industry until it had to start searching for new markets and undergoing political changes directed the efforts to the Western countries while still leaving a lot of enterprises in very unfavorable situation.

Historic development trends may also partly explain the recent development of flax manufacturing and shortage of local flax supply. In 1918-1950 flax was considered as "farmer's money", for the flax material was the leading export commodity as well as the material for homemade clothing and for conditions of life articles. Nevertheless, the flax cultivation has constantly decreased since 1945, regardless of unsuccessful efforts to restore linen farming. Productivity of flax manufacturing was still low requiring large amount of labor force as well as material input that led to poor flax

quality supply for weaving companies. During that time linen farming area reached 69,1 thousand. hectare, while nowadays it has considerably decreased (2,3 times during the period from 1995 to 1997) and reaches only 5,7 thousand hectare.

Summarizing, the development of the industry in historical respect helps to comprehend the real trend of industrial growth and future possibilities. The Lithuanian textile industry has grown up from modest textile mill in Juodupe to the contemporary industrial branch markedly contributing to Lithuanian economy, distinguishing in foreign trade volumes and being able compete with world famous textile producers. Further capacity of The Lithuanian textile industry has been determined by efforts of textile producers as well as economic and political measures of government, which led to successful maintenance of professional education and created benevolent circumstances to adopt for centuries fostered dexterous Lithuanian artisans weaving traditions.

1.8 Products and services in the textile and clothing industry

The textile industry accounts mostly for production of cotton, woolen, linen and synthetic fabrics as well as production of yarn from various natural and artificial raw materials. One of the specific production branches of the textile industry is carpet and carpet covering manufacturing, which has remarkably decreased since 1991. The only enterprise in Lithuania "Audėjas" produces fabrics for furniture upholstery.

Analyzing the structure of fabrics, the major part is taken by cotton based production that accounts for approximately 50 % of all fabrics produced (Appendix 3). The volume of cotton fabrics production has been constantly decreasing since 1991 until 1996 it leaped markedly. The other kind of fabrics keeps almost at the same level (15%), only fabrics of artificial and synthetic fibres and filaments during 1995-1998 have reached 31% in the structure of different kind of fabrics produced. The total production of fabrics in volume started to shrink since 1991 until 1994. Further development shows positive trend with production levels being gradually rebuilt.

Sewing industry offers great variety of clothing apparel by commodity names (Appendix 3). The growing trend can be observed in producing trousers and breeches, women and girl's blouses and skirts. Production of underwear articles for women and coats of all type has vastly decreased since 1991. Other types of production contribute comparably with lover levels of production volume. The majority of services in sewing industry are exported due to comparably low labor costs and ability to fulfill contract obligations with due consideration compared to CIS countries.

In textile and clothing production structure *home textile articles* could be noted out as another group of commodities offered to the market. In 1997 the industry produced 4,2 mln. units of bedding, 6,7 mln. units of table covers, other toilet and kichen linen, 0,3 mln. units of coverlets, 1,7 mln m^2 curtains.

The majority of big textile companies provide some services in the process from fiber to fabric treatment. These services in major covers yarn and fabric dyeing for the process requires special equipment and should conform to environmental requirements, which in deed is a costly process.

1.9 Research, education, training

The Lithuanian textile industry has long-standing traditions of specialists' education and training. Kaunas University of Technology and Vilnius Art Academy are two main centers of higher education in this field. Lower level specialists are trained at light Industry College and College of Technology. More than 15 thousand people working in the light industry have higher or secondary education. An inside advanced training system for lower level specialists and skilled workers has a good reputation, which at present is sponsored by consulting firms of Western countries [3].

Kaunas University of Technology used to be the only institution in the Baltic States with biggest capacities in preparing textile specialist of high level. Under command economy they had the huge research laboratories with advanced equipment, which at present with gradually decreasing financing from the State budget that is not been replaced by support from private sector, maintains rather obsolete riggings. While pretty bright scientific workers tries to keep their research and educational programs in pace of recent world developments the lack of material funds and incentive from private sector in being interesting in cooperation with educational institutions as it is successfully undertaken in developed countries slow down educational and research activities that might be of crucial importance for creating more sound industrial cluster. Moreover when the textile industry in Lithuania had essential scientific basis and even their own coryphée Juozas Indriūnas (1896-1989), which devoted the majority of time to textile technology research and created the scientific basis of it, promoted and organized high education of textile specialists and inspired his followers to continue the work in the textile industry and its progress [19, p.12-16].

Lithuanian Textile Institute (LTI) established in 1960 is the main institution covering applied scientific research work in the fields of textile materials production, testing and analysis as well as carrying out research on new weaving, knitting and finishing technologies. Fundamental alteration of laboratory equipment will allow LTI in a year period establish to some extent unique in the Baltic States center accredited by European Committee for Standardization (CEN).

1.10 Industrial association

In order to promote economic, technology and social development of light industry enterprises the Association of Light Industry Enterprises of Lithuania (LLPIA) was established in 1991. Considering the progress in its activities, in 1992 the Association was authorized by the government to represent officially the light industry. While looking for new markets and co-operation fields, the Association is actively extending trade and business contacts with Western partners [3].

In cooperation with the joint venture partner Messe Frakfurt, LLPIA continues to held International Trade Fairs "Baltic Textile+Leather" being known for profound reputation and success widening the market limits and business contacts between the West and the East. The event launched in 1992 proves to provide unique opportunity for getting acquainted with Lithuania as well as with other Baltic States and CIS

countries textile industries together with new technologies and research facilities available in the region.

Fashion show “Lithuanian fashion” organized by LLPIA is another example of activities in promoting Lithuanian production within the country as well as to attract foreign customers.

1.11 Major companies

Lithuania has some specific companies such as “Kilimai” and “Dirbtinis pluoštas” which are the only of such profile enterprises in the Baltic States. “Alytaus tekstilė” together with Estonian “Kreenholmi Manufaktuur” are the biggest cotton processing companies having the complete production process. Similarly can be determined the joint-stock company “Linas”, which is one of the biggest linen fabrics producer [23].

Joint stock company “Dirbtinis pluoštas” situated in Kaunas is the only enterprise in Baltic States manufacturing acetate yarn. The company was founded in 1992 following reorganization of State artificial fibre factory. “Dirbtinis pluoštas” operating at full capacity per year and employing continuos technological cycle and more than 1000 employess is able to produce about 14 000 tons of acetate and mixed twisted as well as air-intermingled yarns. The company is the major supplier to the Lintuanian knitted and woven fabrics producers as well as attends European, Asian and USA markets. The production of “Dirbtinis Pluoštas” covers approximately 5 % of world market within its manufacturing outcome.

“Kilimai” is the only company in the Baltic producing double-weaving jacquard carpets. In 1992 Lentvaris Carpets Factory was reorganized into joint stock company “Kilimai”. During 42 years the company designed and produced over 1200 jacquard carpets models. The total amount of carpets and carpet products produced during this period accounts for 81,5 ,ill. m^2.

“Alytaus tekstilė” was established in 1969 and to the date of 1996 the factory employed more than 4 000 people in 3 plants located in Alytus. It was the largest textile factory in Eastern Europe. 70-80% of its output is exported mainly to the West. “Utenos trikotažas” is the largest manufacturer of knitted underwear in the Baltic States and employs around 1 600 people. “Linas” is the largest manufacturer of linen fabrics in the Baltics, employing 1 552 people. Among the largest companies can be mentioned “Drobė” (wool products manufacturer) [43], “Vernitas” (acrylic yarns manufacturing for the knitwear industry), “Audėjas” (producer of fabrics for upholstery), “Trinyčiai” (cotton, linen yarn producer), “Kauno audiniai” (silk fabrics producer for dresses), “Liteksas and Calw” (wool fabrics, woolen scarves, shawls, plaids and blankets producer) and others.

All the biggest companies in Lithuania are listed accordingly to the turnover in the Appendix 5.

2. BENCHMARKING THE INDUSTRY

2.1 The scope of the industry

As the Single Market review notes, the textile and clothing industry is of primary importance to European Community [40, p.1]. The importance attached to the textiles industry emerges from its major role in generating manufacturing output, employment and export and the key role it has played in the initial industrialization process in most countries. The EU textile and clothing industry employs 2,2 million people in almost 117 000 enterprises. It accounts for 4% of total EU employment, 2,9% of value added (in 1994 the figure was 5% [25]) and 3,1% of EU manufacturing exports [35, p. 4].

The significance of the textile and clothing industry in Lithuania is even more notable than in the EU states. The industry is one of the most developed industrial branches in Lithuania having long standing traditions. At present nearly 60 thousand people are working in the textile and clothing industry[3] in Lithuania and constitutes to 18% of industrial employment and produce 12% of the Country's total industrial output [3]. If compared the number of people working in textile and apparel industry per 10 000 inhabitants in European Countries Lithuania outruns in this respect Italy, Greece and Spain, the countries that traditionally are famous for high standing textile industries (see Figure 6).

[3] The light industry in Lithuania encompasses manufacture of textiles, wearing apparel, dressing and dyeing of fur as well as manufacture of leather and leather products. While in the report there will be concentrated on clothing and textile industry, in some cases the analyzed industry will be referred as light industry since leather and leather products play comparably minor role in the structure of the light industry.

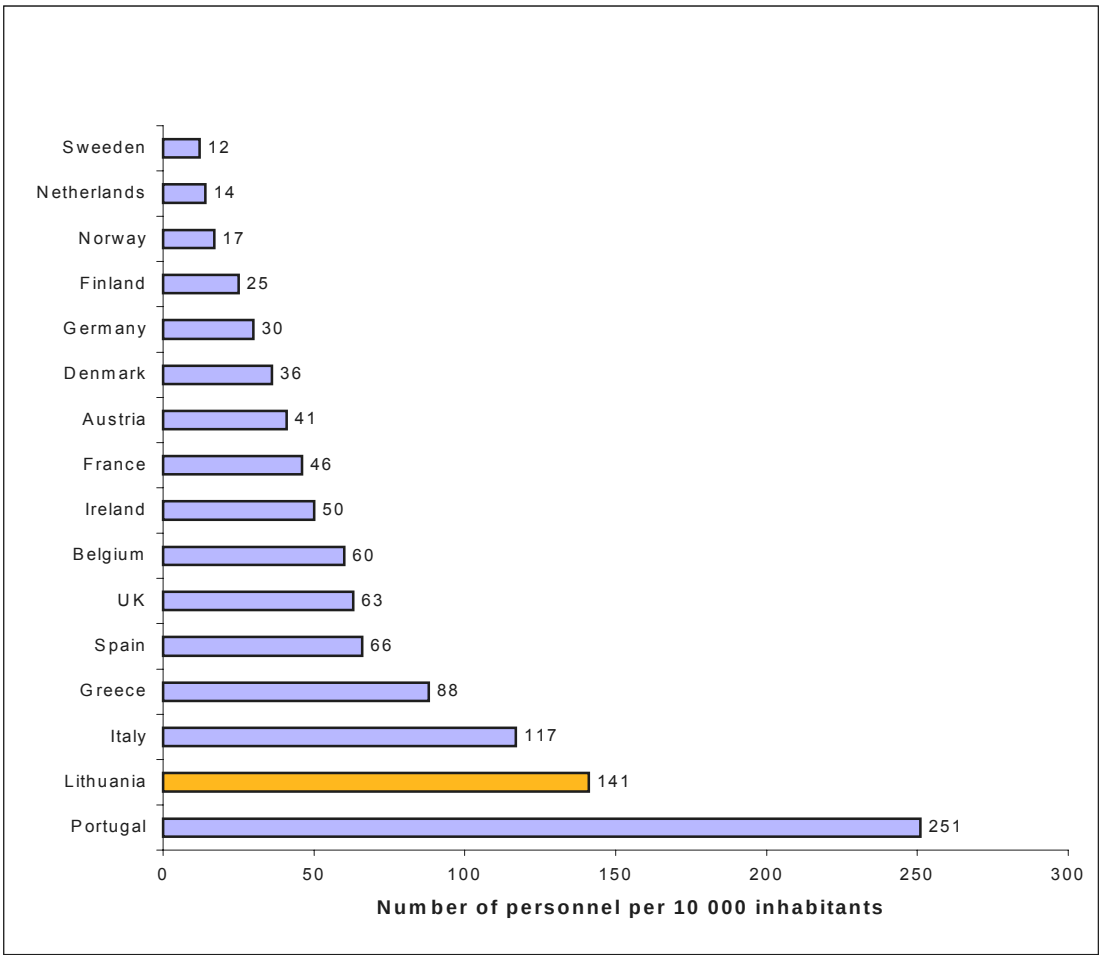

Figure 6. Personnel in the textile and clothing industry per 10.000 inhabitants [adopted from 8]

The textile industry in Lithuania alone accounts for approximately 30 thousand employees, clothing and leather processing industry accordingly- 24 and 6 thousand employees [31].

According to the date of 1996 in Lithuania there were 382 companies (except sole proprietors) working in the textile and clothing industry in Lithuania, 344 of them were involved in the textile and clothing industry. In 1998 the number of enterprises in the industry has slightly increased to 350. 119 of them (except sole proprietors) are textile producers and 231 are sewing companies [39].

2.2 Development trends

The Lithuanian textile and clothing industry is one of the major actors within manufacturing.

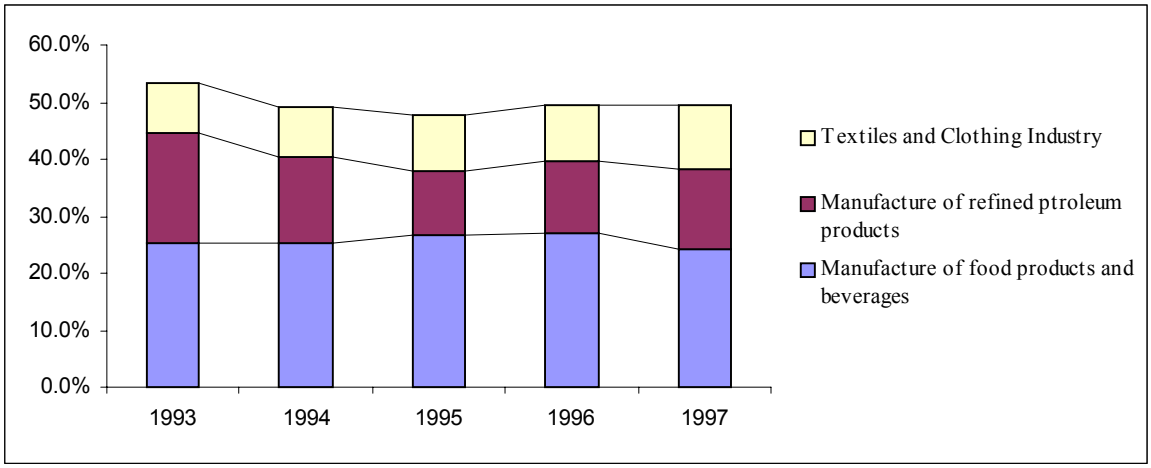

Figure 7 The total industrial production of the main industries within manufacturing in Lithuania (1993-1997) [31]

Slow and steady growth can be observed both in textiles and clothing as well as the whole industrial production since 1994. The industry output in the period from 1994 to 1997 has increased 1,8 times. Nevertheless, manufacturing industry tends to lose its part in creating countries value added (see Figure 8).

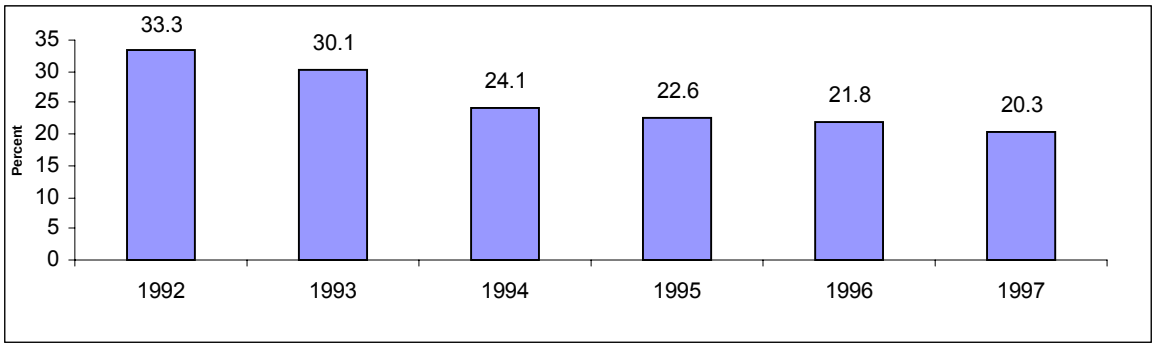

Figure 8 Mining, quarrying and manufacturing in total value added within Lithuanian economy [39]

The structure within industry remains at comparably the same level while in 1997 the weight of food industry and textiles tended to shrink and have been overtaken by production levels of refined petroleum manufacturing.

If compared 1996 and 1997 manufacturing levels has considerably increased in clothing and fur dyeing sector (by 26,37%) by showing the highest growth rates after electrical machinery and apparatus manufacturing sector where its production development reached 42,3 %. While textile industry production suffered 0,3% decline which is at present can be considered as comparably low. Nevertheless, the early signs of further decline are confirmed by the pessimistic prognosis of surveyed companies as well as statistical data for the year 1998.

1998 featured by economic crisis in Russia determined textile industry production slumped by 4,2%. Clothing and fur dyeing sector after rather promising trends in 1997 was able to increase production level only by 2% in 1998.

If looked at production indices since 1992, the year of 1994 could be considered as breaking point after which manufacturing and wearing apparel has recovered until 1998 by reaching the same production level as it was in 1993. While textiles industry (except knitwear) continues to encounter steady and slow decline trend since 1994 (see Table 1).

Table 1 Production indexes in mining, quarrying and manufacturing by sectors (1992 year = 100) [39]

	1993	1994	1995	1996	1997	1998
Mining, quarrying and manufacturing	65.3%	45.9%	46.3%	47.9%	50.3%	53.8%
Manufacture of wearing apparel, dressing and dyeing fur	66.9%	36.5%	43.7%	53.8%	68.1%	69.5%
Textile industry	37.9%	25.4%	23.5%	24.0%	24.0%	23.0%
Manufacture of leather and leather products	40.1%	22.5%	22.4%	21.4%	21.9%	20.5%

Following the survey carried out by the Department of Statistics the main reasons for hindering the activity of various industrial sectors as well as the textile and clothing industry are as follows:

- Comparably low demand levels in local as well as foreign markets;
- Financial problems lying within difficulties to obtain credits from financial institutions, underevaluation of the assets of enterprises that does not confirm to the real value by creditors, high interest rates, high debts and so forth;
- Incomplete and changing regulations, low level of consideration for imported goods legislation.

2.3 Profitability

Traditionally the textile and clothing industry is not considered to fall into the range of activities bearing up high profits. In Lithuania according to the data provided by the Department of Statistics in the Yearbook '98 the clothing industry outruns in gross profit margin the textile industry and even excels average level of the same ratio prevailing within Lithuanian industry (see Table 2).

Table 2 Ratio of profit to income at the end of 1996 [31, p.291-292]

	Gross profit margin	Net profit margin	Return on assets
The whole industry	13.6	3.8	5.0
Manufacture of textiles	12.1	-2.5	-1.3
Manufacture of wearing apparel, dressing and dyeing of fur	16.9	3.8	7.0

Apart from the clothing sector, the textile industry encountered negative impact of operating as well as net loses. The general financial statements for the year 1998 show steady increase in overhead, operating and financial costs, which partly explain considerable loses in the industry. The latter trends in cost structure in clothing could be also observed while the negative movement of the above mentioned cost level hinders the sector in less severe way compared to textile enterprises. Other costs of activities for comparison of the industrial sectors are entitled in the Table 3.

Table 3 Costs of activities for the 1997 year (I, II, III, IV quarters) in textile and clothing sectors [12]

Structure of costs (in per cent)	CLOTHING				TEXTILES			
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
raw materials, consumables	25.1	23.2	23.6	25.0	58.1	54.0	51.8	54.6
cost of goods for resale	2.3	4.6	3.9	2.9	4.3	4.8	4.2	4.2
rent, services	11.9	11.0	11.0	12.0	5.3	6.3	6.3	7.2
depreciation and amortization	4.3	7.9	4.2	7.4	5.4	5.4	6.0	4.9
wages and salaries, social security costs	55.0	51.3	55.8	49.8	24.9	27.8	29.7	27.1
wealth and life security payments	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1
taxes	1.3	1.8	1.3	2.8	1.8	1.6	1.9	2.0

Analyzing profitability it can be observed rather high operating leverage in textile sector. Thus profits in the textile industry might be considered as comparably sensible towards slightest movements in demand for production. Recent market fluctuations together with lost of realization sphere in Russia predetermined by harsh crisis proved to have considerable negative impact of the profitability in the textile sector.

On the contrary apart the high interdependability of the clothing industry with textiles, the former features much more lower operating leverage and thus encounters more success in operating over recent years under market transformation. This partly might explain the steady and complete recovery of the clothing industry after deep decline in 1994 having overtaken by the whole industry (see Chapter 2.2).

According to the date of 1998 there were approximately 55% enterprises in textiles and 40% in clothing working unprofitably. Thus more than half of the enterprises in textile sector suffers huge loses what makes them more and more difficult to recover especially when economic conditions detain further development in the positive way.

2.4 FDI attraction

Together with improvement of the economic and trade environment in Eastern Europe, expansion of export of both textile and clothing to the West emerged. This has created a production and marketing gap, which in turn has resulted in goods and capital investment being attracted in from around the world. At this time, more than 20 countries have invested their capital in the textile and clothing industry of Lithuania (the structure and volume of FDI in Lithuanian manufacturing sector depicted in the (Appendix 1)).

In 1998 there have been invested 49,6 mln Lt into textile sector which appeared to prove 45mln Lt decline compared to previous year. While textile sector traditionally considered as raising high demand for technological innovations especially considering quite obsolete park of The Lithuanian textile produces, the recent trends in investment activities shows extremely negative change disadvantaging further development of the industry.

On the different situation in respect of investment appears clothing subsector attracting 30,8 mln Lt in 1998, which meant an increase by 11 mln Lt, compared to the 1997.

Most of joint ventures established are Lithuanian-German. Among the most successful projects of co-operation with foreign partners are those of joint-stock company “Liteksas” and German joint-stock companies “Calwer Decken und Tuchfabriken” AG, DEG, and International Finance Corporation (see Box 3) and joint venture “Eurotextil” established by joint stock company “Audėjas” and German firm “Tuch Fabrik Wilhelm Becker”. Both enterprises produce woolen fabrics.

Box 3

The International Finance Corporation (IFC) has approved an equity investment of US$1 million and a loan of DM 14.7 million for the expansion and modernization of *Liteksas Ir Calw A.B.*, a woolen textile mill in Kaunas, Lithuania. This was IFC's first investment in Lithuania, which became a member of IFC in August 1993. *Deutsche Investitions-und Entwicklungsgesellschaft* is also performing a significant financing role alongside IFC.

The investment project, which cost US$27.2 million equivalent, enabled *Liteksas* to become more efficient, diversify its product line, increase its output capacity, and upgrade product quality for export to Western Europe. The project was the second largest foreign direct investment in Lithuania to date of 1995. Its success is likely to be a catalyst for additional foreign direct investment.

At project completion, *Liteksas ir Calw A. B.* was be owned 66 percent by *Calwer Decken-und Tuchfabriken AG*, a family-owned German company with a 350 year textile manufacturing tradition; 14 percent by *Liteksas'* employees and Lithuanian investment funds; 4 percent by the government of Lithuania; 8 percent by *Deutsche Investitions-und Entwicklungsgesellschaft*; and 8 percent by IFC.

“Calw brought market access and fabric finishing know-how to meet export quality standards, and the Lithuanian partners brought a long tradition of woolen textile manufacturing and a skilled, competitive work force," said Edward Nassim, Director of IFC's Europe Department. "*IFC* expects these complementary strengths will develop a viable and competitive export company." *IFC* assisted in structuring the project and tailoring the financial plan. Financial support from the governments of Switzerland and the United Kingdom, under *IFC's* Technical Assistance and Trust Funds Program, helped make possible the project appraisal and will be further utilized for training the company's work force. *IFC* is a member of the *World Bank Group* and is the largest multilateral source of equity and loan financing for private sector projects in developing countries [18].

It is worthwhile to mention the investment made by the Austrian firm “Richard Hammerle Farberei und Appertur Gesellshaft” and Lithuanian joint-stock company AB “Dirbtinis pluoštas” into the joint-stock company “Kateks” which produces fabrics for lining. Besides these largest investment there were a number of smaller ones as well (see Box 4).

Box 4

In 1993 August two companies: *Dirbtinis pluoštas* and Austrian textile company *Richard Hammerle GmbH* established joint venture *Kateks* producing lining fabrics from acetate. *Dirbtinis pluoštas* owns 44% of *Kateks* shares and Austrian conmpany – 66%).

Joint venture *Kateks* was established in order to utilize *Dirbtinis pluoštas* potential in maintaining production advantage of comparably cheap labor force, energy and other resources, additionally to the experience of *Richard Hammerle GmbH*.

On 24 September 1998, a transaction on selling the block of *AB Alytaus Tekstilė* (Alytus' Textile) shares has been signed. The company is one of the biggest cotton processing companies having the complete production process in the Baltic States. Acquisition of more than half shares of the company by Toloram Group has been considered as one of the most important investment in the textile and clothing industry in Lithuania by (see Box 5).

Box 5

The Singapore-based Tolaram Group recently acquired a 63% share in *Alytaus Tekstile* for just over US$ 3 million, and is required to invest an additional US$ 60 million to modernize the huge textile factory. *Tolaram is* already a major regional presence, and has investments in the textile sectors of Latvia and Estonia.

"This is an extremely important investment project. It shows that Lithuania has moved past the period of economic transition as reforms are already showing impressive results," said Lithuanian Prime Minister Gediminas Vagnorius.

Employing 3500, *Alytaus Tekstile* is Lithuania's largest textile factory. *Tolaram's* investment project requires that company reforms protect the size of the workforce by expanding production. According to Company Director Gintautas Andriuskevicius, the size of the workforce is likely to increase because the factory began to operate in three shifts from October 1. With additional investment from *Tolaram, Alytaus Tekstile* plans to expand its exports to the European Union, particularly to Scandinavian countries.

Portugal's experience shows that traditionally FDI in textile and clothing sector is not significant. The average size of investment in the textile and clothing industry is generally small [8, p.252]. Nevertheless, FDI is considered to have a major importance for further long-term development of competitive advantage of the industry. Thus investment activities were highly fostered by EU countries and their government institutions in the period of restructuring.

2.5 Technological innovations

Once the market demands higher quality and flexibility in production range, capital intensive machinery becomes necessary irrespective of factor prices, because it can produce quality. Textile enterprises in Lithuania inherited huge park of obsolete and inefficient machinery, which indeed needs radical restructuring in order to keep pace with the recent development trends in the structure and the nature of the market. Since 1975 when Western equipment has been installed in the textile and clothing industry in Lithuania, renovation of industry equipment has become one of the most important strategic goals. Over the last decade, more than 70% of the production equipment in the industry has been replaced by state-of-art equipment. This has been accomplished both by reinvesting profits and by attracting significant investment, with the result that Lithuanian companies have been able to construct modern production lines.

Sewing and knitting enterprises considered as more flexible in equipment renovation effectively used foreign investment as well as own funds for the increase of industrial capacity. In recent years they have bought the newest equipment made by firms "Lindauer Dornier", "Durkopp Adler AS", "Weit", "Santoni", "Sangiacomo", "Macpi", "Rimoldi", "Chirano Kinzoku", "Juki" and other wide-known firms in Europe, Japan and USA. Continuous renovation of sewing equipment of successfully operating sewing companies is one of prerequisite which foreign companies value while choosing business partners in Lithuania. This factor along with high competence of management and specialists as well as qualifications of workers, low level of labor expenditure ensured that the textile and clothing industry more then other branches succeeded in finding business partners, attracting foreign investment that could be used for production and technology improvement [3]

Apart from considerably high renovation of manufacturing equipment in clothing sector, the textile industry still suffers from inefficient and obsolete equipment. The renovation of it requires much higher levels of investment, which at preset without external injections are impossible for they maintain debts, fluctuating manufacturing performance, rigid economic conditions which in turn leads to remarkable lack of working capital.

2.6 The market, customer segments and trade partnership

Demand for fabrics is a derivative of the demand for apparel, household textiles and sewn products in general. Historically approximately 95% of The Lithuanian textile exports have been directed to the former USSR. However during some years after regaining Independence these markets have declined and this has resulted in reduced output and underutilization of existing industry capacities. The local supply of fabric has dropped due to a shortage of raw materials and limited possibilities to raise capital. Financial constraints have made companies resort to purchasing small quantities of raw materials, thus raising the price per unit. In 1994 the textile industry suffered the lowest profits that was only 23 mln Lt for the whole local industry. The 1nd table lists the production volume of fabrics that reached only 81,0 mln m^2 in 1994 while in 1991 it was 204,3 mln m^2. Gross profit margin at the end of 1994 was only 2,7% (in 1996-15,2%) [6].

Table 4 The dynamics of the textile industry production volume (linen, cotton, silk and artificial fibre fabrics, mln. m^2) [31]

	1991	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**
Fabrics (mln. m^2)	204,3	166,9	99,7	81,0	93,7	105,2	136,0	141,0

After severe production decline in 1994 weaker sewing companies oriented their production to low income segments within local market and faced with great competition of worn clothes imported from abroad, while more prosperous sewing enterprises tries to serve medium size income consumers markets within the Country while the won part of local market for domestic clothes is very low. The prerequisite of such activities of the latter companies was experience in sewing gained from working on foreign outward processing contracts and sewing clothes for well known prestigious brand names in Europe (see. Box 6)

Box 6

The Lithuanian textile industry draws on a century of old tradition and today offers highly skilled workers and the young talent of award winning fashion designers. From raw materials to high fashion finished clothing, Lithuania is a competitive source of textiles for most EU markets. Quality conscious companies such as Marks and Spencer and Adidas buy Lithuanian textile.

To overcome the impact of reduced demand in CIS, the industry is actively increasing sales in Western Europe. The increase of exports to the West is the key element of most corporate strategic plans prepared by The Lithuanian textile and clothing companies.

Tracing the foreign trade it can be observed that export of textile production from 41% in 1991 has increased to 70,9 % in 1997. The textile and clothing industry is the

main exporter of the country. In 1996 the export total of textile and textile articles, clothing, fur, leather and footwear accounted for 18 % of all countries export.

Export of textile and clothing articles continues to grow while the export of total Country's production from 1997 to 1998 feared a decline partly due to crisis in Russia (Appendix 6).

The main trade partners interested in The Lithuanian textile production are located in Germany, Russian federation, Denmark, UK, Sweden. Netherlands, Italy and etc (see Appendix 4) [3]. The Lithuanian and the EU trade agreement for textile production in 1993 created benevolent situation for The Lithuanian textile industry to reach European consumers [23]. From 1 January 1998 trade in textile products with the EU has been completely liberalized. As a precursor to the eventual integration of Eastern European countries into enlarged European Union, the EU has conceded significant reductions in trade barriers imposed on textile and clothing trade.

In more general terms, the sort of deals, which began to be concluded between West and East Europe, fell into the following categories:

- straight purchase by the West of Eastern European designed and manufactured products, both textiles and clothing;
- the wining by Eastern European companies of Western contracts for production to specifiers' designs, but using local materials;
- outward processing trade with Western fabrics sent to East Europe for making up into garments to Western specifications and return to the originating country;
- the manufacturing under license of garments for distribution partly in the West and partly in the East European country's domestic market;
- joint ventures or direct investment in Eastern Europe, in which capital and skills in manufacturing, marketing and/or design are also transferred [11].

Although each of these methods provide work for Eastern European companies in the short run term, only the last form of business guarantees the transfer of capital and skills crucial to the longer term development of the region as the major textile and clothing producer. Nevertheless, in sewing industry outward processing trade is the dominant mean of cooperation ensuring profit in short term for some bigger sewing companies and keeping the smaller ones at the balance of survival. Bigger companies perceive these contacts as one of the important sources to raise capital in order to penetrate Western markets with finished apparel production, but this process is at the very early stage. Lithuanian sewing companies do not have well known brand names, original fashion design traditions and experience in marketing making them rather uncompetetive with their finished-up production. While the EU market of clothing is rather overfull it is very difficult to compete with developed sewing industry production with distribution channels maintaining long fostered brand names, having highly sophisticated distribution networks within and outward the EU countries.

The local market is too small to absorb the capacities of most existing textile companies. Therefore export market access is the a key element in ensuring sustainable growth. At the same time, the foreign trade volume enlargement demonstrates the Lithuanian's ability to meet foreign markets challenge and high competition.

3. CHALLENGE OF THE EUROPEAN UNION

3.1 Restructuring of general regulations and institutions

Appropriate level of economic institution preparation is one of the main EU requirements for its potential member states. The Copenhagen Summit indicated the most general criteria that the associated states will have to meet. These requirements encompass ensuring an existence of effective market economy and its ability to withstand the economic competition of the EU member states, i.e. their ability to ensure the competitiveness of their economies, meeting, at the same time, their common political, economic and monetary obligations.

Restructuring of Lithuanian economy recently was advanced by removal of barriers to market entrance and exit, further reduction of direct state involvement, and further liberalisation of rules, governing market transactions. Industry and firm restructuring proceeded at an increasing speed, fuelled by the pressures from the external shock resulting from the Russian crisis and sluggish growth in the EU. Changes in Lithuanian economy mainly effect the whole industry and its branches more or less to the same extend depending on the sensibility of different industries. The more specific policy concerning industries and specific measures are to be applied during later phases of restructuring processes that will succeed more general structural and institutional changes. Therefore it seems reasonable to run over the main institutional changes of common character [22, p.3].

Progress in the alignment with the relevant EU *acquis* of laws regulating *competition, state aid and public procurement* established level playing field together with diminishing barriers to market entry. Barriers to market exit of non-competitive agents have been reduced through improved *administration of bankruptcy* procedures. Since July 1998, bankruptcy procedures significantly accelerated. The Law on the Rehabilitation and Restructuring of the Capital of Enterprises (adopted on 20 October 1998) Law aims at establishing the procedure of capital rehabilitation and restructuring of enterprises that have become insolvent prior to enforcement of the Law on Enterprise Bankruptcy. The Law specifies the cases under which the government will be entitled to rehabilitate or restructure the capital of insolvent enterprises included in the list of the objects under privatization, the purchase and sales agreements of shares belonging to the State under the right of ownership thereof foreseeing their rehabilitation and restructuring without the application of bankruptcy proceedings. Thus, efforts are being made to improve the structure of negative capital of such enterprises, to avoid considerable economic and social losses due to prolonged bankruptcy proceedings, also to create conditions for recreation of the solvency of enterprises attracting private investors. The latter legislation together with Program for the Revival of Industrial Enterprises provided the possibility for companies to reimburse their debts in the form of shares and allowed for the State intervention in the companies' financial restructuring and the department responsible for bankruptcy procedures has been set up at the Ministry of Economy. Bankruptcy procedures have already affected 24 companies since the restructuring of the textile sector had commenced in 1991. The government put efforts to limit the number of bankruptcies and maintain employment levels by attracting local and foreign private investors as

well as to mobilize resources from the State budget, nevertheless, the industry still lack capital and some other devices should be considered as well. The EU rules for rescue and restructuring aid were referred while developing the revival of industrial enterprises program [28]. Although there have been considerable efforts pulled to restructure the industry there is still need for more profound consideration in order to transform the industry into more competitive entity with more higher efficiency not necessarily at the same level of industry's scope in terms of the number of companies and employment.

A significant step towards creating the environment for competition in line with the EU rules were preparation of new *laws on Competition and Public Procurement* (passed in 1999) and presentation of draft *Enterprise Law* at the Seimas (Parliament) for adoption. The amendment of the *Enterprise Law* provides opportunities for foreign companies to open branches in Lithuania. In 1999, new Guide on *State Aid* was released. State subsidies have further decreased from 0.9 per cent of GDP in 1997 to 0.5 per cent of GDP in 1998.

Since 1 July 1998, the following strategies and programs have been approved: the Program for the Promotion of Innovations in Industry, the National Quality Program, the Export Development Strategy and the Program for Management of the Tax Legal Basis.

In order to increase the competitiveness in industry, the government approved the National Quality Program on 12 January 1999. The Program is aimed at achieving the following goals: to form the new approach regarding quality; to create legal and economic conditions for economic entities to constantly strive for higher quality; to develop a quality infrastructure (quality management training, quality regulation, standardisation, conformity assessment, market supervision) that would help economic entities to become more competitive in domestic and world markets; to stimulate enterprises to implement quality systems, conforming to the ISO 9000 series standards and their certification.

One of the major macroeconomic problems of Lithuania is an increase in balance of trade and services deficit, where exports as compared to imports have developed at a slower pace. Seeking to reduce balance of foreign trade and services deficit and stimulate the economic development, as well as the active and profitable operation of the enterprises registered in Lithuania, the creation of new businesses, goods, services, and jobs the government adopted the Export Development Strategy. The Strategy was approved on 29 October 1998 by Resolution of the government. The Strategy analyses causes and factors, which predetermine export possibilities of Lithuania. The same Resolution approved an Action Plan for an Export Development Strategy for 1999-2001. This plan foresees measures and ways for solving problems.

The government, seeking to create a harmonious tax system aimed at encouraging a more rapid development of the economy, as well as at harmonising the tax legal acts with the *acquis*, and taking into consideration the requests of entrepreneurs, approved the Programme for Management of the Tax Legal Basis and measures for its implementation by its Resolution on 11 August 1998.

The drafted Program for Promotion of Innovations in Industry focuses on the creation of favourable financial and legal conditions for innovation, on the strengthening of connection between scientific institutions and industry and on the improvement of information on innovation exchange.

The following institutions for carrying out industrial policy have been established: State Property Fund, Lithuanian Export and Import Insurance, Export Promotion Fund and Small and Medium Business Promotion Fund.

The government is focusing its attention on the development of regional industry, on the export promotion and on the creation of the stable legal basis. A model of the system of Lithuanian foreign trade insurance and crediting, guarantee of trade transactions has been restructured in compliance with the EU model. Agreements on most favourable terms and free trade are being signed, thus enabling the maximum level of development and growth in the country's industry to be achieved in the long-term [22, p.83-85].

At present, Lithuania maintains a relatively low level of protectionism in the area of its foreign economic relations. The weighted average of its conventional customs duties stands at 5.14 per cent, while the weighted average of its customs duties on industrial goods is equal to 2.5 per cent. The share of foreign trade in Lithuania's GDP demonstrates the openness of its economy: in 1998, exports accounted for approximately 34.7 per cent of GDP, while imports accounted for approximately 54.2 per cent [21]. Concerning the textile and clothing industry the specific trade policy measures are applied in order to protect enterprises in restructuring phase. While a free trade protocol has been signed with the EU, there exist duty rates on imports of certain products for some other countries. Nevertheless, manufacturers still face abundance of commodities that come into local market from foreign countries of low quality and having no certificates for health and environment safety. Thus there is a lack of more consistent border administration and quality and safety testing facilities.

At the moment, no valid legal acts exist in Lithuania, which could be related with textile denominations and quantitative analysis of textile fibre mixtures. The Lithuanian manufacturers of textile products for the analysis of fibre mixtures freely apply international standards ISO 1833 "The Two-component Textile Fibre Mixtures. Quantitative Chemical Analysis", and ISO 5088 "The Three-component Textile Fibre Mixtures. Quantitative Chemical Analysis", which have been adopted as Lithuanian standards. The Ministry of Economy is responsible for the implementation of this sub-sector *acquis*.

This sub-sector *acquis*, comprising three Directives, is implemented by preparing the technical regulations "Textile Denominations" (in respect of Directives 96/74/EC and 97/37/EC), and "the Methods of the Quantitative Analysis of the Textile Fibre Mixtures" (in respect of Directives 96/73/EC and 73/44/EEC). The technical regulations will be prepared in 1999, approved by the Order of the Minister of Economy in December 1999, and enforced on July 1, 2000.

An official testing laboratory is to be established for implementation of the technical regulations, (subject to the direct involvement of the Lithuanian Textile Institute).

Extra funding necessity is estimated at LTL 610 thousand (LTL 600 thousand for the establishment of the laboratory, and LTL 10 thousand for the translation and technical wording of Directives).

Referring to the industry addressed by this research work it could be seen that in terms of support development, there is no sector specific programme. Enterprises in the textile and clothing sector benefit from the measures developed at a horizontal level. Particular emphasis is put on export promotion, SME development, quality enhancement (e.g., indemnification by the Export Promotion Fund of the costs for quality management systems certification), innovation and environmental protection (use of Oeko-text standards).

3.2 Privatization in advance

Accumulation of private capital, which is of the vital importance for creating market economy in Lithuania, is largely due to privatization process. The first stage of Lithuanian's privatization program began in 1991 and was completed in 1995 with 86% of total eligible companies privatized. The next stage of privatization was followed by active government contribution in accelerating the next stage of privatizing large industrial enterprises. In 1998-1999, *privatization* has been an important element both in restructuring of enterprises and mobilization of investment capital. In the light of expected cost reduction and increase in productivity, positive impact of privatization of major Lithuanian transport, energy and financial companies will extend beyond these sectors. Considering the development of the textile and clothing industry in Lithuania, it has also been rather influenced by privatization. This industry was the first to join privatization process. This forced the privatization to become more rapid in the textile and clothing industry than in other industrial sectors. If compared, the share of state and municipal capital in the whole Lithuanian industry accounts for 67,5%, while in textiles industry it accounts only for 29 %, in sewing and leather industry-only 15 % [3]. Foreign capital in the structure of textile subsector to the date of 1998 covered approximately 15% in total. In 1995 there were two large textile companies "Alytaus tekstilė" and "Drobė" left unprivatised . On 24 September 1998, a transaction on selling the block of *AB Alytaus Tekstilė* (Alytus' Textile) shares has been signed.

Privatization considered to be one of the preliminary steps towards greater efficiency of enterprises while some failures in privatization process demand outstanding consideration of further restructuring and government participation in creating favorable environment for the development of competitive advantages and industrial networks. It can be regarded as call for appropriate *industrial policy* in order to wield the future of the industry in more thrifty way. The early interviews proved that privatization in some cases have not solved the problem of disruption in creation of added value chain. Adjusting to market economy to some companies appeared to be more arduous task resulting in having great problems and striving for survival instead of taking a challenge of the new environment and perceiving strategic approach to the restructuring of the company.

3.3 Regulation of trade with the EU in textile an cllothing commodities

The textile and clothing industry is regarded as one of the most sensitive sectors when it comes to imports from low-cost developing countries. Therefore the EU import restrictions and export restricting agreements and arrangements between the EU and a number of important textile exporting developing countries, have traditionally been included in the framework of the EU's trade policy (for concrete regulations concerning the textile and clothing industry in the EU see below).

A Trade and Cooperation Agreement with the EU was signed on May 1992 and entered onto force in 1993. The present contractual EU-Lithuania trade relationship is regulated by a Free Trade Agreement, which entered into force on 1 January 1995. A Europe Agreement was signed with Lithuania on 12 June 1995 and entered onto force on 1 January 1998. Duties and quantitative restrictions between Lithuania and the EU are abolished with the exception of agricultural and fishery products where substantial preferential treatment is granted.

The Agreement includes particular specifications in trade for textile and clothing articles. This part of agreement emphasizes the absence of any quantitative restrictions on trade with some stipulation (import quotas are based on historic records). Nevertheless, there still exist some non-tariff barriers in respect of registration, documentation and custom procedures for agricultural and fisheries products as well as standards and other technical requirements for textiles and leather. In order to export the production to the EU countries local manufacturers encounters restrictive mandatory certification and quality controls, which are in use for textile products. Moreover complicated mandatory certification and quality tests are in use for carpets. Imported goods without the required quality and hygiene certificates may be refused at the border or at the custom offices.

Preferential status is applied only to these goods which are of local origin and might be proved by acquiring EUR1 certificate. Special bodies established by the customs (Regional Chamber of Commerce) issue these certificates. The exporter in order to get a certificate of origin must submit a request, which includes the name of exporter, the receiver of goods, kind of transporting, description of packaging, description of goods and the weight. Since the institution established to issue such certificates is located in Vilnius managers of different textile and clothing companies located in a considerable distance from the capital find very time consuming procedure in order to get such certificate for every load which some times is lower than merely level in quantity.

Certificate of origin on the other hand to some producers creates some hurdle for sourcing the supplies and in result in obtaining lower prices and thus competitiveness. Some companies traditionally worked with material imported from Russia, which indeed contained lower prices and logistic cost. Since the major weigh in production costs is formed by raw material, the input of considerable low in cost and amount labor into the value added is not enough to fit into the framework within EUR1. Therefore such restriction limits the freedom in choosing suppliers as well as managing competitiveness and taking benefit from possibilities available from the East neighbors. Nevertheless, the more value added in the production process might solve the problem as well as prove beneficiary in terms of developing competitiveness in the long run.

Box 7

The EU regulations on textiles and clothing

The EU's bilateral textile agreements under the GATT Multi Fibre Arrangement (MFA) expired at the end of 1994, but were at the same moment replaced by administrative arrangements under the new WTO Agreement on Textiles and Clothing (ATC) of the Uruguay Round, which will be in force until the 2005. Under the ATC, 16% of the products regulated by MFA were due to be integrated into the GATT by 1995, further 17% were due to come into the GATT/WTO remit by the second phase in January 1998, another 18% is due to come by 2002 and the remaining 49% by 2005. At the second stage the Commission announced committing to free trade by eliminating a large number of quotas that amounts to 17,84% of the EU's textile and clothing imports (based on 1990 figures). But the point about 0,84% "gift" by the EU could hardly disguise the fact that the list itself was dominated by the least sensitive textile and clothing products (there were 24 different categories of products, including carpets, corsets, panty-hose, mittens, tents, mattresses and knitted or crocheted swimwear). The process of liberalization is mainly controlled by the EU and might be tempered in order the Commission could encourage industrial adjustment at an acceptable pace, moreover when it could be observed that textile and clothing industry in the EU since 1994 continues to lose approximately 2% of labor force annually on average [37].

Only few other regulations specifically apply to the textile sector. The most important is the legalization since 1971 on the indication (labeling) of the fibre content of textile products and on the relevant testing methods. Efforts to establish certain safety requirements regarding the inflammability of fabrics for upholstered furniture were still under discussion in 1997. Other legislation covering all industrial sectors, also includes textiles, sometimes in specific way. This applies for example to the new EU scheme of Generalized Preferences (GPS), which takes into account the sensibility of the sector, or the RETEX program of the EU, which supports entrepreneurial initiatives for diversification, in those regions which are strongly dependent on the textile and clothing industry [27, p.4-15].

Specific regulations regarding textiles are mostly also applicable to clothing. However, for the outward processing trade (OPT) the EU, already in 1982 established a particular legal framework which was modified by regulation (EU) No 3036/94, applicable since the beginning of 1995. This new regulation, supplemented by Regulation (EU) No 3017/95, supporting the uniform application in the EU fabrics when operating in low-wage countries, and limits operators in the volume of their OPT operations by linking these to their respective EU production. The idea was to maintain a maximum of production and employment in the EU clothing sector. However, this regulation does not apply to the Mediterranean countries and will no longer apply to the Central European countries after 1997, where most of industry OPT is carried out [27, p.4-23].

3.4 Trade with the EU indicators

EU/Lithuania trade has developed rapidly from 1991 to 1998. The EU imports from Lithuania have significantly grew from 442 million ECU (1992) to 1311 million ECU (1997). The main imports are textiles (30%) followed by wood and wood products and chemicals. The EU exports to the Country have grown from 225 million ECU in 1992 to 2138 million ECU in 1997. The Union's main exports are machinery and electrical equipment (22%), agricultural and processed agricultural products and transport equipment. Germany traditionally remains the main partner and accounts more or less for 40% of total EU-Lithuania trade [20].

The share of textiles exports (in the country's total exports) grew from 2,3% in 1991 to 38% in 1997 [15, p.10]. The development of trade with the EU and EFTA countries within the total foreign merchandise is indicated in the chart below.

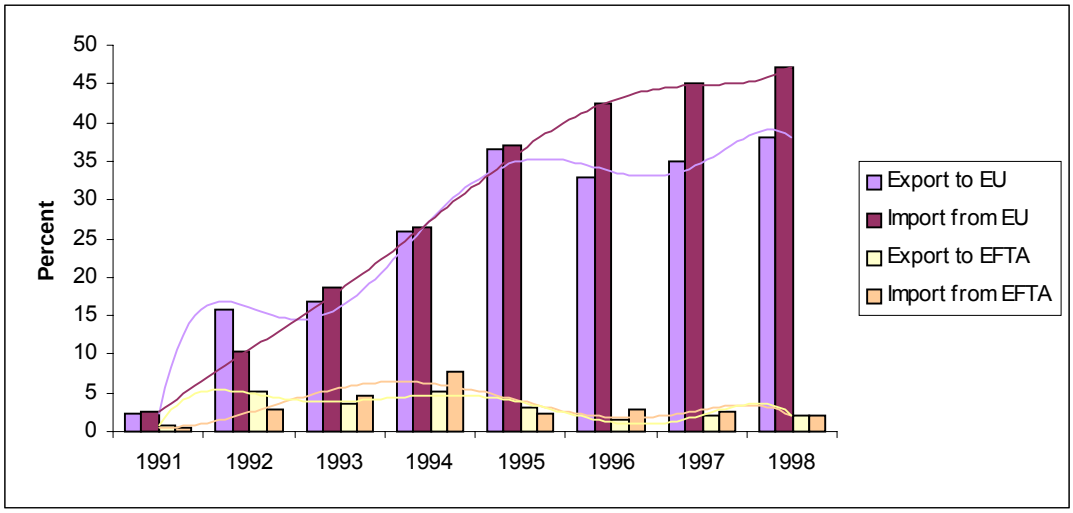

Figure 9 Lithuania's foreign trade in 1991-1998 with the EU and EFTA within the total foreign trade amount

It could be observed that Lithuania faces constant negative trade balance in textile articles (see Figure 10).

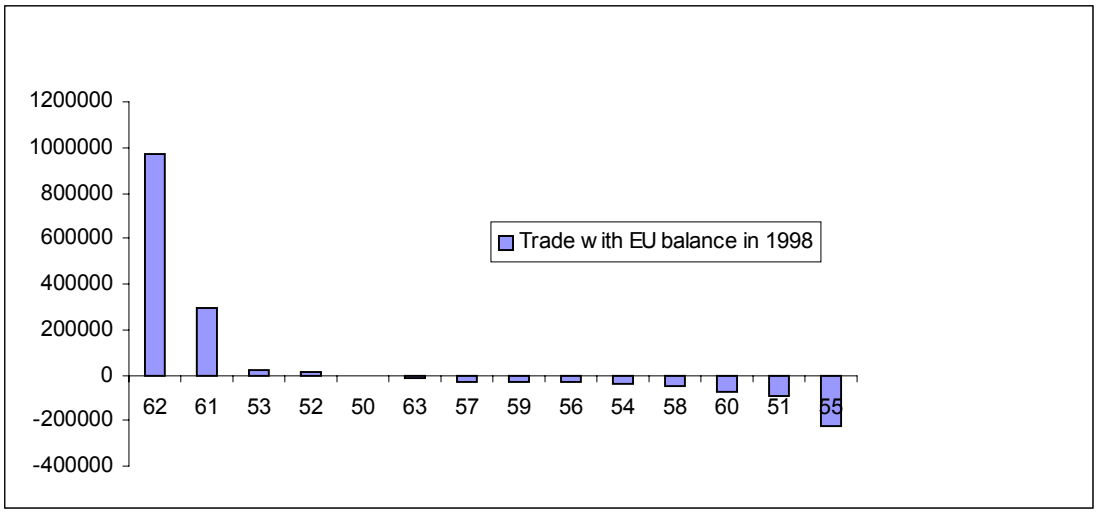

Figure 11 Trade with the EU balance by commodity groups (for identification of commodities groups see Appendix 6)

Articles of apparel and clothing accessories, knitted or crocheted as well as articles of apparel and clothing accessories, not knitted or crocheted together with cotton and other vegetable textile fibres as raw materials are the main export commodities that excel import by the leading amounts. While wool, man-made fibres filaments and special woven fabrics, are the commodities of which inflows from the EU outrun outflows from Lithuania.

The Lithuania's specialisation in certain textile and clothing products (HS 4 digit level) is revealed in Appendix 6. It can be observed that Lithuanian export excel average world export amounts by 55,69 times in outflows to foreign countries by

artificial yarn and more that 20 times by export of flax based material. These figures clearly reveal Lithuanian potential in strengthening export direction within this product range as well as increasing value added in order to maintain higher competitiveness and export income.

The import of textile articles encounters steady growth. Compared to the last year in 1998 inflows of textile articles to the Country increased by 20,1%. The main countries importing cotton fabrics are Russia (26,8% of total import of this commodity), Germany (22,9%) and Sweden (9,5%). Last year in the import market of cotton fabrics Germany took the leading role (24%) and Russia was the second (23,7%).

Germany products accounts for the majority (48%) wool imported wool fabrics. Great Britain imports 18%, Italy-7,1% in total wool fabrics import.

Denmark is the leader in importing knitted sweaters for sports, girl's and women's coats and knitted shirts. From this country Lithuania receives 40% of knitted sweaters, 68%- knitted shirts and 72,5% girl's and women's suits, dresses and skirts.

The majority of men's suits are imported from Germany (18,6%), Estonia counts for 13,7% and the third leader is Turkey (9,8%). China is biggest supplier of men's coats, raincoats and jackets. The products from this country are the cheapest of all imported goods and compared to German the same product range the price of Chinese coats is 25 times lower. The highest price of imported textile articles of the same range appertains to Switzerland (100 times higher than these from China).

The analysis of home textile articles import proves rapid growth of products inflow to the Country. Compared to 1997 the import of bed linen in 1998 increased by 80%, the import of blankets-by 78%, curtains-83%, and toilet/kitchen linen-53%. The majority of curtains fabrics are imported from Germany (30%), Poland accordingly accounts for 26%, Austria-13%, France-6%. The main importers of blankets and coverlets are Check, Poland and Germany together importing more than 50% of total import of this commodity. Bed linen major importer is Poland (44%). Germany imports 18%, Sweden 6% and Denmark 5,8% of bed linen. Toilet and kitchen linen products are received in major from Estonia (23%), Russia and Latvia shares 13% for each and 8% fall to import from German [39].

3.5 EU integration policy impact on the industry

While government has settled the priority in persistent institutional and economical restructuring in context of European integration and actively highlights the slightest positive improvement of Lithuania's economy, early interviews proved that it is still *rather early to asses possible EU integration impact on the industry*. This could be explained by several reasons: i) successfully operating enterprises have already adjusted to the requirements of the EU countries while exporting the majority of their production and attending West European customers (From 1 January 1998 trade in textile products with the EU has been completely liberalized). Interviewees perceive that without more profound cluster relations and rather unfavorable economic conditions as well as absence of industrial policy the future of the enterprises especially in the light of becoming a member of the EU is very vague (without radical

changes local manufacturers could hardly compete with end-up production in the long term) particularly for the textile and clothing industry as a whole encompassing various cluster relationship. The necessity of more notable and consistent preparation of the whole industry including creation of steady and expedient industrial policy before embarking on considering strategies for integration to the EU should be of primary importance for government. In addition integrated development of product value and Western market penetration with end-up production and local brand names should be carried by the enterprises. ii) the lack of strategic thinking among weaker enterprises that fears a lot from lack of experience in operating under market conditions and operates in circumstances of underutilization of existing industrial capacities. These enterprises encounter survival problems, debts, lack of working capital and investment for promoting their activities and products. There is also an evidence that both groups of respondents lack of information about Community's legislation and its impact on the industry.

Interviews proved that analyzing costs and benefits of integration process may cause problems for it proves difficult to distinguish EU integration related effects versus transition to market economy or integration into the world economy measures. If integration of Lithuania in to the EU could be addressed for liberalization of trade and removal of other economic barriers, the textile and clothing industry especially the former subsector benefited the most. The clothing industry proved to appear one of the most favorable area for the EU manufacturers seeking to implement more competitive strategies via cost restructuring. Emerging market economies such as Central and Easter European Reregion proved to attract OPT contacts and establish benevolent cooperation for both parties that proved to carry benefits in the short run. While the further development of the industry will remain dependent more on economic and political actions carried out by Lithuanian government as well as changing strategic patterns of present business partners in the EU not excluding the role of former USSR countries that might perform in the long run as potential competitors for The Lithuanian textile and clothing manufacturers as well as potential markets for their products. Although Lithuanian government is constrained by the EU norms they are committed to adopt, there is still enough room for policies aimed at reducing possible negative impact due to lower competitiveness of the Lithuanian industry in comparison with the EU manufacturers.

Lack of response from managers concerning possible integration costs called for reference to the EU manufacturers' experience in order to fill some information gap concerning interrelation of firm strategy and costs alteration related with integration into the Single Market. The CEGOS consultants in Paris analysing the effectiveness of measures in creating the Single Market in Europe came to the conclusions concerning the costs in the textile and clothing industry, which evolved from creation of the EU. One of the possible ways to derive feasible impact lies within experience faced by the EU manufacturers. Nevertheless, there still exist some notable differences in present situation of Lithuanian manufacturers and this of the EU industry while launching the Single Market. The EU manufacturers were the actors *per se* of the Single Market creation process, shaping and actively seeking for new penetration strategies by themselves. While the textile industry in Lithuania faces already highly structured and developed industry in the target region mainly acting as subcontractors and having no strong negotiation rear as EU manufacturers do. Too weak experience in operating under market conditions that were raised on the

background of command economy habits places Lithuanian industry in a quite different position. Thus implications of possible costs derived from the survey carried out in the EU should be estimated with adjustment having in mind that Lithuanian industry still is not so advanced and the restructuring costs at the enterprise level might be higher.

The abolition of frontiers in European countries has proved to enable effects on cost reduction as well as influenced increase of some additional costs when introducing technological and organisational changes as follows:

Faced with *market pressures* European textile and clothing companies reacted by taking the following actions:

- restructuring the productive apparatus, reducing production costs (reducing staff, changing sources of supply, subcontracting and redeploying their activities to countries with lower production costs)
- developing more flexible distribution as well as quality and creativity
- automating certain design and production stages
- embarking on logistical actions in order to reduce delivery times (An Italian study by Moda Industria shows that enterprises are devoting on average 4,9% of their turnover to logistics (creations of EDI[4] among distributors and manufacturers to make advanced decisions on stock management)
- modification of the policy on human resources in order to improve management, vocational training and relating occupational changes paying more attention to quality staff
- developing of marketing on a European scale

These changes undoubtedly called for money injections. The interviews carried out by SEIL representatives in Lithuania proved that Lithuanian companies are slightly advanced in taking the same actions especially concerning restructuring production cots, developing marketing abilities as well as becoming more flexible in production and delivery times.

- Proportion of *transport costs* in the total costs has risen from 3,4% to 3,9% between 1990 and 1994. The change occurred due to dual effect. The liberalization itself generated a drop in transport costs of around 4% for the same conditions. Nevertheless, elimination of frontiers caused changes in transport policy with creating more flexible delivery forms on a smaller scale and embarking on the new methods of transportation. (Transport costs accounts for between 2% and 4% for manufacturers turnover; the time taken for transport in intra-community trade was on average three days).

- The fall in *administrative expenses* by approximately 5% of between 0,08% and 0,6% of turnover was observed. This reduction is partly offset by the costs of declaring the trade in goods. The Lithuanian textile and clothing companies complained about rather complicated customs documentation for trading in their production abroad (border administrative expenses comprises approximately 0,58-0,1% of turnover). Nevertheless, this factor was not considered as of primary importance for manufacturers in raising their competitiveness.

[4] Electronic Data Interchange

- Adjusting to the *VAT changes* caused short term problems for companies in adjusting computer information system as well giving employees special training;

- There was some costs observed in *adjusting to commercial and technical regulations* concerning consumer protection, fair dealing as well as the protection of public health and environment. Despite efforts to standardise these regulations by European Committee technical obstacles still varies by country within the EU. This situation creates problems not only for intra-community countries but also for extra-community countries. All the companies interviewed in Lithuania, which concludes commercial deals with foreign partners, are already forced to confirm that they meet technical, commercial and quality requirements. The costs of adjusting are usually high due to necessity to test production abroad. While the accredited relevant institution of certification might solve some problems in reducing costs. The need of finance for the establishment of such institution will be estimated by the Ministry of Economy while the authorities who will be responsible for carrying certification activities after there would be a laboratory established claims to reduce certification costs for textile manufacturers by 3 times.

- The cost for taking part in the *protection of the environment* is approached in different ways: the European programme for recycling, developing the Eco-label, directives prohibiting certain substances. Eco-packaging program created some 0,5%-0,8% of the turnover additional costs. Using Eco-label costs some 0,15% of the turnover (UK data).

The mentioned above costs are the main that have been perceived by European managers while facing more competitive and wider EU environment. Some of them are already in production cost structure of Lithuanian manufacturers while the need of more profound restructuring of value added chain elements as well as production process towards increase in productivity tend to remain of major importance where managers efforts together with government support should be put forward.

4. COMPETITIVE EDGE OF THE INDUSTRY

Underlying the call for adjusting industrial capacities in order to respond effectively to challenges posed by external market penetration difficulties and domestic weaknesses, the central issue is to find how Lithuanian economy can achieve the flexibility to assure future competitiveness of the industry in the face of rapidly changing technology and market conditions. This might be considered as the one of the main purpose of research carried out in the textile and clothing industry in the light of measuring its competitiveness (the list of interviewed companies provided in Appendix 10) .

4.1 Theoretical research framework

What to adjust in industry depends on the on existing structure of the industry and its potential as well as analysis of factors influencing industrial competitiveness. For that reason Porter (1990) address these factors which can be summarized as policy and non-policy related factors: a) government policies; b) demand and market (domestic versus export market); c) related input industries and the influence they exert over the industry in terms of raw material, technology and etc.; d) barriers to entry. Institutional structure, domestic factor pools, macroeconomic conditions are factors defining the setting for industry to operate together with firm's ability to sustain and upgrade its competitive advantage which falls into three categories: natural competitive advantage, basic and advanced (Figure 12).

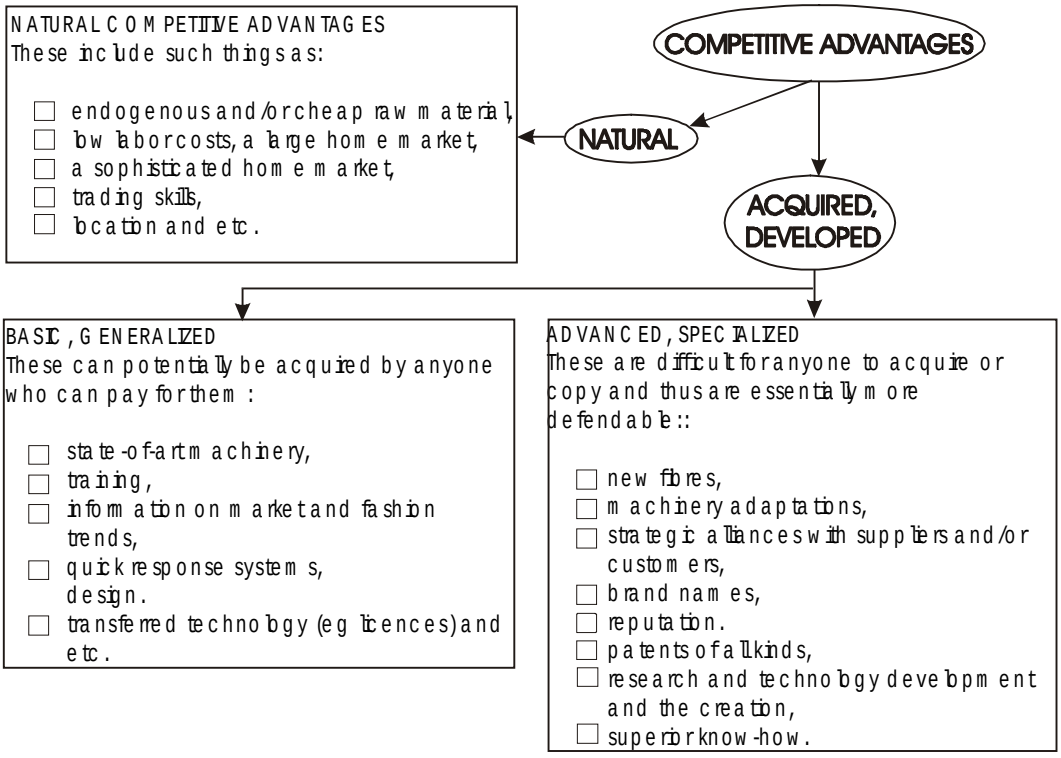

Figure 12 Types of Competitive Advantages

According to Porter's diamond model adopted to the Lithuanian textile industry, which is illustrated in Figure 13, industry forms clusters encompassing these determinants: 1) factor conditions, 2) demand conditions; 3) related and supporting industries and 4) firm strategy, structure and rivalry. Besides these factors Porter includes three external forces shaping operating environment: 5) government; 6) chance; 7) international business activities. Reaching balance of these factors ensures most vigorous industrial activities and might serve as precursor for reshaping The Lithuanian textile and clothing industry.

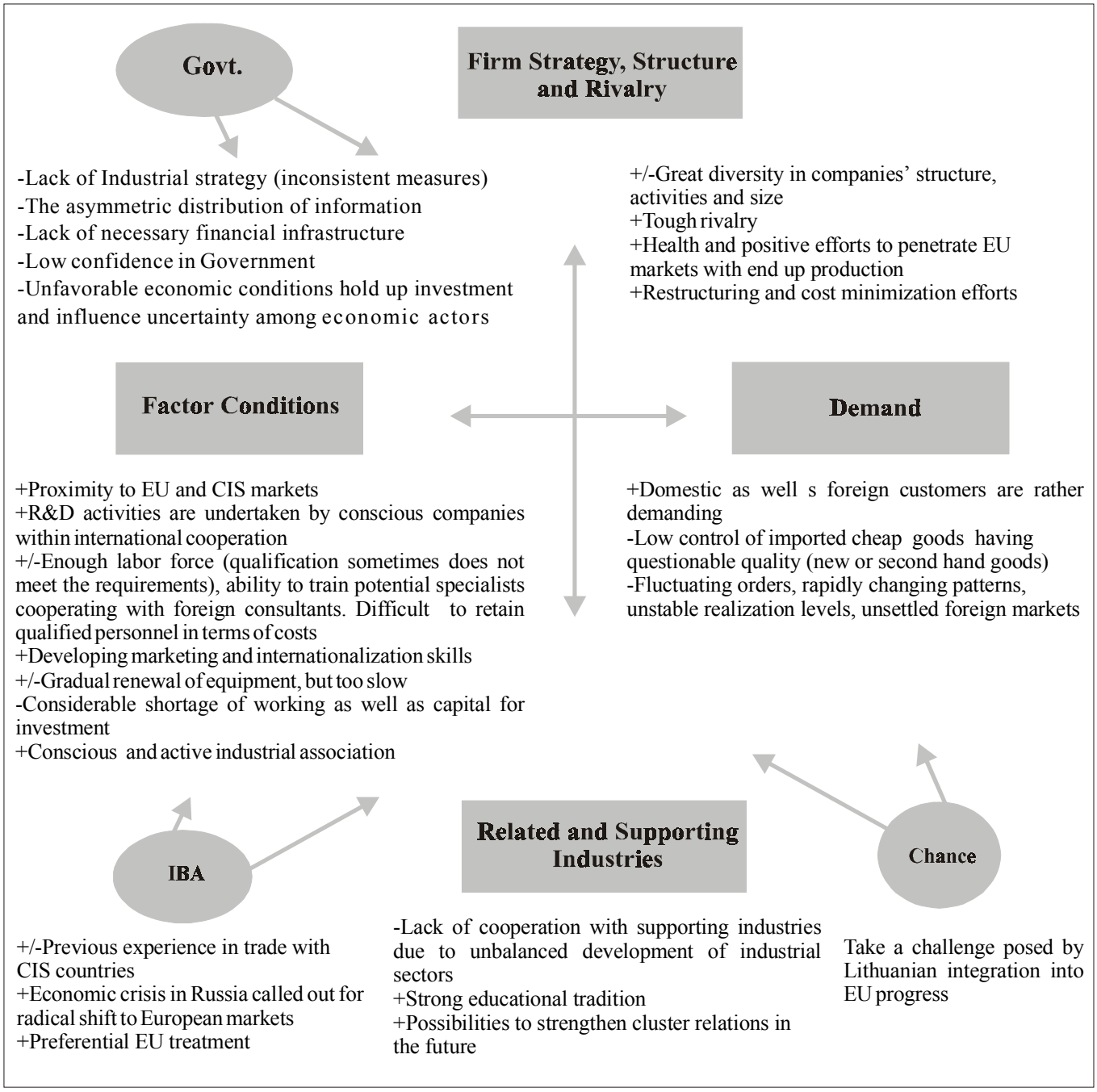

Figure 13 Determinants of competitiveness in the textile industry in Lithuania

4.2 Factor conditions

The Lithuanian textile and wearing apparel industry has been able to cope fairly well under market economy conditions. Despite the adverse influences of having operated in centrally controlled economy with little or no pressure on either costs or levels of service, the Eastern European countries as well as Lithuania still have a number of things in their favor: cheap labor, a textile tradition, a well-educated workforce, in comparison with other developing countries, preferential EU treatment, proximity to European markets, relatively competitive work force in addition to sound business culture.

With relative abundance of high skilled comparably cheap labor force, Lithuania as well as other developing economies find that among manufacturing goods *their initial comparative advantage* lies with those products wherein labor input is high. This factor partly contributes to the high textile and clothing industry export rates and notable part in country's value added. Several of interviewed companies mentioned this factor as one of the most important in earning profits or at least for surviving in the short run. It must be admitted that competitive advantage in developed countries is now being driven by factors such as market access, connections with manufacturers of textile machinery and inputs and flexibility in production, rather than low labor costs.

It would be imprudent to single out cheap labor force as the only advantage that allows benefit for firms by itself. Managers of interviewed companies sometimes used to emphasize that comparative advantage source for Lithuania already does not lie within cost of labor. Other countries such as CIS also have considerably lower wage levels compared to Baltic States, but due to limitations meeting contractual engagement with Western Companies, business partners still or after some time trying CIS industries return to cooperation with Lithuanian producers. Interviewees mentioned that they also tend not to lag behind with quality, which is mainly controlled in their own laboratories (for textile enterprises), or by representatives from contractual partners (mainly in the clothing industry). Some bigger sewing companies sell their services to foreign clients that have well known prestigious brand names.

The majority of surveyed companies usually saw remarkably benefit from Lithuania's proximity to the EU markets. It could be considered as one of the most important factors making vast impact of industry production competitiveness in the Single Market. By nature the textile industry is usually directed by fashion trends that sometimes could have even crucial impact on demand for specific fabrics. Thus manufacturers as well as those from questioned companies always tries to keep hand on fashion pulse and even catch up the slightest movements of this demand indicator. On the other hand fashion requirements usually have seasonal character which in turn calls for production adjustment every period. Ability to react quickly to these fashion fluctuations creates valuable asset in order to attend customers in the most effective way. Therefore trustworthy Lithuanian clothing manufacturers contributes remarkably by providing acceptable conditions for Western partners in terms of fulfillment of contractual obligations as well as product delivery to the end user in time.

As the market has become more differentiated and more frequent fashion changes have become the rule, manufacturers are having to respond far more rapidly to retailer

demands and specifications. Under such circumstances, the *time* involved in meeting orders becomes as important as the *cost*.

Proximity of the EU markets has been another most apparent natural factor in favor of Lithuanian manufacturing sector which in turn keeps textile produces at the higher then moderate level of flexibility together with lower transportation costs compared to the Asian or North African countries.

One of the weaker parts of the textile and clothing industry is related to R&D activities within and outside the firms. Weaving factories usually maintain laboratories, which are assigned to control the quality of products mainly. While R&D activities tend to be transferred to external institutions such as Textile Institute (see Box 8).

Box 8

Lithuanian Textile Institute (LTI) worked out fireproof technology under order of furniture upholstery producer "*Audėjas*". Notably such kind of services is quite expensive and not widespread in industry to consider as important factor at present. While this might be crucial in the future in order to serve foreign customers, who have some strict requirements for the products as proved the case of "Audėjas" as they were forced to adopt such technology, for Great Britain and Scandinavian countries have strict demand for inflammable upholstery fabrics.

LTI has been established, as the State owned enterprise in 1960 for the purpose of applied scientific research work in fields of textile materials production, testing and analysis. While at present the research activity has been mainly replaced by production of special purpose working clothes for army, firemen, fishermen, woodcutters and etc. Nevertheless, LTI continues to provide services of chemical and physical tests of yarn articles as well as testing for hygiene, ecological and quality certifications and also consults on weaving, knitting and finishing technology issues. The obsolete equipment was the main barrier in expanding the latter activity and being accredited for international certification activities and adoption of the EU standards. Recently the Ministry of Economy is questioned for funds directed towards radical renovation of the laboratory equipment, which in turn will allow measuring the technical standards, required by the EU in more cheaper way (see Appendix 8).

Some of interviewed textile enterprises are in doubt of such investment necessity and benefit for several reasons. First of all dealing with Western partners textile companies already receive certificates from contract countries, moreover some contractors require some specific characteristic of the product that unavoidably ought to be measured in the client's laboratory. Therefore the possible obligatory requirement for all the production in some measures to meet the EU or even local standards might create another barrier for the trade in textile articles (taking in account that the EU countries still have rather diverse requirements and thus technical barriers [40, p. 35]). The latter argument is completely denied by the manager of LTI. Secondly companies questions LTI ability to perform at the level of qualification and proficiency achieved by Western institutes of such kind. While in turn it could be only questioned to what degree this institution would contribute in enhancing the competitiveness of the textile industry. Manufacturers does not see big a prominent impact on the industry it could bring while having certification institution nearby in

terms of costs, on the other hand LTI managers claims it could reduce certification costs such cost by 3 times.

Other textile companies address foreign or international organizations in carrying out R&D activities. This cooperation usually results in researching for new materials, their more advanced properties or new processing or finishing technologies. As the most commendable example might be "Brelytus Textil" textile, knitwear and sewing company which has actively searching for more advanced and state-of art technologies in producing or finishing fabrics. Taking and incentive as pioneers in launching some production made of completely new materials. Another example wool company "Drobė" manufacturer of wool fabrics is also cooperating in R&D activities with International Wool Secretariat as well as with Textile Institute in Great Britain. "Audėjas" upholstery producer cooperates in R&D activities with LTI.

The apparel industry in general does not conduct much new products research and development. Investments in this area are made mainly to develop the talent, skills and inspiration of fashion designers (see Box 9). There are subsectors where product R& D are more prevalent, including specialized outerwear such as used for army, firemen, and other special working clothes. These products require the use of specialized fabrics, assembly methods and unique design features to accommodate their end use.

Box 9

Innovation in the form of fashion design is the apparel industry's most distinctive feature. It is a factor often overlooked in assessing sector competitiveness. While many other manufactured goods industries have a design focus, none has the same impact on the market place and influence on success as fashion design. It involves trend research, fabric sourcing and testing, and pattern and sample making. Some innovative companies in Lithuanian such as "Brelytus Textile" proved yielding advantages of such activities already.

Some Lithuanian fashion designers are employed by ready-to-wear manufacturers, a number of talented individuals have established reputations in the domestic market for the production of higher-end, ready-to-wear clothing under their own labels. Although most of these designers may not yet be known internationally, a few have gained recognition in international and regional contest of designers.

4.3 Demand conditions

Demand is a fundamental influence on the level and location of the textiles and clothing industries. Each sector in the textile-clothing production sequence shown in the Figure 1 relates to different markets. However, since the majority of all textiles production goes to the clothing industry, the major influence on the demand for textiles is the demand for clothing.

Porter underlines the importance of domestic demand as a catalyst in innovation and technological development. While traditionally Lithuanian industrial capacities usually exceeded the frames of local demand. This factor led to no less important gains in experience and in adjusting to attend foreign customers to some extent. At the same time the generally low incomes in the country also restricts the size of its domestic clothing markets and this undoubtedly had an important influence on the adoption of export-oriented policy.

In addition, following the collapse of FSU market textile industries in Easter Europe as well as in Lithuania had a desperate need to find new customers. As a result of inherent attractiveness of the Lithuanian textile and clothing industry as a production source for Western companies, and despite numerous problems, in particular a lack of funds to pay for raw materials, there were early signs of creative solutions being found to put trade deals into place.

Historically with low levels of Western confidence in the Eastern Europe's ability to supply reliably and to required quality standards from local source materials, and the regions generally poor conditions for design, outward processing trade remained the most common form of East-West relationship. At the same time subcontracting has ensured ready markets for products manufactured in Lithuania, it has also freed the textile and clothing industry from dependency upon raw materials or at least enabled procurement of raw materials. OPT as a mean of cooperation apart from some drawbacks in the short run and at the early stages of industrial reorganization render some benefits. First of all it allows companies to keep ear to the fashion trends in Europe, maintain further contacts with Western partners, benefit from consultation on quality assurance and controlling. Finally profit earned could be successfully invested in activities such as marketing and own design inevitable for foreign market penetration with end up products through direct realization of the production. For example, sewing company "Dobilas" mainly working as subcontractor for OPT only in May of 1999 established marketing department with 4-5 people working in and fosters plans in more deeper penetration of local as well as foreign markets with their own clothes collections and end-up production. But it is important to highlight that this company is one of the leaders and still is on the very early stage in posing possibilities to compete in the EU markets with end-up production, considerably smaller ones and these facing considerable lack of working capital are even more taken away from comprehension of some competitive advantage they might develop in European integration context, apart cheap labor force.

Interviewed companies whose activities do not confine only on foreign markets find local customers as demanding ones apparently with some opposite opinion as well. The open local economy impel customers to search for the most accurate befit to their needs. Thus enacting local demand as much exacting as European one.

For almost all interviewed companies penetrating European market to wider extend is one of primary strategic goal, nevertheless, fierce competition in the area of the Single Market from intra-community countries as well as growing thread from Asian countries together with traditionally settled consolidated relations between distribution networks and producers within the EU are the main barriers and for the majority of clothing companies in Lithuania are insuperable ones.

Returning to the characteristics of demand for the textile and clothing industry *Dicken P.* claims that the clothing industry tend to have an elasticity of demand of less than one. What means that the relationship of goods sold and income is not total: beyond of certain level of income, demand for clothing tends not to increase at the same rate as income increases [10, p.246].

In the clothing and textiles industry one of the most important ways of offsetting this 'natural' tendency for demand to rise less than proportionally to income is to *stimulate more frequent purchasing through fashion change.* Only the innocent would regard fashion as the spontaneous expression of consumer demand. Fashion-and the resulting demand - are largely induced, not least by the clothing and textiles manufacturers and, especially, the retailers themselves. Fashion change has been especially important to the textiles and clothing industries of the developed market economies. The opportunities offered by this kind of product differentiation have been crucial to the survival of Western European textiles and still might explain that the large share of the world's clothing trade still occurs between the industrialized countries themselves. Enormous efforts (and expenditures) have gone into promoting fashion products and creating 'designer' labels. Indeed, one of the most interesting developments in the clothing industry during the past few years has been the incredible proliferation of designer-labeled garments. Such a practice covers a very broad spectrum of consumer income levels from the exceptionally expensive to the relatively cheap. Designer labeling is basically a device to differentiate what are relatively similar products.

In Lithuania only the leading clothing companies recently have actively taken the incentive to differentiate their production according to the Western fashion industry pattern mentioned above. Thus first steps towards creating differentiated products according to the developed industrial countries model shows prominent advance towards becoming rather competitive potential actors in the Western as well as Eastern markets.

4.4 Relating and supporting industries

Historic review of the textile and clothing industry testifies considerable efforts being pooled in creating sound cluster relationship, which in turn have been undermined under highly centralized command economy. After the collapse of Soviet Union these relations have been hardly deteriorated with almost all companies or scientific and educational institutions being turned to Western markets unfortunately to the extend of each separately managed to. As a result enterprises found input industries abroad together with new customers and having no common industrial strategy rather unbalanced development of the industry emerged. Thus internal relationship between clothing and textile industries in great amount has been lost.

In the perspective of further but not so rapid industrial development as might be perceived by companies of the textile and clothing industry the role of supporting and relating industries tend to increase and perform in creating cluster relations in the industry.

Porter concludes that successful industries tend to form clusters. Clusters encompass an array of linked industries and other entities important to competition. Due to accelerated diffusion of technology and knowledge spillovers a successful cluster has internal synergies that further feed the innovation and upgrading process. By having internationally competitive related industries, a firm in a cluster can gain competitive advantages: it can concentrate on its core competencies and rely on its suppliers for other activities.

In respect of value added chain the situation seems rather disparate. Some big textile companies have inherited from command economy high centralized structure of production process encompassing process from primary raw treatment to finishing, packaging and even distribution by their own retail or wholesale chain. Usually they maintain own transport fleet, perform logistic activities in cooperation with other producers in the region, keep up machinery service facilities as well as performing other manufacturing provision activities that might be handed over supporting industries in case the result (services and production) are achieved in the more efficient way than textile companies can afford in respect of costs.

On the other hand smaller companies tend to perform specialized narrow activities (for example, fabric final treatment, dyeing, finishing) but facing rather disparate level of industrial development encounter diverse demand level for services thus turning to prove that efforts to split technological activities are impractical ones at present.

Under such unbalanced economic conditions and diversity of enterprise's concentration in activities, bigger companies find their competitiveness via ability to rally as much as possible production phases as well as supporting services departments in order to achieve independability upon ad hoc troubles related with inability to perform at the right terms or quality from unrelated partners. But in the future since the economies of scale is not considered to be the core stone of textile, especially in the clothing industry, there is a possibility to split activities into more specialized fields.

Similarly in respect of input suppliers interviewed companies tend to choose foreign ones for Lithuanian suppliers can not ensure necessary product qualities as well as delivery and favorable financial terms. Thus quality, comfort with more flexible financial settlement system as well as high standards ensuring safety and environment friendly qualities especially in case of chemicals forces to cooperate with related industries located in Europe instead of local ones. Nevertheless, the sound local cluster especially in linen manufacturing sector or in terms of yarn and garment manufacturers' cooperation might prove as valuable device in creating competitiveness in the long range

The supply of flax is also one of the weaker part for developing sound value added chain within the country as well. Although there are abundance of natural advantages for flax farming, agricultural policy carried out by the government hinders possibilities to restore linen farming, thus local manufacturers are forced to by raw material even from the EU suppliers facing considerably higher costs than the local farmers could provide. If this particular part within supply and primary flax treatment could be reinforced (with government support), Lithuania could benefit from very successful industrial cluster encompassing the whole value added chain operations and thus benefiting the local economy in the most efficient way. Especially when this kind of production already yield its share and strong position in the foreign markets. New quality levels due to reinforced raw material supply and primary treatment functions as well as technologies in linen finishing and design with adjustable local manufacturing costs might prove advantageous for the textile and clothing industry in developing long range competitiveness.

The realization of production is usually carried out through several main channels:

- trade agents usually in case of dealing with foreign clients;
- local or foreign retail or wholesale chains;
- own specialized realization stores;
- direct trade through working on special orders (with restaurants, hotels, furniture producers or even aircraft companies).

Small enterprises sell their production through intermediary companies providing logistic as well as running custom and border documentation related services. Bigger companies that have domestically well known brand names cooperate with retail chain, maintain their own specialized stores or handle subsidiary trade companies. For example "Utenos trikotžas" considered as one of the most strongest and flourishing company in knitwear sector sell its production through JSC Ltd. "Utenos trikotažo prekyba". Similarly operates knitwear company "Vilija" in trade matters cooperating with "Vilijos prekyba" trading company. Operating under the same brand names empowers to retain close connection to products manufacturer and vendor in order to coordinate their activities in synergetic way, on the other hand, simultaneously detaching two different functions in order each of them to be performed in more professional way due to specialization effect.

4.5 Firm strategy and rivalry

The Lithuanian textile and clothing firms being interviewed by now export the majority of their production abroad under OPT contacts (sewing companies). Thus, perceiving ready markets for their services which in turn leads to lack of incentive to compete in local market or penetrate foreign ones while this might be possible in the future. While the response concerning strategic goals due to absence of stable economic conditions and government's purposeful industrial strategy appears not to be specifically defined.

By nature the textile and clothing industry is rather diversified ranging from quite a lot small companies to some rather big actors not only in the Baltic but in the world markets as well (for example Dirbtinis Pluoštas) competing with specific production. The diversity of enterprises in respect of scale and activities makes difficult to generalize their strategies in common terms as well as define rivalry, which usually apart of local producers perceived as threatening from geographically incompatible regions or even particular countries.

Nevertheless, the survey revealed several alternative strategic approaches planned to be pursued by the enterprises as follows:
- Market penetration;
- Market development;
- Product development;
- Retrenchment.

The former three strategies are sometimes referred to as "intensive strategies" for they require intensive efforts to improve a firm's competitive position with existing products. Market penetration strategy is used widely alone or together with other strategies. The latter strategy seeks to increase market share for present products or services in present markets through greater marketing efforts. The strong and well

standing sewing companies comprehend the importance of marketing and are seeking to improve their production realization and customer serving efforts as well as skills by cooperating with various consultants and foreign partners (see Box 10).

Box 10

"Weis Consulting Asocc. GmbH (WCA) from Germany has been working with Lithuanian clothing companies already for three years. The main object of this program is to increase productivity of Lithuanian clothing manufacturers as well as develop managerial and technical skills for promoting the Country's production abroad especially meeting European quality standards. According to German experts Lithuanian clothing enterprises have high potential to penetrate Western market with complete production and gradually refuse selling cheap labor force.

Lithuanian companies were highly motivated to acquire the skills that have been proposed by WCA experts and achieved considerable results by increasing productivity by 20-30%. Some of them already established marketing departments that are actively working with Western partners and seeking for niches to enter with end-up production and local brand names.

In order to increase production value sewing companies seek for young but still highly recognized in local and international level designers. Paying more attention to the creative side of the product enables to perceive rather specific and interesting products. As the main markets remain foreign ones, sewing companies do not avoid employing foreign designers in order to get closer to the customers of the markets they are going to serve. These functions of the companies form the key element for further expansion into the markets they already have stepped in.

Textile companies usually try to direct efforts in the same direction creating specific and attractive end up production. For example Joint Stock Company "Kilimai" producing double-weaving jacquard carpets invest quite a lot in creative part of their activities. The results of their efforts helped them to win international acknowledgment (seeBox 11).

Box 11

Products of "Kilimai" are well known for their unique style, common only to Baltic States, which represent old traditions of carpet weaving in Lithuania. In 1992 factory was awarded "International Gold Star" by Business Initiative Directorate (Madrid). In 1993 the company won the Prize of European Market Research Center-"Euromarket Prize-1993"

Design, quality and marketing will be critical to the future success of Lithuanian products and the growth of apparel manufacturing in the country. In carrying out their marketing strategies, manufacturers will have to attempt to influence the purchasing decisions of consumers. In addition to strategic pricing, manufacturers may adapt products to satisfy perceived consumer needs, alter designs to enhance fashion appeal and use branding to project a specific product image. As the consumer tends to spend less time shopping, product quality and service are becoming more important.

As the Survey proved that conscious apparel manufacturers have been striving to improve their design capabilities. Many firms are moving away from making knock-off products with mass appeal to producing designs for targeted markets, which often yields better sales growth and profitability (See Box 12)

Box 12

> The shift in the product base from standardized garments produced in mass production, to medium and upscale fashion produced in short run for rapidly changing demand is nothing less than a shift from the industrial age to the knowledge economy. The primary consideration is no longer production cost per unit, but quality, continuous creativity, responsiveness to the market and the ability to carve out a unique niche. As in other knowledge industries, success is built less on rivalry than on differentiation [30 p. 17].

Brand-name development is an important tool, which are sought to be followed as one of the priority in order to enter foreign markets to convey to the industrial consumer a consistent image of quality.

As Lithuanian apparel manufacturers try to adopt a European market orientation, they should become aware of important European marketing trends. Lithuanian firms that hope to compete successfully in the EU should be prepared to adopt appropriate business strategies that are likely to prove successful in that market.

Market development involves introducing present products or services into new geographic areas. Since there is a lot to be done to penetrate local or increase shares in present markets only few companies seek for new ones. Some of interviewed companies keep in line with market development trends in Europe in order to catch up with some vacuum niches that temporarily appears in the West. Nevertheless, existing capacities and technological potential together with lack of capital hamper their intentions.

The majority of interviewed enterprises recognize local markets as one of potential to increase their shares. While at present still low incomes of the dwellers keep local producers in rather unfavorable conditions facing import competition from Asian or European countries that with the newest technologies achieve low price and better quality.

Product development is a strategy that seeks increase sales by improving present products or services usually entailing research and development expenditures. Such activities in common are of primary importance for the textile industry while could be achieved only by some enterprises that dispose of enough finance to handle such rather money consuming activities (as an example might be “Brelytus Textil”, see chapter 4.2 or “Utenos Trikotažas”). Under command economy different enterprises have been focused on specialized production (for example knitwear companies had quite different range of products which they were specialized in (underwear, outwear clothes, clothes for children, sport activities and so forth) while at present the production attached to the single manufacturer became more diversified.

Due to abundance of huge and obsolete equipment park some companies use retrenchment strategy in order to improve productivity and production quality. Sometimes called as turnaround or reorganizational strategy, retrenchment is designed to fortify an organization’s basic distinctive competence. Retrenchment can entail selling off land and building to raise needed cash, pruning product lines, closing marginal businesses, obsolete assembly lines, automating process, reducing the number of employees and instituting expense control system (see Box 13).

Box 13

Joint Stock Company "*Trinyčiai*" has invested into new equipment that resulted in total restructuring of the company by discharging 160 employees. The managers sought the strategy will influence decrease in production volumes by 40 tons lower per month but in turn will result in higher production quality level. The previous production extends impeded to discharge production cots. Thus restructuring was unavoidable act ensuring the survival of the company and drawing its potential in the future.

Retrenchment strategy seems to be one of the most appropriate to the date for bigger textile companies. This strategy might improve not only a company's flexibility, but also could be a prerequisite for deeper cooperation between subsector actors.

In terms of competition the textile and clothing industry could be considered as very tough one. Facing local competitors as well as much stronger pressures from the markets they tend to enter. Analysis of competitive strengths of the countries facing more or less the same cost and industry conditions as well as pursuing the same integration goals might be of crucial importance. While small companies still tend to operate blindly without having clear information about the competitors and their strengths they are going to face in European markets. On the contrary flourishing or big companies tend to dispose of quite comprehensive information bout their main competitors in Europe and Asian countries while the latter usually is considered as bigger thread than the former.

In order to get more exhaustive overview of textile and clothing industries in the countries the EU applicants there have been a short presentation prepared in the Appendix 9. Though the data provided in some cases does not mach in terms of period accountable and measures used to estimate the importance of textile and clothing industries some adjusted comparison of the countries observed still could be made. It can be observed that Poland and Czech Republic in terms of labor force per 10 000 inhabitants involved in the industry the most closely compares to Lithuania's indicator (Poland accounts for 102 employees per 10 000 inhabitants, while Czech Republic indicators exceed Lithuania' s one and comprises-174). Furthermore, the contribution of Lithuania's textile and clothing industry to the industrial value added is the most notable where it creates 13,1%, Poland-3,5%, Czech Republic-6%. The fact again supports the necessity to assign more attention towards the textile and clothing industry position within the whole manufacturing structure of the country ant the importance of its role in economic transformation.

The structure of exported goods to the EU from CEER region reveals that these countries compete mostly in the same production range with some divergences in their specialization they ,nevertheless, occupy the same quality level markets of the EU imports. Yet Lithuanian manufacturers does not consider these countries as the main competitors in the long range. Each of this country still find its niche in the target market through direct export and OPT obligations, which at present due to serious supply and distribution problems are more prominent then the former. More feasible threaten might come due to relocation of OPT contracts due to increase of costs in the CRE region to the low-labor-cost countries such as North Africa, Turkey, Marocco, Tunisia, former USSR countries. Following this scenario the manufacturers of the region is possibly to face radical turn to rivalry in higher quality level markets.

4.6 The role of government

While Porter gives the government the minor role, experience of industrial countries has demonstrated that restructuring of industrial activity at the firm level will not take place automatically to changes in macroeconomic policy or rapid shift in global conditions. Government need to establish policies that facilitate flexible sources movement in response to competition, promote institutions capable of filling information and capability gaps, ensure that appropriate financing is available. Thus Lithuanian government already embarked on developing policies and institutional programs that would help to scale down uncompetitive industrial activities and promote and reshape those that can be internationally competitive, while the direction of such policy should be very carefully considered and potential advantages of industrial activity measured.

The dynamic competitive advantage calls for close cooperation between the state, the private sector and multilateral institutions. But the principle impulse for change must come from the private sector. The role of official agencies is to provide physical and technical infrastructure (not necessary by along traditional lines, thus physical infrastructure may be provided along the lines of build, operate and transfer; the costs of technical and research institution may be shared between beneficiaries and so forth), to promote agencies for the collection and dissemination policies that ensures resources are allocated in response to competitive forces and to ensure adequate financing. Nevertheless, considerably dubious enterprise attitude toward government forces to believe that there is still not found common tongue between government and manufacturers with latter perceive being treated as potential criminals by the former as well as being hindered all the time they try to implement specific efforts on more sound development of the industry.

The main problems caused by insufficient government activities towards the industry create serious problems and hindrances for further development. This negative factor in building competitive advantage according to the interviews might bring greater impact on the industry then the integration process itself with its consequences related with implementation of the EU regulating norms and pursuing more liberal economic policy. Concerning the latter aspects managers still feel overstated intervention of government in the business sphere, where there is a vital need of more liberal policy. The main problems indicated by interviewed managers were as follows:

- Lack of industrial development policy, there is no clear industry development priorities stated;
- Export promotions strategy is not effectively implemented (there is lack of cooperation between industrial associations and the export promotion institutions; there is still unsolved question concerning local certification; there are no measures that could support export by tax reductions or other benefits that could mace more notable contribution for developing managers incentive to export; complex and costly border administration process creates a field for corruption);
- Government lacks an incentive to settle up favorable bilateral or multilateral agreements between countries they are negotiating political or other issues;
- Industrial associations and government should cooperate more closely.

The need for government involvement proves the fact that the major policy pursued by a number of developed country governments-most notably in Europe-has been the encouragement of restructuring in their textiles and clothing industries through the use of subsidies and investment assistance programs. Government involvement in restructuring domestic textiles and clothing industries has not been confined solely to the older producing nations. Even the newer producers such as South Korea and Taiwan have found it necessary to intervene to maintain their competitive position through the encouragement of new investment and the scrapping of old capacity. In all the cases, the hand of government has been firmly involved.

Successful restructuring may be said to have occurred when the enterprise or sector has shifted to a product mix and cost structure that renders its competitive advantage and well-positioned to remain so. Thus, reducing costs and raising productivity as well as finding product niche are two axes that industrial strategy must traverse. On the other hand the role of government as the practice of developed and newly emerging industrial countries proves could not be ignored. On the contrary it should take an active role in restructuring the industry while at present it maintains rather favorable position in the whole economy.

It will be too much to expect Lithuanian government to build up quickly the comprehensive system of institutional support services that are inevitably for creating international competitive advantage. The necessity of more time might be a reason why interviewed companies do not respond to questions on their strategic reorientation due to European integration and possible outcome.

5. CONCLUSIONS AND INDUSTRIAL POLICY PROPOSALS

5.1 Conclusions about the competitive positions of the industry

The textile and clothing industry is recognized as of major importance for the EU industry creating 3% of value added and contributing 4% of total EU employment [35]. The importance attached to the textiles industry emerges from its major role in generating manufacturing output, employment and exports and the key role it has played in the initial industrialization process in most countries.

Qualitative indicators of the Lithuanian textile industry within the country's manufacturing are even more notable. The textile and clothing industry in Lithuania is acknowledged as one of the most developed industries having deeply fostered traditions.

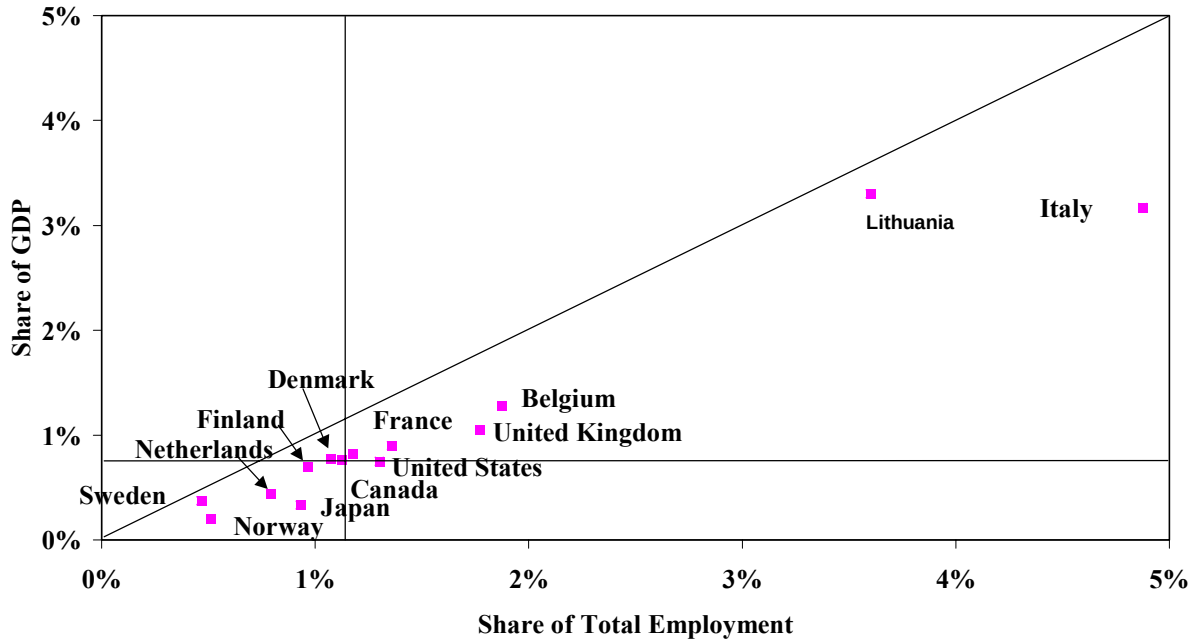

Figure 14 Relative Importance of Textiles, Wearing Apparel and Leather Industries

The competitive position of the industry was evaluated in the frame of Porter's "diamond model". The model provides for the method to anticipate possible industrial development ways within the dynamic technological and rapidly changing market conditions, indicate measures that could ensure its flexibility on the given background of factors influencing industrial competitiveness in respect of strengths and weaknesses of the industry.

In terms of competitive factors the textile and clothing industry maintains several natural competitive advantages: (1) abundance of skilled (defined relative to the requirements and markets served) low cost labor force, (2) traditions and (3) proximity to the target markets (proximity to the EU as well as Russian markets that might be treated as the field for future cooperation for subcontracting or consumer

markets is of crucial importance for the industry due to its specific demand for a flexible supply of products within s short time especially in rapidly changing fashion markets of the clothing subsector). Moreover IFF Research noted that geographic proximity is likely to be a powerful factor in determining who is investing where [13]. Interviewed managers of the companies in the industry perceive each factor in comparison with their present or possible competitors and their position in the industry, therefore the importance and ranging of these factors might differ while these three were the most frequently mentioned.

The dynamic market environment requires firms to develop marketing and R&D skills that inevitably would have a major importance in maintaining future competitiveness. These factors might have a considerable contribution to the already achieved and moreover internationally acknowledged production features of high quality and distinctiveness. However, firms lack experience and capital for implementing marketing and research and development functions in the framework of traditional activities. The lack of capital especially hurts financial settlements and accumulation of funds for investment. It is evident that without investment it will be very difficult to shift from OPT contracts to the new value added creation system and thus to the higher competitiveness level.

There has been observed positive movement towards implementation of cost minimizing and restructuring activities within firms' strategies. But the pace of this process is still slow and small in scope due to the above mentioned financial problems. This problem proves to be more important for textile and clothing industry than for some other economic activities due to demand for supply flexibility and adjustments to the fashion changes, although Lithuanian industry compared to the EU's still remains rather concentrated in large business units.

The process of restructuring also lacks consistency, the industrial relations network is not developed enough and is fragmented. Sewing companies choose foreign suppliers instead of local ones (where there is such a possibility) for more favorable financial settlements, production quality, reliability and supply terms thereby incurring transportation and other costs. Nevertheless, there is the possibility to strengthen local industrial network relations where a majority of companies will undertake restructuring activities and will become more flexible. In addition, Porter underlines that due to accelerated diffusion of technology and knowledge spillovers a successful cluster has internal synergies that further feed the innovation and upgrading process. The abundance of natural competitive advantages as well as RCA indicator proved that the most favorable natural conditions for developing competitiveness in the long-range pose linen manufacturing. If flax cultivation and linen farming as supporting industry will be seriously taken into consideration by the government (providing the initial support for upgrading raw material quality by inducing investment into the new more efficient flax farming technologies as well as ensuring raw material sufficiency) the textile and clothing industry could develop and maintain rather successful cluster and textile specialization line within the country.

Operating under relatively unfavorable economic conditions the Lithuanian textile and clothing industry still maintains its solid position, but it should be noticed, that besides prominent efforts to enter foreign markets through direct trade with local brand names and collections, many companies remain operating under OPT contracts. From one

point of view this kind of activities provides the possibility to get acquainted with the nature and traits of foreign market demand, while on the other hand, supply and distribution functions still remains areas of inexperience for Lithuanian manufacturers.

Forecasting further development trends of the textile and clothing industry European markets remain the priority as target markets, dealing with Russian markets is constrained at present while in the future it might have great potentials where even European manufacturers won't be eager to refuse their market shares. Besides, Lithuania maintains experience and knowledge in dealing with the economic actors of Eastern neighboring countries that might prove beneficial in the future.

Actively trading with the EU economic actors (having in mind various forms of dealing) The Lithuanian textile and clothing industry representatives successfully adapted to their requirements and standards for the production process and characteristics of the products. The trade was further encouraged by liberalization of trade since 1998.

Local manufacturers still operate under conditions of uncontrolled competition from imported goods usually of lower costs as well as of doubtful quality. Nevertheless, net export for textile and clothing production remains positive and the share within the total export amount keeps growing (in the first half of the year 1999 textile and clothing production export share within the total amount of Lithuanian exported production reached 23%).

Porter gives the government the minor role, experience of industrial countries has demonstrated that restructuring of industrial activity at the firm level will not take place automatically with changes in macroeconomic policy or the rapid shift in global conditions. Governments need to establish policies that facilitate flexible resources movement in response to competition and promote institutions capable of filling information and capability gaps, ensure that appropriate financing is available. Thus the Lithuanian government in the framework of the integration process already embarked on developing policies and institutional programs that would help to scale down uncompetitive industrial activities and promote as well as reshape those that can be internationally competitive. The direction of such policy should be very carefully considered and potential advantages of industrial activity measured.

Nevertheless the considerably skeptical enterprise attitude towards government proves that government and manufacturers still have not found common ground with latter the latter's perception being that they are controlled and restrained more than the business efficiency demand for. Besides, low economic and political stability hinder further development of the industry and especially investment and thus restructuring incentives that might be crucial for maintaining industry competitiveness in the long run. Compared to other CEEC countries Lithuania is not among the leaders in attracting FDI. Thus as IFF Research notes the comparably low level of investment may be explained not only by current market size but also by perceived potential for political and economic instability. IFF-surveyed firms attribute less importance to other factors such as costs, availability of cheap labor and skill levels of appropriate infrastructures [13, p.253].

Summarizing, the current comparative advantage in textile and clothing products on the one hand may be a temporary phenomenon for some of CEEC's induced by the economic transformation, the collapse of Comecon markets and the lower costs. But on the other hand, strong performance of the textile and clothing industry in Lithuania exports and industry structure could not be considered inconsistent with long-run comparative advantage in more sophisticated skill-intensive goods. Moreover industrial traditions, the present industry's position within the Lithuanian economy supported by sound managers' incentive point out for the successful experience. The prolongation of it the most will depend on many factors of which major will comprise balanced actions carried out by the industry representatives and supporting government performance.

5.2 Strategic development needs and aims

The competitiveness analysis within porter's "diamond" model revealed abundance of natural competitive advantages The Lithuanian textile and clothing industry maintains. Nevertheless, higher demand and integration tensions make pressure for the industry to restructure and apply the new strategies for enhancing competitiveness in the future. There is no doubt that the main strategic goal for the textile and clothing industry in Lithuania is to achieve the strong position and improve its competitiveness in respect of becoming a member of full value within the global economic relationship network of the textile and clothing industry.

In recent years the textile industry on the global basis has undergone a process of restructuring in order to reduce costs, increase productivity and improve competitiveness. This process was largely accompanied by implementation of high technologies in the latter subsector as well as adjusting to modern production and marketing strategies of the clothing producers and distributors such as quick-response and just-in-time. European manufacturers face slacken investment into the new machinery and lost of employment in recent years, while there is continuity in raising labor productivity. While Asian textile capacity and installation of the new technologies has expanded strongly. More important for the competitiveness appears to be permanent search for the new markets, including promising niche-markets, the improvement of product quality and the development of new fashion and trade marks as well as extension of servicing customers. This affects the EU textile firms' strategies that tend to depend on the place in the so-called textile chain as well as on company's size and location within the EU. Textile companies have reduced capacities continuously over recent years, but invested in extensive technological modernization measures and in production plants in third countries. They tend to specialize in a limited number of production processes, relying partly on subcontracting in some segments of the industry. A growing number of the EU textile companies have also tended to develop strategies capable of safeguarding their position as suppliers to an increasing delocalized the EU clothing industry. Of growing importance in the future will be more aggressive export strategies, in order to find the new markets in third countries. All these strategies result in a change of company organization and management methods, in order to maintain or strengthen the firm's competitive position.

These implications draw some guidelines for the Lithuanian textile industry strategic goals. First of all renovation of technologies as well as R&D activities became of

major importance especially in this subsector in Lithuania still maintaining considerable part of outdated equipment. There is also need for more disintegrated activities within industry as well as identification of product line the country could specialize in. Disintegration of centralized production processes in big companies could introduce more flexibility, higher production quality as well as delivery effectiveness in the same turn developing and strengthening cluster relationship. There is a need to improve international marketing skills and cooperation with clothing sector within the country. The latter could facilitate modern production and marketing strategies (quick response, just-in-time) that would lead to sustained textile subsector position as suppliers to the well developed clothing sector in Lithuania. Since production delocalization out of country seems to prove a remote possibility it should not be renounced as strategic chance when the industry will become more sophisticated and able to retain specialization in particular technological processes.

These strategic goals will have to be supported by maintaining and developing marketing, logistic, modern management skills as well as developing employees' qualification.

The growing environmental concerns in the future will also have the valid influence on competitiveness differentiation in textile sector. Environment safety will become an object to legislative control by active regulatory bodies at national and the EU levels. The EU manufacturers already are giving more attention to the voluntary eco-auditing scheme of the EU Commission's Fifth Framework Program which is regarded as the key to continuing the reduction of the environmental impact of textile manufacturing over and above legislative requirements.

The clothing industry faces a bit different strategies, though it continues restructuring processes all over the world in order to consolidate international competitiveness. The EU clothing industry has faced considerable competitive pressures from low-cost countries, mainly in the Far East, Mediterranean Rim and Eastern Europe. This has been particularly severe in the low and medium quality segments of the market. Conformably the increase in lower priced imports influenced consumer priority for lighter and less expensive clothing. A growing concentration of retailing in the hands of small number of larger companies in many EU countries seemed to favor cheaper prices as well as OPT contracts. Nevertheless, demand for clothing has required a growing number of fashion changes and new collections each year. This has put more emphasis on the speed and reliability of response to orders by retailers. The clothing enterprises tend to react to these pressures by consistently improving productivity and by continuously developing new fashions, products and brand names in order to create their individual images and markets, and thereby to improve their competitiveness. In terms of product range definition produced within one company is difficult to define, since there is no single blueprint strategy. Many companies in the EU manufacture a narrow range of products while others diversify into a range of activities.

An increasing important aspect of clothing companies' production strategies over recent years has been the widespread use of subcontracting. The EU OPT contracts are mostly used in relation to Poland, Romania and Eastern European countries and to Tunisia, Morocco and other Mediterranean countries. Newer developments point out to OPT activities in the independent Republics of the former USSR, where labor costs are still lower. OPT is carried out to new countries with lower wages, even if

distances tend to be greater. Direct sourcing of the EU manufacturers in third countries has become a regular instrument of company policy. The new distribution methods are rapidly developing, where manufacturers take over the former functions of traders, e.g. through their own factory outlets and distribution chains.

The majority of Lithuanian clothing industry performing as OPT contractor for the EU manufacturers should maintain their present position by enhancing production quality, shortening delivery and lead times. Nevertheless, the more useful would be development of the new value added concept through developing logistic and the most important marketing activities. Only being able to operate as independent partner capable to control and implement production supply and realization by themselves is of crucial importance for further development of the clothing industry in Lithuania. In the long run Russian markets will demand more active involvement of Lithuanian garment manufacturers in subcontracting and direct export activities to this region. Thus strategic restructuring of the industry should be developed on the present OPT basis to more advanced independent activities especially stressing on cooperation with distribution networks in the target markets as well as strengthening relations with local suppliers in related industries and enhancing systematic market management mechanism.

Special emphasis in strategies for clothing subsector should be made on the development of new methods of working so as to achieve more rapid and flexible production targeted on individual customers. Thus the necessity of new information and telecommunications technologies are likely to be increasingly important for raising competitiveness in the industry facilitating more direct links between customers, retailers, designers and manufacturers and supporting quick response strategies. An example is the growing use in the EU of EDI (Electronic Data Interchange) systems on the basis of new forms of cooperation between manufacturers or between the industry and distribution.

Summarizing it should be noted that at the early stages of industry development the major advantage of low-labor-cost producers lies in the production of staple items of clothing, which sell largely on the basis of price, rather than in fashion garments in which style is more important. The difference between the two is one of rate of production turnover. Fashion clothing has a rapid rate of turnover, which tends to reflect the idiosyncrasies of particular markets. Proximity to such markets is important and this helps to explain the survival of many developed countries clothing manufacturers, which might be an object for consideration for Lithuanian producers. In addition *innovation and creativity* must become the factors driving the clothing industry towards more sound competitive position between developed countries.

5.3 Effects of EU accession and membership

Integration in the European economic infrastructure, which is undertaken as the priority of Lithuanian politicians, inevitably relates Lithuanian industrial activities with this region. Lowering co-operation barriers enforced by concurrence of economic actors' interest in Lithuania and the EU together with the progress in trade liberalisation induces an active development of business co-operation network. Concerning the textile and clothing industry the success of the former activities

especially in clothing subsector is difficult to disown. Nevertheless, unstable macro economic situation, development of neighbouring countries are the driving forces in considering long range strategies and perspectives for this industry which are gradually more and more interrelated with economic policy carried out in the EU.

The methodology of the research *per se* determined the limits of integration policy effects analysis within the frame of competitiveness appreciation. Thus the precondition of effects analysis was based on the competitiveness concept as a manageable *process* judged by inherited and developed factors of competitiveness with certain conditions and environment evaluation, which had a major influence on the elaboration of these factors. Moreover this approach proved to be the most relevant for textile and clothing sector due to lack of abundance of specific regulation applied on this sector by the government. As a result, comparative advantage development during the transition period was mainly supported by the chance which usually appears for textile and clothing sectors in developing countries, managers' incentive and traditional emphasis in Lithuania on this particular industry without any considerable government measures undertaken to foster the above-mentioned process. However, economic policy towards trade liberalisation and EU legislation adoption might be considered as a prerequisite for impact analysis but this though raised some further problems.

One of them concerned with another limitation of integration policy effect analysis was due to difficulties arising while distinguishing the EU integration related effects versus transition to market economy measures. As EU experts remark the comparative advantage in textile and clothing products is induced by economic transformation that had an inevitable effect on manufacturing cost structure [8, p.237].

If integration of Lithuania in to the EU could be addressed for liberalization of trade (for the textile and clothing industry particularly since 1993 when the Trade and Cooperation Agreement with the EU entered onto force, then 1995-Free Trade Agreement which entered onto force since 1998) and removal of other economic exchange barriers due to adoption of *acquis*, the textile and clothing industry faced the same level of benefits as other economic actors. The survey proved that the recovery outset dates earlier than certain liberalization measures with the EU were undertaken. Managers of interviewed companies usually have not noticed any considerable impact up from Free Trade Agreement came into force apart increase of imported production from the EU countries thus enhancing the rivalry in domestic markets where local producers maintain rather low shares. Nonetheless, the success particularly paramount in the clothing industry was mainly due to the EU business actors' activities. The clothing industries of transformation economies for them proved to appear one of the most favorable areas for implementation of more competitive strategies via cost restructuring. Emerging market economies as well as liberalization of trade with the EU in Lithuania proved to attract OPT contacts and establish benevolent cooperation for both parties that proves to carry benefits in the *short run*. The further development of the industry as survey showed would remain dependent more on economic and political actions carried out by Lithuanian government as well as changing strategic patterns of present business partners in the EU, which will be mainly related to the situation of economic development of other low-labor-cost countries, rather than adoption of EU legislation concerning this sector.

According to the OETH[5] the complete deregulation of trade in textiles between the EU and CEES' from 1998 may have only limited on the textiles-clothing sector for a number of reasons. Firstly, quotas on textile and clothing imports from CEEC'c have already increased progressively and have not been fully utilized for most products. This suggests that the EU imports from CEECs have been restrained by either a lack of capacity or competitiveness with other sources of supply. The evolution of the EU imports of textiles and clothing from East Europe is likely to depend among other things, on the level of investment by these countries in their textile and clothing sector and any increases in their labor costs. The OETH believes enlargement of the EU to include these countries is more likely to increase the level of investment in textiles and clothing than liberalization itself, by reducing the degree of political and economic risk. It can be observed that the EU trade policy favors OPT imports rather than imports from FDI firms. Thus trade policy has a bias against FDI in the CEECs. Given that presently Eastern European markets are small, Western firms will probably invest more in the CEECs when they have a better access to the EU markets and more favorable political and economic conditions for investment [8, p.252].

The further impact for the industry can be overlooked considering current EU trade policy and its perspectives as well as analyzing Community legislation applicable in the textile and clothing sector (see Appendix 11), which inevitably will have to be implemented while the EU accession in the form of membership will emerge. Considering that the EU trade policy within the Agreement on Textile and Clothing (ATC) obligations have a dynamic character as well as the Lithuania's membership date is not fixed yet, these two variables might influence quite a contrary impact on the industry in the future if manufacturers are prepared by that time to reach more or less the same level of competitiveness as W. European manufacturers have.

Considering the EU trade policy at present it becomes evident that the EU Commission claims to be actively committing to liberalizing trade in textiles under the ATC deal negotiated under the Uruguay Round reducing tariffs and quotas. As well as Multi-Fiber Arrangement (MFA) ATC, which is to dismantle by integration 24 different categories of products into the GATT, were determined to encourage industrial adjustment of "sensible" sector at an acceptable for the EU manufacturers pace. While non-EU countries having no considerable negotiation rear should adjust to this pace at their strengths in order to retain the industry or at least the most advanced in terms of competitiveness and perspective part of it. Inability to adjust might be lead to resignation that would have rather painful and severe effect especially in the economy where the weight of textile and clothing sector is a considerable one. Inability to reorganize industrial capacities into the more effective and competitive business units might bring detrimental costs not only for this particular industry but for the macro economic indicators in the country as well (lost jobs, shrunk GNP, increased negative foreign trade balance, other alternative costs due to lost of possible revenues of the industry that really had substantial basis for development of their competitive advantage).

Tariff based external protectionism in the EU appears rather low compared to other countries (see Appendix 11). Nevertheless, non-tariff barriers discussed above accompanied by anti dumping procedures frequently applied to the textile and

[5] Observatoire Europeen du Textile et de l'Habillement

clothing production imports set quite a complicated protectionism procedures within the EU. To what extent this legislation will affect candidate countries after accession will depend on the integration period of the countries applicants and the EU trade policy. The policy encompass non-tariff concessions due to the ATC agreement, other applied measures (ant idumping activities) or economic relations with non-EU members that might have relevant importance as suppliers or target markets for Lithuanian manufacturers. In order to make more tangible assessment of possible common foreign policy impact on the industry (will it be more or less protected and who will benefit or lose) the analysis of present legislation and the EU economic relations with other countries are to be evaluated while elaborating the prevailing studies.

It should be also noted that integration costs will heavily depend on the successes in utilization of industry "strenghts" as well as rate of integration process will take determining adjustment period. The greater the pace of integration would be the higher costs could be faced by the industry due to inability to restructure industrial capabilities in the short run in respect of competitiveness and the EU regulation compliance. It also should be taken into account the fact that the textile and clothing industry still plays very important role in Lithuanian economic development process and this industry should not be excluded from the long run economic strategies of the country. This makes possible to make an implication that the EU accession process will prolong and thus membership effect is still rather early to asses in more tangible measures since the number of variables in determining the process outcome tend to increase.

Another integration related aspect is due to adoption of the EU legislation comprising three Directives related with textile denominations and quantitative analysis of textile fibre mixtures. Lithuanian manufacturers of textile products for the analysis of fibre mixtures freely apply international standards. In addition, since the majority of manufacturing output of this subsector is exported, the production inevitably is required to meet the standards of importing countries and the EU as major partner is not excluded. Therefore implementation of technical regulations prepared on the base of the EU standards would have only limited impact for the enterprises since the majority of textile companies already adjusted to the Western standards. On the other hand implementation costs of technical regulations (financing an establishment of official testing laboratory and adoption of the technical regulations) will be mainly attached to the Ministry of Economy.

Estimating the EU membership effects on the textile and clothing sector impelled to overview the experience of other countries that might have had the likely situation in the industry. Portugal seemed to be the most relevant country to analyze since the textile and clothing industry played the important role within manufacturing in this country before joining the EU. Nevertheless, the comparison methodology proved not to provide for expected results for the EU accession and membership costs estimation since there were some important differences observed highly limiting the likely membership effects on the industry in CEECs and particularly for Lithuania. First of all Portugal differs greatly in size and output amount of the industry (the share of Poland, Czech and Slovak Republics, Hungary, Romania and Bulgaria exports in textile and clothing sector in total is about equal to Portugal's share in the EU markets [8, p.262], whileLithuanian textile and clothing exports amounts approximately for

20% of Poland's export to the EU). The second difference between Portugal and CEEC is that Portugal's textile and clothing industry was more open and for much longer time exposed to international competition than the CEECs ever were. From the 1960s onwards, as a member of EFTA, Portugal benefited from increasing international trade, some competition and access to larger markets. This means that the industry was and is less vulnerable to OPT (and FDI) movements than the CEECs will be some time to come. OPT was never as important in Portugal as it is now in CEECs Lithuania included. For the next few years the EU volume of imports and the quality level of products traded with the CEEC may depend on whether OPT stays in the East. Direct CEEC exports face serious supply and distribution problems, firms appear to have difficulty in marketing products. EC-CEEC direct trade is likely to increase if OPT moves elsewhere. Given the difficulties in CEEC supply, however, the total trade may fall. In particular, rising labor costs in the CEECs would only induce OPT to go to other low-labor-cost countries. Thus industry's export will mainly depend on the EU manufacturers strategies and local costs structure.

Concerning the EU manufacturers strategies and development of textile and clothing sector in this region OETH has developed two scenarios on this issue based on forecasts for production and changes in labor markets. According to the first scenario in high-wage European countries textile subsector is likely to have excess capacity by the end of the decade. Firms will invest less in advanced technologies. This phenomenon of disinvestment will affect the yarn and fabric sector more severely. The finishing sector will remain competitive due to very high quality of production. The textile industry firms will become service companies focusing their strategies on design, logistics and marketing. Information technology will therefore play pivotal role. The competition in the EU form low-labor-cost countries is likely to increase, thus implying that OPT contracts will remain in and move to these countries with the most location and cost advantages. The second scenario is based on more dynamic technological development based on the theory that European textile and clothing producers will be better able to defend their competitive position, and that consumers will be less sensitive to price and more attached to the local market. In the frame of this scenario rivalry conditions for Lithuania in the EU markets will become more rigid. Innovation, introducing of new technologies and development of marketing activities will play a major role in approaching the EU consumers with more adapted to their need and higher quality products. In this scenario, however, the new international distribution of labor could not be eliminated in respect of clothing sector. Businesses will improve their position as intermediaries between designers, producers and clients [34]. Summarizing it should be noted that both scenarios propose the importance of the labor cost distribution importance, while the second places more emphasis on technological development enhancing competitiveness. In both cases Lithuanian manufacturers could benefit if renovation of the industry is put to place, while the first scenario for adoption pace of the industrial capacities provide more favorable conditions than the latter threatening that the competitiveness gap between the EU and low cost countries will increase.

At the enterprise level the EU accession and membership cost will be the most prominent and for some firms (its is still early to asses whether bigger or smaller part of the industry enterprises will survive and enhance their positions) distressing one. First of all development and implementation of new strategies enhancing competitiveness will demand high investment in (1) restructuring the productive

apparatus, reducing production costs (reducing staff, changing sources of supply, subcontracting and redeploying their activities to countries with lower production costs); (2) developing more flexible distribution as well as quality and creativity; (3) automating certain design and production stages; (4) embarking on logistical actions in order to reduce delivery times; (5) modification of the policy on human resources in order to improve management, vocational training and relating occupational changes paying more attention to quality staff; (6) developing of marketing on a European scale; (7) renovation of equipment and technology; (8) introducing and adopting information and telecommunication technologies. Benefits that are already created for business actors within the EU will inevitably approach Lithuanian manufacturers due to integration process in terms of advanced financial infrastructure, reduction of border formalities, development of wide range logistical network, unified technical and environmental regulations, taxation system, reduction of border formalities, common commercial policy, widening distribution system and settled supply channels within the Union.

The mentioned above membership costs of are the main that have been perceived by European managers while facing more competitive and wider EU environment. Some of them are already in production cost structure of Lithuanian manufacturers while the need of more profound restructuring of value added chain elements as well as production process towards increase in productivity tend to remain of major importance where managers efforts together with government support should be put forward.

Summarizing there is a need to emphasize that the research methodology used in this work provided framework for competitiveness analysis. In addition performing as a pilot study drew primary guidelines for further impact analysis needs. The extension of cost and benefit estimation demand for further analysis carried out towards more detailed appreciation of the EU legislation concerning particular industry in the competence of professional lawers. In general it should be pointed out that while Lithuanian government is constrained by the EU norms they are committed to adopt, there is still enough room for policies aimed at reducing possible negative impact on the industry due to lower competitiveness compared to the EU industry. Understanding likely effects of integration measures on national economies and their sectors (in the textile and clothing industry integration impact is likely to be judged in context of the EU manufacturers' policies as well as development of East and West relations) is necessary for membership negotiations and rational policy-making.

5.4 Industrial policy proposals

Analysis of the EU accession impact implied the importance of industrial policy for controlling and mitigating industry adjustment and restructuring costs. Sound activities of economic actors in the textile and clothing industry supported by relevant institutional and government performance could enhance the efficiency and competitiveness of the industry in the long run.

The appraisal of present situation in the industry within Porter's "diamond" model provided strengths and weaknesses of the competitiveness of the industry. It was revealed that Lithuanian industry as one of the important economic activities within

the country faces not only the challenges and benefits from new forms of cooperation with the EU but often it have to overcome serious competitiveness problems. How could the industry adjust and restructure in order to penetrate new markets as well as enlarge their shares in the present markets featured by very tough rivalry and how the transformation process towards the new value added concept could be implemented? As the survey proved the answers to these questions are far more complex and require a set of complementary actions that do not confine as the experience of developed countries witness only within micro level.

The initial stage of policy formulation traditionally lies within identification of major competitiveness problems that need to be solved referring to the existing base of strengths (see Appendix 13). The more detailed analysis of industry competitiveness was analyzed in the framework of Porter's "diamond" model, while the industry representatives (managers of the firms, the Association of the Light Industry Enterprises, Ministry of Economy and other interested institutions) formulated the main competitiveness problems that generalize the more detailed analysis of the industry competitiveness weaknesses). In order to develop implications concerning industrial policy there is a need to overview the main problems:

- One of the most important shortages is lack of industrial strategy. Such device should clear identify the industrial development priorities and measures necessary in achieving foresighted aims in favor of production efficiency and competitiveness of the domestic industry encompassing three level actions within government, industry and enterprises (these will be overlooked further in the frame of industrial proposals). Especially here should be emphasized cooperation of economic actors within industrial cluster of which business efforts should be unified to achieve common goal and coordinate individual efforts for benefit of the whole industry's competitiveness development in the long run.

- Another problem of industrial competitiveness concerns unfavorable business environment. Representatives of the industry perceive it as the most complex and difficult to solve in the short run problem. The survey also revealed negative attitudes of managers towards policy and regulating measures implemented by the government institutions. The government and business sectors still acts not as the partners and this diminishes effectiveness of both sectors performance that leads to considerable squandering of funds. Changing inconsistent State regulation measures limits the ability for business to apply competitiveness enhancement actions. Thus dynamic and complex set of business regulations creates great hindrance for business development as well as makes difficult to grope the true purpose of regulation per se in democratic state system.

- Industry representatives are also anxious about productivity, quality and employees qualification levels that do not satisfy their requirements in terms of competitiveness enhancement. There is lack of qualified and skilled labor force that could be able to maintain new technologies and work with relatively new for transition economies business functions. There is a need for more specialized educational system, closer cooperation between industry and scientific institutions as well as analysis of successful business cases.

- Despite there have passed considerable time since transformation to market economy, business still feels the remaining of command economy mentality. There is lack of skills and experience to manage marketing and innovation functions

- The former problem partly influences lack of systematic market management system. Business internationalization incentive usually comes from foreign partners in the frame of OPT. Due to this manufacturers receive only superficial information about the Western markets and their requirements. In this case is very important that local manufacturers could more actively search by themselves for new production supply possibilities, analyzing target markets and adjusting their capacities towards more effective performance meeting final customer demand requirements.

- All these problems are closely related to financial issues. Lack of working capital hinders ability to accumulate funds for investment. This kind of shortage restricts technological renovation and consequently competitiveness in the long run.

The analysis of main competitiveness problems proves the existence of shortages in supporting infrastructure in terms of appropriate skills, finishing, technological capability and information leads to weak marketing and clustering of supporting industries. Problems with financial infrastructure and macroeconomic shocks (loss of markets) as well as microeconomic inefficiencies (inadequate distribution skills, obsolete technology, and excessive indebtedness) result in competitiveness lose. The exact reasons for such weaknesses sometimes is difficult to identify and thus to solve in the desirable way.

The second stage of policy formulation in order to make relevant adjustment and restructuring of the industry requires detailed strategies and action plans. Despite it is difficult to find a perfect blueprint for such activities, experience of developed countries suggest a set of operations that help direct the industrial policy formulation and implementation process.

On the fist turn there should be made three level actions: macro, industry and enterprise. At the macro level sound and stable macro economic environment is vital. Restructuring and adjustment in the face of macroeconomic imbalances can ensure further financial distress for firms. Macro environment of industrial policy contains the following critical components:

- Macroeconomic policies designed to provide a stable business environment with exchange rates adjusted to maintaining equilibrium between domestic and international prices.

- Policies to promote competition and equal opportunities for business actors independently from their status and organizational form. This calls for comprehensive and developed legal system. Government should acts as an equivalent partner in economic relation with private sector, in the same way maintaining the aim to create the most efficient and favorable business conditions and effective performance of budgetary functions. The specific measures in ensuring this macro factor were suggested by the industry representatives:

- Creation of business representatives institution under the government. Participation of private sector in provision of physical infrastructure, strengthening the legal system and prudential regulation is of vital importance as supporting action;
- Development of advanced taxation system supporting business actors;
- Diminish State regulation and its scope;
- Government should revise administration procedures, border formalities, try to reduce duplication of administrative functions;
- Political decisions should not come in isolation of economic considerations;
- For restructuring efforts to be effective, a set of procedures need to be followed and this should have strong political support and consensus, especially concerning issues of labor retrenchment and the provision of social net;
- Political decisions should not come in isolation of economic considerations.

- Ensuring institutional services and infrastructure to aid firms restructuring including effective market information collection and dissemination, human resource development, telecommunications, transport, power (developing physical infrastructure) as well as strengthening financial infrastructure. Government should take control and temper upgrowth of factor costs in relating industries (especially when it is under competence of the government) at an adjustable pace. Institutional support to help firms develop competence in critical functions areas are:

  - Measures to help firms device export marketing strategies (international agreements in favor of exporting companies, financial aid in introducing Lithuanian products in foreign markets, dissemination of official information about potential of the industry, creation of information database on markets and business conditions);
  - Programs aimed at creating flexible and technical labor force with appropriate management capability (promotion of studies abroad, improvement of state officials competence);
  - Funding for research and development with a focus on applying technologies available internationally to domestic uses (as part of joining the EU negotiate money for technological development in the textile and clothing industry);
  - Mechanism to help firms forge strategic alliances with companies operating abroad;
  - Developing consulting services and financing them in the initial stage (restructuring is high skill intensive, professional and technical teams will be required to introduce efficient production and competitive services and sound business practices) ;
  - Strengthening financial infrastructure, attracting foreign financial institutions, creating favorable conditions for foreign capital inflows.

Having identified the series of actions needed in the program of adjustment and restructuring the problem of building consensus for implementation from the stakeholders' remains. Ideally, industrial adjustment and restructuring should be left to financial institutions and private sector with state authorities providing a

framework, bank system providing funding needed to rejuvenate the industrial units. But the State is inevitably drawn into the process due to distressed firms, labor retrenchment from distressed firms, inability of financial institutions to take risk for supporting restructuring companies. For these reason it may be worthwhile to establish at a broad level a legal basis for adjustment and restructuring including provision of policy implementation cost sharing by stakeholders (government, firms, labor force, financial institutions) in a manner sensitive to both efficacy and equity considerations. Most importantly government intervention need to have clear objectives and procedures in order to reduce its role managing distress, otherwise, government risk becoming captive to the political process that directs more and more resources to loss making activities bailing out financial institutions and companies.

At the industry level specific policies affecting the sector should be applied. Since there is no a lot of specific regulation applied on the textile and clothing industry, the minor remark, nevertheless, should be taken into account. The EU accession progress inevitably will require an implementation of regulations concerning environment and health safety standards for the textile and clothing industry. These regulations should be harmonized according to the real possibilities to implement them and maintain in the long run without severe distress for companies. Thus adoption of the specific regulations should be first of all discussed with industry representatives and if necessary there should be reasonable time negotiated for companies to adjust for such changes. Moreover regulations on the national level should not be more rigid then in the Single Market.

At the industry level important role in supporting industrial policy should be undertaken by the industrial Association. Acting as an intermediate between firms and government officials as well as other supporting industries and institutions. The Association can act as restructuring facilitator. The functions of Association comprise analysis of present requirement of their industry firms and caring for the solutions of these problems on whatever level (preparing information on professional qualifications for the educational institutions (strengthening relations between science and industry), promoting successful business practices, for example, introducing sort of “Nobel” prize for the best entrepreneur, collect and disseminate the best production practices).

At the enterprise level, having identified the problems, whether of the macroeconomic nature or due to the microeconomic deficiencies at the firm or subsector level a decision has to be made to limit the damage and minimize or prevent further loses. What direction to take at the firm levels closely depends on the strategies companies will maintain. There is an evident necessity to increase productivity of factors, labor and management. This will call for elaboration of skill development programs, evaluation of work assignments and development of productivity linked incentive schemes for workers. Development of management skills and interaction system is a key to enhancing efficiency and competitiveness. Capacity utilization will also come under competence of enterprise level, it will be up to the to decide how to improve operating procedures by replacing and utilizing existing equipment. Firms will have to develop input conservation and saving schemes to reduce wastage of energy and raw materials. Closure, mergers, strategic alliances, disintegration of business functions, upgrading production mix (quality) along the value chain will be also relevant issues there.

One of the industrial policy elements is timing and sequencing provision. The timing will inevitably be related to the pace of economic development and integration process. Although, there is an evidence of considerable time needed for adjusting and restructuring of the industry for generating more competitive outputs. Another remark in the sequencing context concerns stabilization of macroeconomic conditions that should be the precondition for structural reform of the industry. Macroeconomic instability can reduce efficacy of the reforms.

Industrial policy program concerning adjustment and restructuring of the economic activity must be implemented at various levels by appointed agents in the government or governmental agencies operating in concern with private sector organization. Implementation is essentially political process and involves interactions of politicians, government officials and special interest groups. The issues that must be resolved include: (1) which agencies are responsible for implementation of the action program in the frame of industrial policy?, (2) what are their capacity to implement reforms and/or actions?, (3) how they will coordinate with other related institutions and the private sector at the national and regional level?, (4) how the progress of the policy will be monitored?, (5) what performance indicators should be formed for measuring progress towards objectives?, (6) how performance will be communicated to the concerned parties and what intervals?

The approach to industrial policy and consecutive industrial change described in the foregoing is grounded on the believe that as a process industrial change can not be fully predicted in advance and as such industrial policy must be adaptive and requiring modifications.

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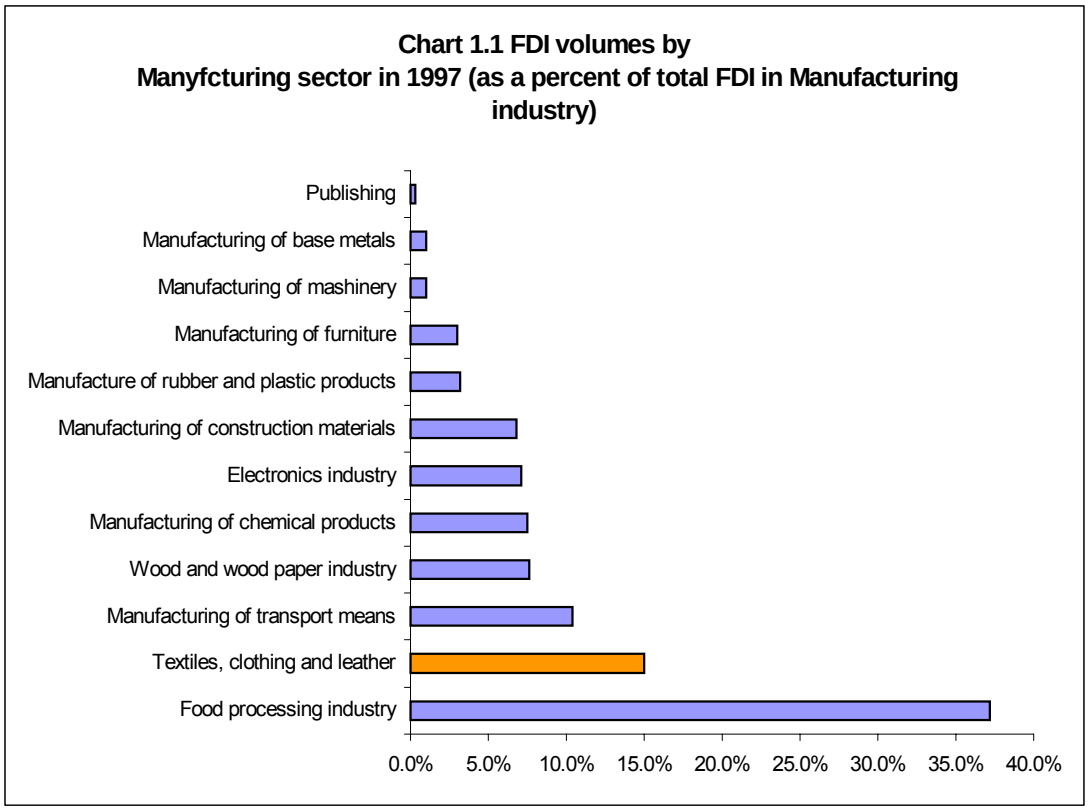
TABLE 1.1 LARGEST FDI IN LITHUANIAN MANUFACTURING SECTOR (TO THE DATE OF 01.01.1999)

Industries	Number of enterprises	Foreign Direct Investment (thous. Lt)	%
Manufacturing industry total	327	2106061	100
Manufacture of food products, beverages and tobacco products	63	764779	36.3%
Textiles, clothing and leather	70	312387	14.8%
Manufacture of wood and paper products	41	149714	7.1%
Manufacture of oil products and chemicals	4	107552	5.1%
Manufacture of transport equipment	11	217787	10.3%
Manufacture of other non-metallic products	19	161812	7.7%
Other industries		332030	15.8%

Source: The Association of Light Industry Enterprises

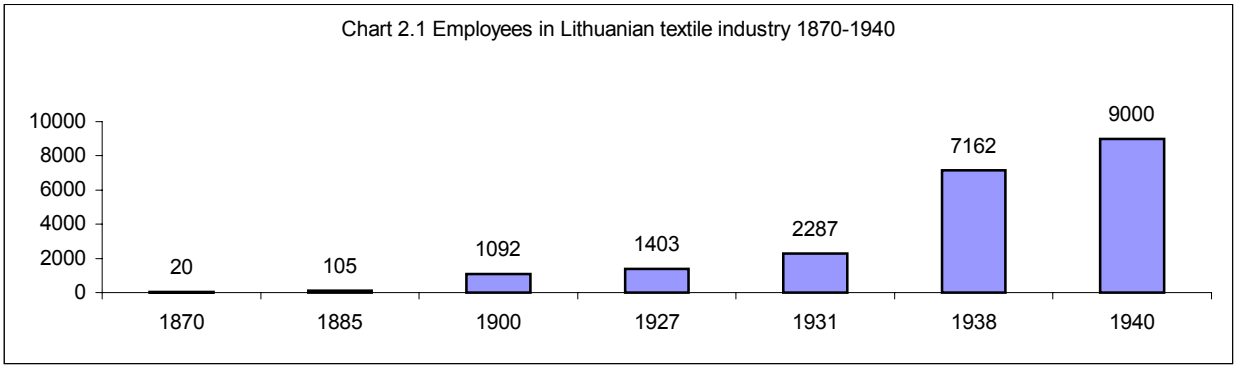


Source: The Association of Light Industry Enterprises

TABLE 2.1 THE FIRST BIGGEST TEXTILE COMPANIES IN LITHUANIA

Name of the enterprise	Establis-ment year	Further name	Town	Production
O. Tray's Factory	1907	"Nemunas"	Juodupė	Woolen fab.
J. Kučinsko flax spinning mill	1913	A/B Kučinskis-Pabedinskai; "Linų audiniai"	Plungė	Linen, fab.
"Drobė"	1922	"Drobė"	Kaunas	Woolen fab.
"Klaipėda"	1923	"Trinyčiai"	Klaipėda	Woolen yarn and fab, later only yarn
"Lana"	1925	"Laisvė"	Kretinga	Woolen fab.
"Liteksas"	1927	"Liteksas"	Kaunas	Woolen fab.
"Lietuvos medvilnės manufaktūra"	1928		Klaipėda	Cotton fab.
"Liverma"	1929	"Gulbė"	Klaipėda	Cotton fab.
"Kauno audiniai"	1930	"Kauno audiniai"	Kaunas	Silk fab.
"Siūlas"	1930	"Siūlas"	Biržai	Linen fab.
"Bostonas"	1932		Kaunas	Woolen fab.
"Šešupė"	1936	"Liteksas" subsidiary	Marijam-polė	Woolen fab.
"Mastis"	1936	"Mastis", knitted fab. enterpise	Telšiai	Linen fab.
"Lima"	1938	"Drobė" subsidiary	Kaunas	Woolen fab.
"Gamyba"	1940	"Spartuolis"	Kaunas	Woolen fab.

Source: Lithuanian Science and Industry. European Context, Conference Material, - Kauno Technologijos Universitetas, Kaunas 1998, p.214;

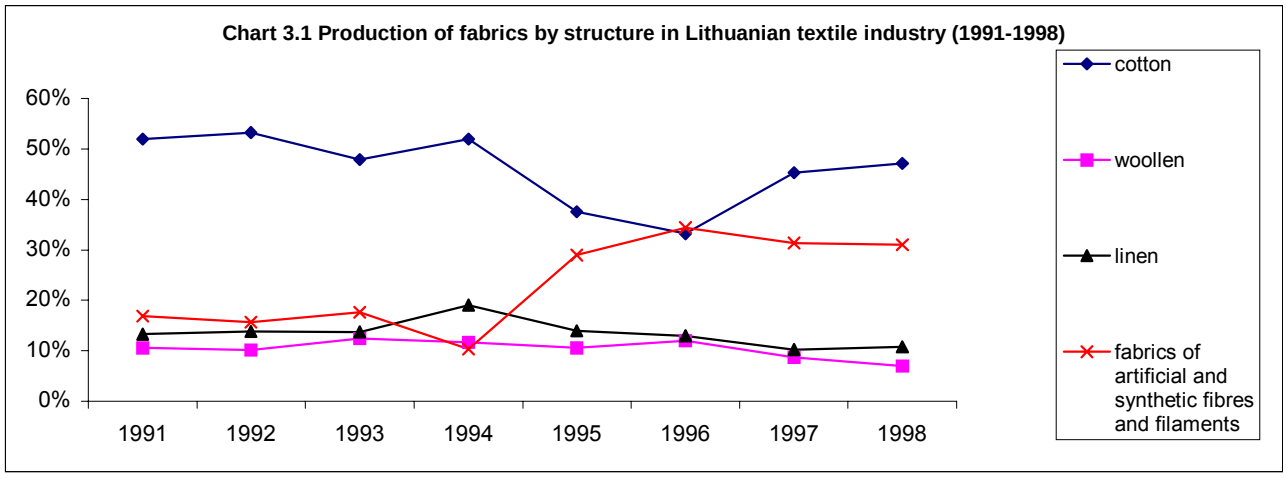


Source: Lithuanian Science and Industry. European Context, Conference Material, - Kauno Technologijos Universitetas, Kaunas 1998, p.216;

TABLE 3.1 THE MAIN PRODUCTION IN THE TEXTILE AND CLOTHING INDUSTRY (1990-1998)

Products	1990	1991	1992	1993	1994	1995	1996	1997	1998
Lflax-type fibres, thous. t	12.7	11.6	9.6	4.6	3.3	4.9	7	6.8	4.6
Fabrics, mill. m2, of which:	203.6	204.3	166.9	99.7	81	93.7	105.2	136	141
cotton	n/a	106.1	88.9	47.8	42.1	35.2	34.9	61.6	66.5
woollen	n/a	21.5	16.9	12.4	9.4	9.9	12.6	11.9	9.8
linen	n/a	27.1	23.1	13.7	15.4	13.1	13.6	13.9	15.2
fabrics of artificial and synthetic fibres and filaments	n/a	34.5	26.1	17.6	8.4	27.1	36.2	42.7	43.8
Carpets and carpet coverings, thous. m2	6551	2739	2615	2226	867	286	186	136	85
Knitwear articles, mill. pcs. of which:	58.8	54.1	37.1	22.2	16.4	17.1	18.7	25.7	28.7
knitted underwear	40.9	36.8	22.2	12.1	11.1	10.1	11.7	12.1	16.6
knitted outwear	17.9	17.3	14.5	10.1	5.3	7	7	13.6	12.1
Panties, socks and stockings, mill. pairs	82.2	81.2	63.3	49.8	42.2	38	31.2	37.5	27.9
With polyvinyl chloride coated, covered ornlaminated textile fabrics, mill. m2	n/a	17.2	10.5	7	3.7	3.6	2.3	1.5	
Coats of all types and jackets, thous. pcs.	1634	1934	2085	1142	663	872	1080	784	997
Suits and ensembles, thous. pcs.	701	632	392	236	277	266	414	363	380
Trousers and breeches, thous. pcs.	2108	2112	1563	1857	2341	3238	4305	5772	5642
Shirts, thous. pcs.	2745	2630	2144	1913	1755	1936	2080	2072	1801
Dresses, thous. pcs.	2353	2513	1269	409	297	691	893	670	750

Source: The Association of Light Industry Enterprises



Source: The Association of Light Industry Enterprises

TABLE 4.1 MAIN LITHUANIAN FOREIGN TRADE PARTNERS (1996/1998)

Countries	**Export (%)**		**Import (%)**	
	1998	**1996**	**1998**	**1996**
Germany	23,0	23,2	18,0	21,5
Denmark	10,9	8,8	9,8	10,8
United Kingdom	9,0	6,1	7,8	5,1
Russian Federation	6,8	14,7	4,7	6,3
Sweden	6,2	4,9	3,4	2,3
The USA	4,5	2,6	1,2	1,0
Italy	4,0	3,6	6,2	4,2
Latvia	3,9	2,5	2,8	3,2
Belgium	3,5	3,0	4,4	3,2
Netherlands	3,3	3,9	3,4	4,4
Korea	2,8	3,0	0,9	1,1
Austria	2,7	2,1	0,5	0,2
Finland	2,4	2,6	1,6	2,3
The Ukraine	2,3	3,1	1,5	1,7
Belarus	2,1	2,5	4,7	6,6
Poland	2,0	2,8	4,0	4,2
France	1,8	n/a	2,6	n/a
Spain	1,6	n/a	1,5	n/a
Norway	1,3	1,2	4,5	0,7
Estonia	1,1	1,1	1,3	2,0
Uzbekistan	0,1	n/a	3,8	n/a

Source: The Association of Light Industry Enterprises

Appendix 5 Key Firms

TABLE 5.1 THE TEXTILE AND CLOTHING INDUSTRY IN LITHUANIA. THE BIGGEST COMPANIES.
*Sorted according to the turnover (*Source: Catalogue of Light Industry Enterprises of Lithuania-'98/99 /textile, sewing, knitting, leather, trade, services/,1998)

Companies	Estab-lished	Capital	Annual turnover (USD)	Number of em-ployees	Export	Production	Town
Lelija JSC[6]	1947	na	3000000 pcs	3300	90.00%	Clothing for men, women and children	Vilnius
Dirbtinis Pluoštas JSC	1965	24,135,750.00	65,000,000.00	1600	na	Synthetic yarn	Kaunas
Alytaus Tekstilė JSC	na	na	32,500,000.00	na	na	100% cotton and mixed yarn, fabrics for home made textile, bedding, curtains, and services.	Alytus
Drobė Wool Company	1920	15,196,031.00	25,000,000.00	2450	92.00%	Wool fabrics for coats, outerwear apparel.	Kaunas
Vernitas JSC	1975	9,709,500.00	22,500,000.00	1420	32.00%	Synthetic spun yarn, knitted outerwear.	Marijampolė
Utenos Trikotažas JSC	1967	4,600,000.00	20,000,000.00	1600	na	Knitted underwear, clothing for babies.	Utena
Liteksas ir Calw AB Lithuanian-German Joint Venture	1927	11,950,000.00	18,375,000.00	900	na	Wool fabrics, woolen clothing accessories.	Kaunas
Audėjas JSC	1946	na	15,000,000.00	400	72.00%	Jacquard fabrics, plush fabrics, flock for upholstery, tapestry.	Vilnius
Linas JSC	1957	5,894,182.00	15,000,000.00	1552	80.00%	Linen fabrics.	Panevėžys
Šatrija JSC	1955	2,605.00	8,000,000.00	1415	89.20%	Clothing for women, men and children.	Raseiniai
Kauno Audiniai JSC	1930	6,050,000.00	7,500,000.00	639	80.00%	Fabrics from natural, artificial and synthetic yarns for light garments and home interior.	Kaunas
Linų Audiniai JSC	1913	438,750.00	7,500,000.00	1160	90.00%	Linen fabrics and products.	Plungė
Sparta JSC	1918	3,900,000.00	7,000,000.00	600	na	Socks and knitted fabrics goods for men, women and children.	Vilnius
Silva JSC	1929	4,391,250.00	6,600,000.00	680	26.00%	Textile dyeing and finishing, socks.	Kaunas
Trinyčiai JSC	1923	3,475,000.00	6,250,000.00	430	42.00%	Cotton spun yarn.	Klaipėda
Dainava JSC	1957	2,887,500.00	6,000,000.00	1400	90.00%	Outerwear for women and men.	Alytus
Vilija JSC	1948	3,000,000.00	6,000,000.00	450	na	Outer knitwear for men, women and children.	Vilnius
Trikotažas JSC	1935	225,000.00	5,200,000.00	1300	na	Women's underwear, sport clothes, knitted fabrics and lace, sewing and embroidery service.	Kaunas

[6] Joint-Stock Company

Appendix 6 Foreign Trade Indicators

TABLE 6.1 FOREIGN TRADE IN LITHUANIA (1993-1998)

	1993	1994	1995	1996	1997	1998
The total Country's import and export (at current prices)						LTL million
Import	9098.4	9413.6	14594	18234.4	22573.6	23175.2
Export	8098.8	8115.2	10822.8	13425.6	15450	14842.8
Trade balance	-999.6	-1298.4	-3771.2	-4808.8	-7123.6	-8332.4
Import	Growth rate compared to previous year	3.46%	55.03%	24.94%	23.80%	2.67%
Export		0.20%	33.36%	24.05%	15.08%	-3.93%

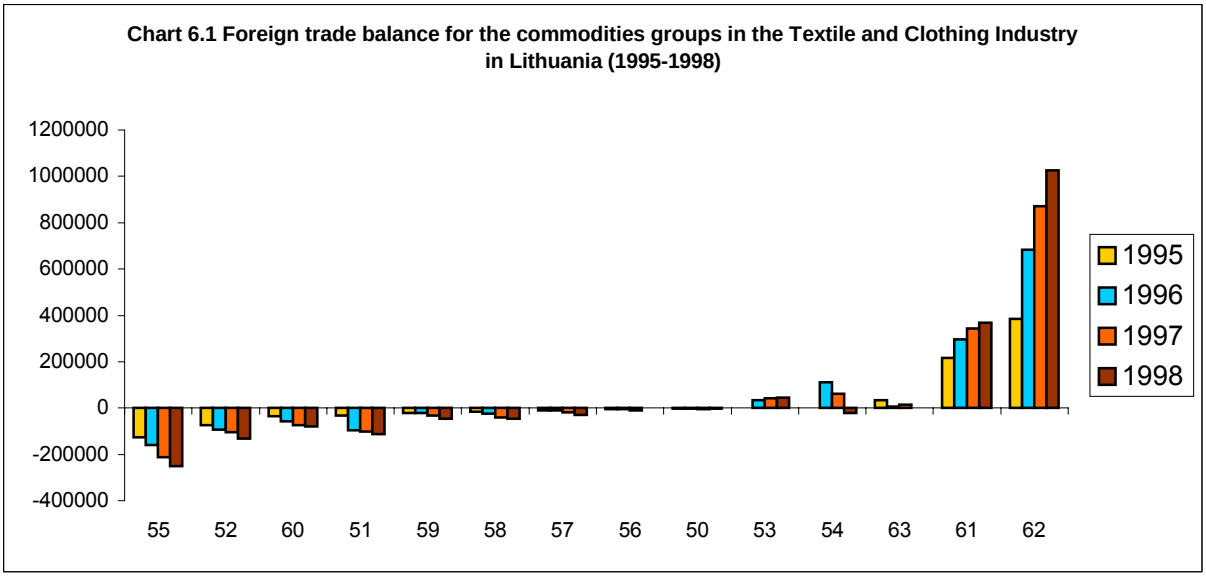
Source: *Foreign Trade 1998*, -Department of Statistics to the Government of the Republic of Lithuania, Vilnius 1999, No. 2210;

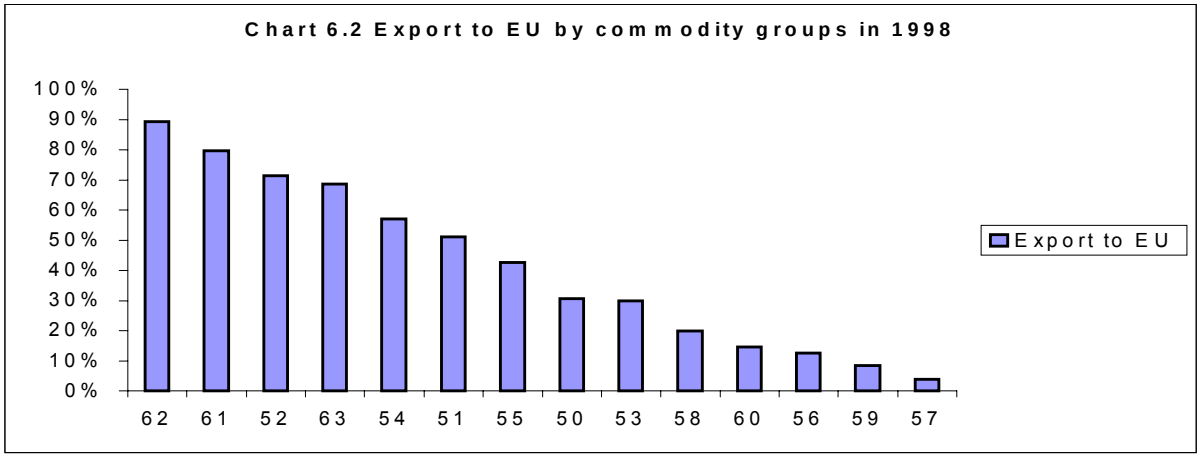
TABLE 6.2 FOREIGN TRADE IN TEXTILE AND CLOTHING ARTICLES IN LITHUANIA (1995-1998)

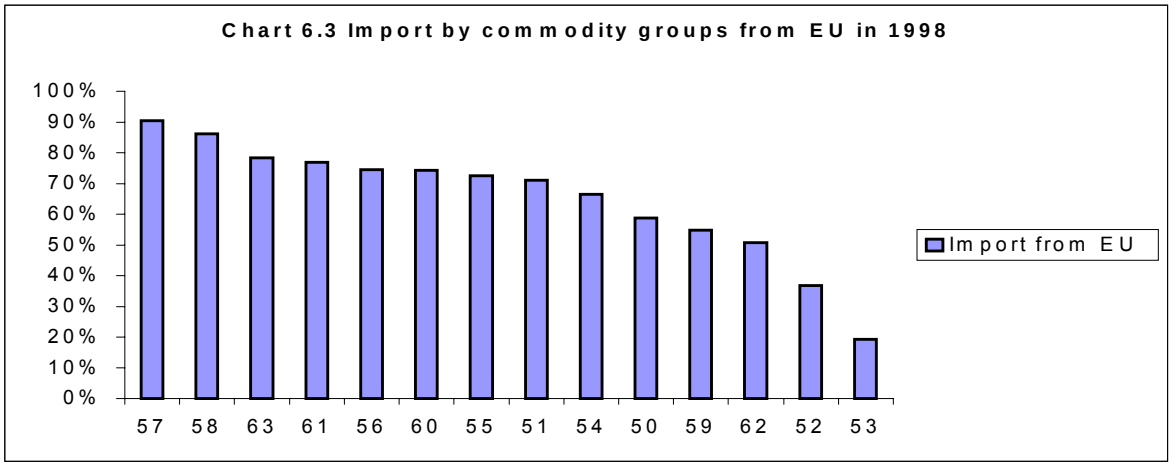
HS	1995	1996	1997	1998	1995	1996	1997	1998
	EX	EX	EX	EX	IM	IM	IM	IM
50	461	9.8	11.3	67.2	1427.5	2388.9	4253.9	3178.7
51	71410.5	69233.9	84455.5	79044.4	104840.1	166533.6	187202.9	192348.8
52	207591.4	148561.2	177194.8	179944.6	282511.3	240766.7	282813.3	313153
53	56377.2	62544.9	101814.2	163166.6	56496.5	28520.8	59162.9	119059.3
54	170877.5	284367.5	309076.7	269790.8	169055.9	173615.1	246884.2	291207.3
55	122713	183198	159728.7	147413.8	249709.1	344153.3	372963	397770.9
56	26724.4	29828.7	46928.5	56805.1	30325.3	35519.3	57959.5	56552.6
57	8018.5	8385.7	7378.1	4597.5	17488	18349.2	26800.4	35228.6
58	8758.2	7438.6	7680.7	9598.6	25580.9	32333.9	47244.1	57184
59	29068.7	30573.5	37764.5	18322.4	51145.9	51822.1	71331	63702
60	14930.3	18930.3	28170.5	28607.3	49371.4	76258.6	102311.3	107484.3
61	283988.1	374803.5	441294.8	494374.9	66946.1	77578.3	98252.1	126834.1
62	502591.5	772675.5	994956.6	1173682.5	116575.7	90355.9	124543.4	149099.3
63	88562.9	106949.6	116219	136832.7	54495.1	100044	101121.5	136489.7
Total	1,592,073.20	2,097,500.70	2,512,673.90	2,762,248.40	1,275,968.80	1,438,239.70	1,782,843.50	2,049,292.60
Growth rate compared to previous year	32%	20%	10%		13%	24%		15%

Source: *Foreign Trade 1998*, -Department of Statistics to the Government of the Republic of Lithuania, Vilnius 1999, No. 2210;

50	Silk
51	Wool, fine or coarse animal hair, horsehair yarn and woven fabrics
52	Cotton
53	Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn
54	Man-made filaments
55	Man-made stable fibres
56	Wadding, felt and nonwovens: special yarns; twine, cordage, ropes and cbles and articles thereof
57	Carpets and other textile floor coverings
58	Special woven fabrics; tufted textile fabrics; lace; tapestries; trimmings; embroidery
59	Impregnated, coated, covered or laminated textile fabrics; textile articles of a kind suitable for industrial use textile articles of a kind suitable for industrial use
60	Knitted or crocheted fabrics
61	Articles of apparel and clothing accessories, knitted or crocheted
62	Articles of apparel and clothing accessories, not knitted or crocheted
63	Other made-up textile articles; sets; worn clothing and worn textile articles; rags







Source: Foreign Trade 1998, -Department of Statistics to the Government of the Republic of Lithuania, Vilnius 1999, No. 2210;

TABLE 6.3 LITHUANIAN TOP PRODUCTS WITHIN OECD EXPORT, YEAR 1997

HS Code	Product	Lithuanian Export 1997 (1000. USD)	Share of Lithuanian Exports	Net Exports (1000 USD)	Share of Lithuanian Exports within World Exports Amount	RCA=(LithexpX1/Total Lith exp)/(World expX1/ Total world exp)	Share of EU Imports
5403	Arti fi yarn (o/t sewg thread) nt put up, incl arti monoles thn 67 dtex	46620	1.2070%	42830.50	4.7320245%	55.69	2.47661%
5301	Flax, raw or processed but not spun; flax tow and waste	6074.2	0.1573%	1217.30	2.4090183%	27.68	2.64875%
5309	Woven fibres of flax	17751.6	0.4596%	8944.20	1.7658634%	20.15	2.89056%
5111	Woven fabrics of carded wool or of carded fine animal hair	14946.7	0.3870%	3087.20	0.7438206%	8.40	0.56848%
6202	Women's/girls' overcoats, capes, wind-jackets etc o/t those of hd 62.04	23538.7	0.6094%	20786.40	0.7428200%	8.39	0.86969%
5601	Waddg of tex mat & art thereof; tex fib</=5mm le(flock), tex dust & mill nep	6116.3	0.1584%	4354.40	0.6976811%	7.88	0.01192%
5408	Woven fab of arti filam yarn incl woven fabric of mat of hd no54.05	18423.4	0.4770%	5824.50	0.6924665%	7.82	1.85017%
5515	Woven fabrics of synthetic staple fibres, nes	19898.8	0.5152%	-812.30	0.6898575%	7.79	1.01982%
5306	Flax yarn	1622.6	0.0420%	897.90	0.6463574%	7.29	0.57359%
6206	Women's or girls' blouses, shirts and shirt-blouses	30217	0.7823%	29055.70	0.6237219%	7.04	0.90056%
6301	Blankets and travelling rugs	3794.2	0.0982%	3484.70	0.4670324%	5.26	1.39138%
6204	Women's/girls' suits, jackets, dresses skirts etc & shorts (o/t swimwear)	87742.3	2.2717%	82940.10	0.4621153%	5.21	0.79743%
6203	Men's or boys' suits, jackets, trousers etc & shorts (o/t swimwear)	70100.5	1.8149%	61974.40	0.4296588%	4.84	0.69577%
5208	Woven fabrics of cotton, cntg>/=85% by wt of cotton, weighg</= 200 g/m2	29447.1	0.7624%	9239.80	0.3959805%	4.46	0.96021%
6115	Panty hose, tights, stockings & other hosiery, knitted or crocheted	15959.4	0.4132%	13511.80	0.3947570%	4.44	0.17406%
5509	Yarn (o/t sewg thread) of synth staple fibre, nt put for retail sale	12355.3	0.3199%	6767.50	0.3772249%	4.25	0.14715%
6302	Bed, table, toilet and kitchen linens	17376.5	0.4499%	16300.70	0.3528593%	3.97	0.46348%
6106	Women's or girls' blouses, shirts & shirt-blouses, knitted or crocheted	9328.6	0.2415%	8220.40	0.3207033%	3.61	0.80869%
6104	Women's/girls' suits, dresses, skirt etc & short (o/t swimwear)knit/croch	17553.8	0.4545%	14567.90	0.2751333%	3.09	0.41240%
5904	Linoleum; floor coverings with a coating or covering on tex backing	537.6	0.0139%	-1430.40	0.2446321%	2.75	0.00000%
5608	Knottd nettg of twine, cordage/rope made up fishg nets & o net of tex mat	1146.8	0.0297%	-379.80	0.2445110%	2.75	0.06432%
6306	Tarpaulins, sails for boats, sailboards, awnings, tents &	1952.6	0.0506%	1289.90	0.2253531%	2.53	0.50433%

HS Code	Product	Lithuanian Export 1997 (1000. USD)	Share of Lithuanian Exports	Net Exports (1000 USD)	Share of Lithuanian Exports within World Exports Amount	RCA=(LithexpX1/Total Lith exp)/(World expX1/ Total world exp)	Share of EU Imports
	camping goods						
5907	Textile fabric impreg, ctd, cov nes; paintd canva (eg theatrical scenery)	1573.1	0.0407%	-1727.90	0.2249223%	2.53	0.10530%
6107	Men's/boys' underpants, nightshirts, pyjamas, bathrobes etc, knit/croch	4879.6	0.1263%	2708.50	0.2153954%	2.42	0.37859%
6303	Curtains (including drapes) & interior blinds; curtain or bed valances	1344.6	0.0348%	946.80	0.2098345%	2.36	0.14390%
6201	Men's/boys' overcoats, capes, windjackets etc o/t those of hd 62.03	8713.9	0.2256%	6423.40	0.2091843%	2.35	0.28953%
6205	Men's or boys' shirts	10976.9	0.2842%	9094.10	0.2062386%	2.32	0.30167%
5205	Cotton yarn (o/t sewing thread) ctg>/=85% by wt of cotton, not put up	7212	0.1867%	-1769.10	0.2034055%	2.29	0.18410%
5514	Woven fab of syn stapl fib, cntg<85% of such fib, mxd w cot, wt >170g/m2	1599.1	0.0414%	-6468.30	0.2019940%	2.27	0.03945%
6211	Track suits, ski suits and swimwear; other garments	10116.9	0.2619%	8207.20	0.1944631%	2.18	0.33794%
6109	T-shirts, singlets and other vests, knitted or crocheted	16445.3	0.4258%	12176.70	0.1912319%	2.15	0.33048%
6111	Babies' garments and clothing access, knitted or crocheted	2961.2	0.0767%	2642.00	0.1888477%	2.12	0.24768%
5212	Woven fabrics of cotton, nes	568.4	0.0147%	-230.40	0.1873531%	2.10	0.11688%
6113	Garment, made up of knitted/crochetd fabric of hd no 59.03, 59.06, 59.07	230	0.0060%	172.40	0.1861444%	2.09	0.28461%
6309	Worn clothing and other worn articles	0.000549	0.0549%	-8586.90	0.1853873%	2.08	0.06460%
5401	Sewing thread of man-made filaments, w/n put up for retail sale	1156.3	0.0299%	-4500.40	0.1823431%	2.05	0.05446%
6110	Jerseys, pullovers, cardigans, waistcoats etc, knitted or crocheted	28556	0.7393%	23909.50	0.1701211%	1.91	0.22189%
6101	Men's/boys' overcoats, capes, cloak etc, knitted/crochetd, o/t of hd 61.03	765.8	0.0198%	492.40	0.1682771%	1.89	0.25244%
6103	Men's/boys' suits, jackets, trousers etc & shorts (o/t swimwear)knit/croch	4267.6	0.1105%	3854.60	0.1578602%	1.77	0.35780%
6305	Sacks and bags of a kind used for the packing of goods	1187.9	0.0308%	-1190.10	0.1507597%	1.69	0.04512%
6207	Men's or boys' singlets, briefs, nightshirts, pyjamas, bathrobes etc	1172.7	0.0304%	839.30	0.1478295%	1.66	0.33978%
5112	Woven fabrics of combed wool or of combed fine animal hair	4470.7	0.1157%	-11755.30	0.1437292%	1.61	0.34550%
6210	Garment made up of fabric of heading no 56.02, 56.03, 59.03, 59.06/59.07	3361.3	0.0870%	2142.70	0.1360428%	1.53	0.24692%
6310	Rags, scrap twine, crodage,	0.0001202	0.0120%	396.70	0.1245715%	1.40	0.16966%

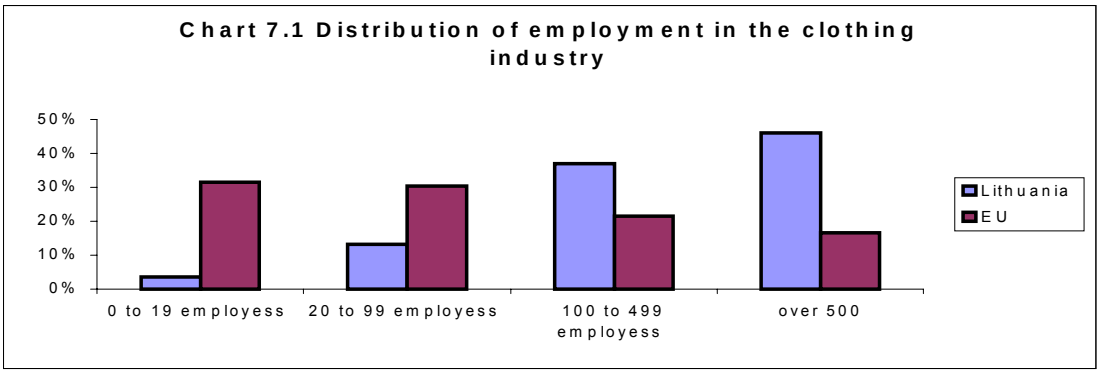
HS Code	Product	Lithuanian Export 1997 (1000. USD)	Share of Lithuanian Exports	Net Exports (1000 USD)	Share of Lithuanian Exports within World Exports Amount	RCA=(LithexpX1/Total Lith exp)/(World expX1/ Total world exp)	Share of EU Imports
	rope & cable worn out art of twine, cordage etc						
5511	Yarn (o/t sewing thread) of m-m staple fibres, put up for retail sale	186.6	0.0048%	-38.40	0.1173322%	1.32	0.23072%
5406	Man-made filament yarn (o/t sewing thread), put up for retail sale	112.8	0.0029%	34.20	0.1111979%	1.25	0.00000%
5206	Cotton yarn (o/t sewing thread) cntg < 85% by wt of cotton, not put up	366.5	0.0095%	-417.70	0.1036850%	1.16	0.02355%
6114	Garments, knitted or crocheted, nes	1171.9	0.0303%	922.60	0.1032923%	1.16	0.14522%
5211	Woven fab of cotton, cntg<85% by wt of cotton, mxd w m-m fibre, >200g/m2	900.8	0.0233%	-836.10	0.1009930%	1.13	0.04997%
5903	Textile fabrics impregnated, coated, covered/laminated w plastics, nes	6892.2	0.1784%	-3578.10	0.0992868%	1.11	0.03359%
5505	Waste (incl noils, yarn waste & garnetted stock) of man-made fibres	217.3	0.0056%	105.90	0.0951662%	1.07	0.04707%
5102	Fine or coarse animal hair, not carded or combed	175.4	0.0045%	-915.60	0.0942436%	1.06	0.04680%
5607	Twine, cordge, rope & cable w/n plaited/braidd, w/n impreg etc w rbr/pla	653.8	0.0169%	-929.30	0.0908288%	1.02	0.03893%
5202	Cotton waste (including yarn waste and garnetted stock)	189.8	0.0049%	86.10	0.0821184%	0.92	0.01257%
6108	Women's/girls' slips, panties, pyjamas, bathrobes etc, knitted/crocheted	4803.9	0.1244%	2621.30	0.0805235%	0.90	0.14799%
6102	Women'/girls' overcoat, cape, cloak etc, knitted/crochetd, o/t of hd 61.04	334.5	0.0087%	133.00	0.0774240%	0.87	0.05352%
5909	Textile hosepiping and similar textile tubing	69.1	0.0018%	-269.10	0.0758548%	0.85	0.00000%
5402	Synth fi yarn (o/t sewg thread)nt put up, incl syn monoles thn 67 dtex	7251.7	0.1877%	-15963.30	0.0750375%	0.84	0.01336%
5501	Synthetic filament tow	384.6	0.0100%	-2423.50	0.0738852%	0.83	0.00000%
5603	Nonwovens, w/n impregnated, coated, covered or laminated	3144.4	0.0814%	-3405.70	0.0691863%	0.78	0.01230%
6112	Track suits, ski suits and swimwear, knitted or crocheted	1243.5	0.0322%	483.80	0.0690509%	0.77	0.06141%
5801	Woven pile & chenille fabrics, o/t fab of hd no 58.02 or 58.06	1606.1	0.0416%	-2181.10	0.0678304%	0.76	0.00358%
5609	Articles of yarn, strip, twine, cordage, rope and cables, nes	85.8	0.0022%	-145.40	0.0650760%	0.73	0.00175%
6216	Gloves, mittens and mitts	251.5	0.0065%	-3.70	0.0647041%	0.73	0.06998%
5602	Felt, w/n impregnated, coated, covered or laminated	446.9	0.0116%	-226.70	0.0630409%	0.71	0.05529%
6002	Knitted or crocheted fabrics, nes	6096.7	0.1578%	-15139.40	0.0605231%	0.68	0.01124%
5209	Woven fabric of cotton, cntg>/=85% by wt of cotton,	3830.9	0.0992%	-5794.90	0.0603223%	0.68	0.11871%

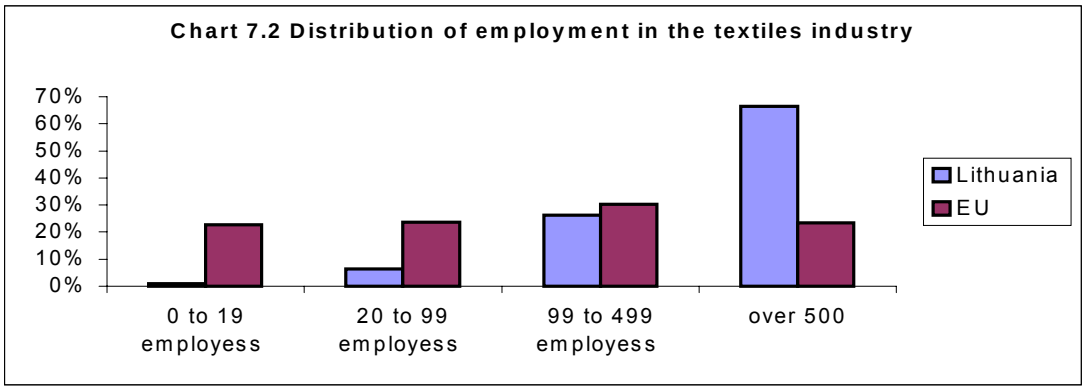
HS Code	Product	Lithuanian Export 1997 (1000. USD)	Share of Lithuanian Exports	Net Exports (1000 USD)	Share of Lithuanian Exports within World Exports Amount	RCA=(LithexpX1/Total Lith exp)/(World expX1/ Total world exp)	Share of EU Imports
	wghg over 200g/m2						
6105	Men's or boys' shirts, knitted or crocheted	1405.1	0.0364%	1039.40	0.0591281%	0.66	0.06723%
5513	Woven fab of syn stapl fib, cntg<85% of such fib, mxd w cot, wt</=170g/m2	1305.7	0.0338%	-1751.00	0.0583505%	0.65	0.05001%
5103	Waste of wool/fine/coarse anim hair, incl yarn waste, excl garnettd stk	79.8	0.0021%	-147.30	0.0574974%	0.65	0.05735%
5702	Carpets & o tex floor covg, woven, not tufted/flocked, incl hand-woven rugs	1174.6	0.0304%	277.40	0.0510903%	0.57	0.00381%
5605	Metallised yarn, being tex yarn combined with metal thread, strip/powder	66.9	0.0017%	44.10	0.0468678%	0.53	0.00000%
5503	Synthetic staple fibres, not carded, combed/o/w processed for spinning	1805.2	0.0467%	-13620.10	0.0467518%	0.52	0.00293%
6001	Pile fabrics incl `long pile` fabrics & terry fabrics, knitted/crocheted	946.7	0.0245%	-3393.00	0.0418864%	0.47	0.03422%
6116	Gloves, mittens and mitts, knitted or crocheted	255.1	0.0066%	66.60	0.0379813%	0.43	0.00763%
6304	Furnishing articles nes, excluding those of heading no 94.04	262.4	0.0068%	174.20	0.0374806%	0.42	0.05801%
6212	Brassieres, girdles, corsets, braces, suspenders etc & parts, w/n knit/croch	1212.5	0.0314%	285.40	0.0364102%	0.41	0.01562%
5811	Quiltd textile product in the piece other than embroidery of hd no5810	67.5	0.0017%	-1101.30	0.0356849%	0.40	0.05310%
5516	Woven fabrics of artificial staple fibres	1438.1	0.0372%	-22160.60	0.0355320%	0.40	0.05198%
5201	Cotton, not carded or combed	1428.9	0.0370%	-21375.00	0.0329728%	0.37	0.00468%
5101	Wool, not carded or combed	1140.3	0.0295%	-6820.00	0.0317776%	0.36	0.02823%
6208	Women's or girls' singlets, slips, briefs, pyjamas, bathrobes etc	543.7	0.0141%	5.30	0.0290058%	0.33	0.04043%
5210	Woven fab of cotton, cntg<85% by wt of cotton, mxd w m-m fib, </=200g/m2	336.5	0.0087%	-2966.80	0.0285189%	0.32	0.03015%
6307	Made up articles nes, including dress patterns	552.4	0.0143%	-9027.80	0.0280338%	0.31	0.02272%
6217	Clothing accessories nes; parts of garments/accessories, o/t of hd 62.12	581.2	0.0150%	-3344.70	0.0273251%	0.31	0.02825%
5407	Woven fab of syn filam yarn incl woven fabric of mat of hd no54.04	3613.3	0.0935%	-12365.70	0.0246491%	0.28	0.04453%
5508	Sewing thread of man-made staple fibres, w/n put up for retail sale	142.1	0.0037%	-2123.00	0.0237061%	0.27	0.01663%
5512	Woven fab of syn staple fibre, cntg 85%/more by wt of syn	367.2	0.0095%	-6379.70	0.0231777%	0.26	0.01446%

HS Code	Product	Lithuanian Export 1997 (1000. USD)	Share of Lithuanian Exports	Net Exports (1000 USD)	Share of Lithuanian Exports within World Exports Amount	RCA=(LithexpX1/Total Lith exp)/(World expX1/ Total world exp)	Share of EU Imports
	staple fibre						
5906	Rubberised textile fabrics, other than those of heading no 59.02	168.5	0.0044%	-311.00	0.0229731%	0.26	0.00000%
5106	Yarn of carded wool, not put up for retail sale	173.7	0.0045%	-431.40	0.0217893%	0.24	0.00188%
6117	Clothing access nes, knitted/croch; parts of garments/access, knit/croch	177.5	0.0046%	-1744.20	0.0181655%	0.20	0.03264%
5910	Transmission or conveyor belts or belting of textile material	20.7	0.0005%	-89.50	0.0171239%	0.19	0.01924%
5502	Artificial filament tow	203.1	0.0053%	-3095.70	0.0164980%	0.19	0.00000%
5204	Cotton sewing thread, whether or not put up for retail sale	19.2	0.0005%	-706.50	0.0153444%	0.17	0.02837%
5705	Carpets and other textile floor coverings, nes	78.5	0.0020%	-304.10	0.0134776%	0.15	0.00022%
5703	Carpets and other textile floor covering tufted w/n made up	532.4	0.0138%	-4193.50	0.0126089%	0.14	0.00004%
5704	Carpets & other textile floor covering of felt, nt tufted/flockd w/n made	59.7	0.0015%	-563.10	0.0119128%	0.13	0.00000%
5404	Synth mono>/=67dtex, nocross-sect dim>1mm; strip..., syn tex mat wd</=5mm	91.3	0.0024%	-303.30	0.0114377%	0.13	0.00000%
5905	Textile wall coverings	8.1	0.0002%	-28.60	0.0108808%	0.12	0.00000%
6214	Shawls, scarves, mufflers, mantillas, veils and the like	122	0.0032%	-144.60	0.0103540%	0.12	0.01222%
5506	Synthetic staple fibres, carded, combed or o/w processed for spinning	27.8	0.0007%	-14.70	0.0087500%	0.10	0.00000%
6209	Babies' garments and clothing accessories	63.7	0.0016%	-408.40	0.0085991%	0.10	0.00412%
5807	Label, badge & sim art of tex, in the piece, in strip, cut to size nt embrod	54.5	0.0014%	-2289.40	0.0083788%	0.09	0.01372%
5806	Nar wovn fab, o/t those of hd 5807; nar fab of warp w/o weft assem w adh	127	0.0033%	-2826.80	0.0081331%	0.09	0.00408%
5107	Yarn of combed wool, not put up for retail sale	121	0.0031%	-5651.50	0.0079159%	0.09	0.00190%
5911	Textile products & articles for tech uses, specified in Note 7 to this ch	130.6	0.0034%	-613.50	0.0078361%	0.09	0.00569%
5606	Gimped yarn nes; chenille yarn; loop wale-yarn	34.9	0.0009%	-1921.00	0.0069532%	0.08	0.01300%
5808	Braid in the pce; orn trim, in pce, w/o embrod o/t knit/crochtd; tassel...	17.2	0.0004%	-445.50	0.0062818%	0.07	0.01063%
5805	Hand-woven and needle-worked tapestries, whether or not made up	1.7	0.0000%	-36.00	0.0051811%	0.06	0.00278%
5803	Gauze, o/t narrow fabrics of hd 58.06	1.3	0.0000%	-11.40	0.0044244%	0.05	0.01229%
5902	Tire cord fab of high tenac yarn of nylon, o polyamide, polyester/vi ray	36	0.0009%	-64.40	0.0041387%	0.05	0.00000%

HS Code	Product	Lithuanian Export 1997 (1000. USD)	Share of Lithuanian Exports	Net Exports (1000 USD)	Share of Lithuanian Exports within World Exports Amount	RCA=(LithexpX1/Total Lith exp)/(World expX1/Total world exp)	Share of EU Imports
5109	Yarn of wool or of fine animal hair, put up for retail sale	6.2	0.0002%	-230.20	0.0040718%	0.05	0.00281%
5604	Rubber thread, cord, tex cov; tex y, strip & like, impreg, cov etc w rbr/plas	37	0.0010%	-142.90	0.0034096%	0.04	0.00119%
5901	Text fab ctd w gum, for book cov...; tracg cloth; paint canva; buckram..	4.7	0.0001%	-276.90	0.0033015%	0.04	0.00376%
5908	Textile wick for lamps, stoves, etc; ga mantles & knittd ga mantle fabric	0.9	0.0000%	-3.60	0.0032539%	0.04	0.00000%
5804	Tulles & other net fab not incl woven, knit/crocheted fab; lace in pce, etc	22.5	0.0006%	-377.70	0.0031546%	0.04	0.00295%
6308	Set consisting of woven fab & yarn for making up into rugs, tapestrie etc	1.7	0.0000%	-2.70	0.0023234%	0.03	0.00000%
5810	Embroidery in the piece, in strips or in motifs	17.9	0.0005%	-573.40	0.0022043%	0.02	0.00110%
6215	Ties, bow ties and cravats	29.6	0.0008%	-176.80	0.0021788%	0.02	0.00630%
5802	Terry towellg & sim wov terry fab o/t nar fab; tuftd tex fab o/t hd 5703	2.5	0.0001%	-17.50	0.0018388%	0.02	0.00000%
5308	Yarn of other vegetable textile fibres; paper yarn	2.6	0.0001%	-12.30	0.0012837%	0.01	0.01166%
5311	Woven fab of other vegetable textile fibre; woven fabric of paper yarn	1.6	0.0000%	-357.90	0.0009104%	0.01	0.00945%
5310	Woven fabrics of jute or of other tex bast fibres of hd no 53.03	0.3	0.0000%	-0.10	0.0007884%	0.01	0.00000%
5510	Yarn (o/t sewg thread) of arti staple fibre, nt put up for retail sale	3	0.0001%	-1072.80	0.0007172%	0.01	0.00061%
6213	Handkerchiefs	0.7	0.0000%	-47.90	0.0005150%	0.01	0.00000%
5007	Woven fabrics of silk or of silk waste	2.9	0.0001%	-1051.90	0.0001616%	0.00	0.00000%
5504	Artificial staple fibres, not carded, combed/o/w processed for spinning	0.8	0.0000%	-219.70	0.0000924%	0.00	0.00000%
5701	Carpets and other textile floor covering knotted, w/n made up	0.4	0.0000%	-68.20	0.0000486%	0.00	0.00000%

Appendix 7 Employment Distribution





Source: *Statistical Yearbook of Lithuania 1998*, - Department of Statistics to the Government of the Republic of Lithuania, Vilnius 1999 and *The Single Market Review. Impact on Manufacturing. Textiles and Clothing*, - European Communities 1998

Appendix 8 Standards

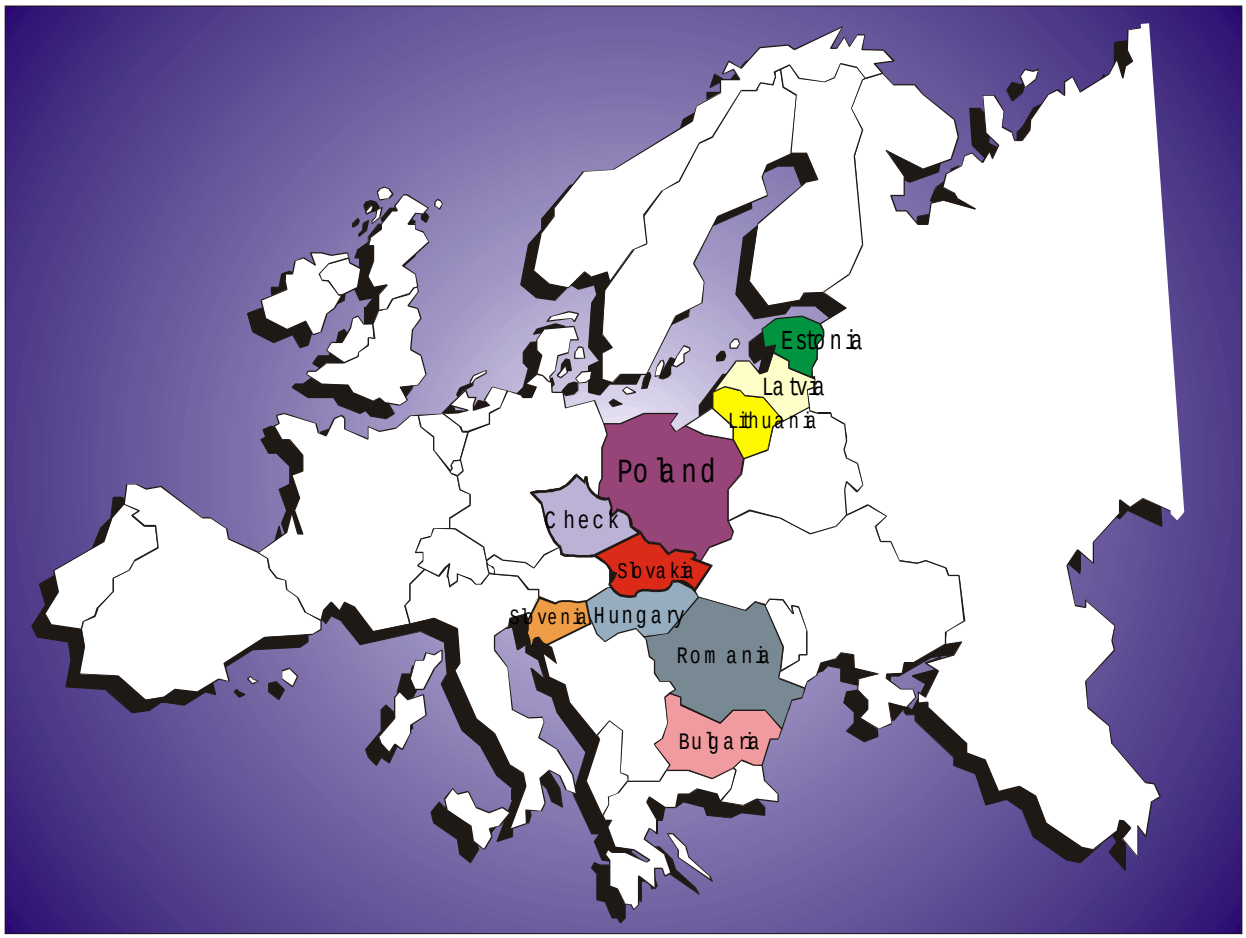
THE TOPICS FOR STANDARDIZATION IN THE EU ARE AS FOLLOWS:

- resistance to fire, wear and tear, tension, water and air;
- technical characteristics (thickness, density, twisted yarns);
- composition fibres and names of textiles;
- conditions for maintenance; standardization of symbols and labeling, dry cleaning;
- sizes of some textile articles;
- arrangements for testing and checking and for processing;
- colour resistance under different conditions;
- toxicity of the materials and finishing products.

THE STANDARDS SET DOWN BY CEN WHICH ARE PRESENTLY IN FORCE ARE AS FOLLOWS:

EN 23578: Textiles-symbols and labeling for maintenance)15 October 1993);
EN 29073-1: Nonwoven: mass by unit (29 June 1992);
EN 29073-2: Nonwoven: definition of thickness (29 June 1992);
EN 29073-3: Nonwoven: definition of tension and elongation (29 June 1992);
EN 29073-4: Nonwoven: definition of resistance to tearing (29 June 1992);
EN 14: Blankets: sizes (26 September 1994);
EN 25080: Sisal cords and ropes (September 1993);
EN 22289: Coated fabrics (October 1993);
EN 25978: Coated fabrics (9 September 1993);
EN 22313:Textiles: reactions to crumpling (26 June 1992);
EN 1049-2: Textiles: defining the number of threads per unit of length (16 December 1993);
EN 31092: Textiles: defining physiological properties (March 1993);
EN 20105-A02: Scale of measuring change in colours (August 1994);
EN 20105-A03 (August 1994);
EN 20105-C01: Reaction of colours to washing (16 November 1992);
EN 20105-C02: Reaction of colours to washing (16 November 1992);
EN 20105-C03: Reaction of colours to washing (16 November 1992);
EN 20105-C04: Reaction of colours to washing (16 November 1992);
EN 20105-C05: Reaction of colours to washing (16 November 1992);
EN 20811: Textiles: resistance to water penetration (29 June 1996);
EN 24920: Textiles: defining resistance of surfaces to dampness (29 June 1992);
EN 250077: Textiles: defining the changes in size (26 November 1993);
EN 29865: Textiles: impermeability (9 September 1993);
EN 26330: Textiles: washing and drying procedures for textile tests (25 November 1993).

Source: The Single Market Review. Impact on Manufacturing. Textiles and Clothing, - European Communities 1998, p. 141;



ESTONIA

Textiles is often seen as an area where Estonia can effectively compete to gain the EU market share. In 1997 total sales in textile sector, which covers clothing, fur and leather products exceeded 3,9 billion Ekr merely a 30% growth over the previous year. According to estimates by the Ministry of Economic Affairs, 236 companies were active in the sector employing 9 160 workers/ Most firms are small, with only about 28% employing more than 207 people/ Over the long term, the key factor for growth will be the development of brand names and increase in productivity.

Wages in the textile industry have increased by 61,5% over the past two years (1997 date accountable) while output per worker has increased by 91%, thus resulting in an overall decrease in production costs. Despite the increase in wages, they remain at almost the lowest levels in the industry. This may lead to future staffing problems.

In the first part of 1996 textiles accounted for 15,5 per cent of Estonia' total export. Textiles and soft goods were the most important export articles of Estonia during the first 6 months of 1996. In the export of textiles and soft goods the biggest part - 36 per cent - was formed by clothes. At the same time their export increased only 13 per cent. The export of cotton goods doubled and accounted for 24 per cent of the export of textiles. Among clothes the most important export articles were men's suits and ladies' outdoor clothes. The export of sporting and leisure cloths increased 7 per cent.

During the first part of 1996 the biggest and the most important markets for Estonian textiles and soft goods were Finland - 36 per cent, Sweden -30 per cent, Germany and Russia. Subcontracts play extremely important part in the Estonian textile and clothing industries. Although it is noticeable today,

that bigger enterprises are trying to decrease the importance of subcontracts in production, the smaller enterprises cannot afford it yet. Here a size and notoriety of a firm as well as the length of time it has been known in the market, plays an important role.

The export of the sub-branches of light industry can be divided into the export of subcontract goods and enterprises' own products. As mentioned before, there is a tendency to decrease subcontracts. But it is noticeable that the importance of subcontracts in the exports of many large-scale clothing enterprises is still remarkably big. The importance of CMG (cutting, making, trimming - international index for subcontracts) in the following enterprises in 1995 was: AS Baltika - CMT 26 per cent, AS Klementi - CMT 86 per cent. By the end of 1996 AS Klementi hopes to decrease this number to 55 per cents.

Estonian textile and clothing producer today is Scandinavian orientated, but more and *more attempts are made to reach Europe*. First experiments with Germany are made. This year the Estonian Union of Clothing Producers opened its own box in Frankfurt, one of the biggest textile fairs in Europe. In the framework of this fair also a CMG fair took place. Although CMT does not make Estonian producers well known directly, it enables to raise the quality of goods to win new markets.

The figures reveal that the biggest offerers of CMT are Finland - 36% and Sweden -22%. CMT accounts for 70% in the total export of clothing.

The biggest markets for textile were the USA, Germany, Belgium. 89 per cent of cotton goods were exported. The export of cotton yarn has also increased. Most of it was sold to Lithuania.

The best markets for stockinet goods have been Finland and Sweden. The export of home textile increased only 4 per cent. The most active buyers of this group of articles were Finland - 39%, Norway - 20%, Germany - 19%.

As a general, the situation described before, is quite satisfactory. The main aim of Estonian textile and clothing producers is to guarantee a high quality and notoriety to the trademark "Made in Estonia" and producers are looking forward to help and encouragement from the state institutions which today are represented by the Estonian Export Council and the Council of Export Aid of the Ministry of Economy.

LATVIA

As the third largest industrial sector, textiles accounts for 12,3% of the total added value of all Latvian industry. The majority of textile goods are exported to Western European countries, with export increasing every year. Export to the EU countries rose by more than 150% in 1996 and by another 25% in 1997. By contrast sales to CIS have remained almost unchanged over the past three years (1997 accountable year).

The main products comprise of clothing, knitwear products, fabrics and fibres. Among the successfully operating companies is the women’s underwear producer Lauma, which managed to increase sales to CIS market and was the first company to enter the EU market. Textile producers include cotton products manufacturers Juglas Manufactura, Tritex and Rimako, the flax processor Larelini, the wool products manufacturer Saule, the textile manufacturers-Ogre, Mare, Viola, Rita, Rigas Aditajs, the clothing manufacturers-Velme, Latvija and Rigas Apgerbs.

Confidence among senior management within the sector is steadily increasing. Most firms see their greatest growth market as the EU and North America. The main factors hindering the development of the sector was unclear economic legislation and limited domestic and regional demand.

POLAND

Poland has a large, diversified textile and clothing industry, which, accounts with about 388.000 employees for 7% of industrial employment and 3.5 % of industrial production. As in the case of footwear, the sector has been severely negatively affected by the loss of the former Soviet Union as a major market. Nevertheless, the industry, with active private participation, has remained relatively vibrant and appears to be internationally competitive.

The textiles sector covers all stages of production and consists mostly of small forms. The biggest firms are to a large extent state-owned, while in clothing both middle-sized and large private firms play a more important role. By 1999 both sectors should be completely privatized. Given this, and the need to modernize the industry, the sector is seeking for foreign participation for capital and technological co-operation.

According to figures provided by the Polish authorities, raw materials are almost entirely imported and are at the base of the clothing and textile sector which, in terms of value, amounts with 2,264 Mio US $ to 13.5 % of the total Polish exports. Textile and clothing exports grew by 18.5 % from 1993 to 1994 which represents an increase of 353.4 mio US $. Exports of knitted and sown clothing and clothing apparel amounted in 1994 to 1,784.3 mio US $, or 78.8% of the Polish textile and Clothing sector.

The textiles and clothing sectors provide a relatively large contribution to the economy. Since liberalization, Poland's imports of textiles and clothing increased substantially, accounting in 1994 for 2,237.1 mio US $ and 10,4% of the of total imports. The 1993/94 growth rate reached 22.7, imports of raw materials and seem-finished products (fabrics, synthetic fibres) used for the manufacture of clothing being the most important segment. The highest dynamic indicators point out linen fabrics and fibres (202.6), silk (140.8), cotton (135.7), continuous synthetic fibres (122.7).

By 1999 both textiles and clothing sectors are expected to be completely privatized. Given this, and the need to modernize the industry, the sector is seeking foreign partnership for capital and technological co-operation.

CZECH REPUBLIC

Textile and Clothing sector belongs to the sectors that create significant part of national product. Its share in industrial production represents more than 6% and with 179.000 employees. The textile industry represents the largest part of the sector with 65% of its production and 56.9% of its workforce. The sector is characterized by strong competition both on domestic and foreign markets. Its share of export sales represents almost 54% as well as active trade balance. National self-supply ratio in 1995 represented 58.8 %.

The European Union is the CR most important partner in foreign trade with textile, apparel and leather products with a share of 50.6% in total imports of the sector. The share of the textile, apparel and leather sector in the gross turnover of Czech industry amounted to 5.6 % in 1995 and gross turnover per employee amounted to 537.1 thousands of CZK.

Privatization of the sector has been almost finished. More than 85% of assets were privatized by means of their deposition into joint-stock companies and 11% of assets were privatized by means of various methods of direct sales. Privatization process started *extensive restructuring of the industry* and has created competitive conditions in a lot of until now monopolistic productions.

Due to restructuring and privatization ineffective productions have been stopped or restricted and manufacturing base has been conformed to the changes related to market orientation. At the same time, accessory activities and services not directly connected with the production were separated. However the restructuring has not brought either substantial quality changes within individual groups of products or innovations of higher order (except of joint ventures with foreign partners). The reason for this may be the *lack of funds* for investments and considerable insolvency caused by outstanding debts, high stock as well as by increasing raw material costs. Capital intensity ratio in textile, clothing and leather industry indicates average values. With respect to the lack of investment funds the investment activity is low and this causes more than 50% depreciation of fixed assets. Participation of foreign capital in the branch represents about 1.9 % of the total foreign investments in the Czech Republic.

Textiles and clothing account for some 7.7 % of manufacturing exports and 4.1 % of imports of CR. Until 1990, the sector's output was heavily directed toward CMAE partners, with some 42% of exports (5% of total production). Thus with the drop in economic activity in CMEA countries, the sector contracted sharply beginning 1991, and in 1993 the total output was less than half of its 1990 level. Employment dropped from 175.000 to about 133.000 during this period.

In 1994 however, production levelled off, with the decline in output limited to a 2% drop, while exports of the sector increased 5 %. Exports to Western markets have begun to expand. Domestic demand indicates now balanced and steady increase in the textile sector, and considerable growth in the clothing sector.

In the textile industry the utilization rate of installed production is increasing (65.4% in 1993, 66.9% in 1994). The capacities of the clothing industry ,however, are utilized for about 56% in 1994 and compared with 1993 the utilization slightly decreased. Following the Czech authorities, this is due to reduced shift working and by extension of more sophisticated productions on special machines for fashion elements which are utilized only partly. Number of enterprises, especially in the group of small-sized enterprises, is still increasing both in the textile and clothing industry.

In the clothing area, privatization and restructuring caused a reduction in number of big companies, the share of small enterprises (25-100 employees) accounting for more than 50%. Only one company with more than 5000 workers has been listed. In the textile sector, more than one third of enterprises can be found in the group with average number of 25-99 workers, only five enterprises register more than 2500 workers.

In both *sectors investments are insufficient and do not cover even simple reproduction*. In textiles it seems to be caused by the lack of investment funds and considerable insolvency of enterprises. For the clothing sector, the volume of investment funds in 1995 in current prices decreased by 13% compared with 1994. The clothing industries share in total volume of investment in textile, clothing and leather industry represents 3.9 %. The participation of foreign capital in the textile industry in 1995 amounted to 2.3 bn CZK, which represents 1.5 % of total volume of foreign investment in the Czech Republic. Any participation of foreign capital in the clothing sector has not yet been recorded, co-operation with foreign firms is realized only by co-operation in the field of outward processing.

SLOVAKIA

The relatively large textiles, clothing, leather and shoes sector is still in crisis. Competition with Asian manufacturers and a general lack of restructuring plague the industry, but exports still account for most of production and there is a trade surplus. To increase competitiveness, manufacturers are attempting to target new markets, upgrade production for the EU markets and establish outward processing trade (OPT) links with the EU manufacturers.

HUNGARY

EU/Hungary textile and clothing trade has a preferential trading status under the Europe Agreement. This Agreement is asymmetrical. All EU textiles tariffs have been eliminated for Hungary on 1/1/97, while Hungary has to do so on 1.1.2001. Hungary does not maintain any quantitative restrictions for EU countries. All EU import quantitative limitations have been eliminated vis-a-vis Hungary on 1.1.98.

The textile and clothing sector in Hungary has been particularly affected by the collapse of former COMECON markets, which resulted in a sharp decline in output and employment. Hungary represents a medium-sized potential market. On the other hand, attracted by relatively low labor costs, FDI has brought about an increase in outward processing trade with the the EU, whereby firms import goods, add value domestically, and then export the goods. As noted earlier, activity in this regard is concentrated in apparel and clothing accessories, where Hungary appears to enjoy a strong revealed comparative advantage (RCA). RCA indicators for women's and men's clothing (of textile fabrics) are among the highest (OECD, 1997). In 1997, Hungary ranked the EU 16th. import and 11th. export market in terms of value.

ROMANIA

Textile production in the first quarter of 1996 represented about 4.8 of Romania's total industrial output, while clothing, furs and leather goods (excluding footwear) about 2.5 with the majority clothing; ex-factory value totaled US$318 m. Textiles and clothing exports during the same period were worth 285 million US$ and imports 193 million US$. The usual articles are shirts, blouses and sportswear. Textile and leather is the best performing Romanian export sector (1/4) of the total. It largely relies on OPT operations with European partners.

Private enterprise has only a relatively small part to play in the primary textile industry, which is still dominated by the former foreign trade companies such as Romwool, Textilcoton and Romanoexport, and by the state-owned man-made fibre manufacturers, spinners and weavers. Investment cost is the main disincentive, even when it comes to the privatization of state companies. The private sector, however, is now well entrenched in the import/export trade and in clothing manufacture, usually for export and often in conjunction with small-scale foreign investments. Nevertheless, even the Ministry of Industry seems to be unable to give any accurate information on private manufacturing.

However, the state-owned sector is beginning to undergo change because of MEBO's (management employee buy-outs), the mass privatization program begun in mid-1995, and shareholding action of the State Ownership Trust Fund (SOFT). MEBO has affected especially the clothing manufacturers, notably those with existing foreign contracts. Shares are regularly traded on the equivalent of the OTC (over the counter) market companies. SOFT has put 32 textile and clothing companies up for sale to strategic investors (i.e. foreign investors) and, assisted by the Austrian Credit-Anstalt, has approached many potential buyers world-wide.

BULGARIA

Bulgarian textiles and garment making based largely on imported wool and cotton and on locally produced silk and manmade fibres. In terms of production decline, this has been one of the branches worst affected by the demise of communism, but this seems to be explained more by depressed consumer demand at home and, in Bulgaria's mind, exports quotas imposed by the West than by any fundamental weakness. However, EC quantitative limits, for instance, are currently not fully used. On the other hand, considerable potential is shown by the subcontracted work certain factories are performing for some very exacting Western firms. Besides more modern branches, Oriental-style carpet making is a traditional Bulgarian industry.

Textiles, clothing and other industrial consumer goods accounted for 14 % of Bulgarian exports in 1994 and exceeded imports, although by a margin that has decreased somewhat in the last couple of years.

RUSSIA

Russian textiles and clothing production is considered an industrial priority by the Russian government. There are approximately 3000 textiles and clothing factories in the Russian Federation, of which only 46 are state-owned. The rest are split almost equally between private ownership and joint ventures. The Russian government thinks it is necessary to restructure the former textile giant production plants into more flexible production units. At present about half of Russian's clothing factories are working at 50% of their capacity, about a quarter are running full stretch, and a further quarter which are under-used, can only survive if they receive foreign investment. According to Russian officials, this economic situation could result in a loss of 50000 jobs if large scale liquidation occurs.

Clothing production has been in decline since 1992. The EU's positive trade balance with Russia in this sector is essentially due to carpets (Belgium), woven clothing (Italy, United Kingdom, Ireland), knitted clothing (Germany, Italy) and woven fabric (Germany).

SLOVENIA

The majority of the Slovenian companies in this industry are SMEs but production is concentrated in a few major companies. Net investments in clothing correspond to disinvestment in the textile subsector, indicating a specialization down-stream of the production chain. *Wage costs are among the highest* in the CEECs (although still lower than in the EU). Foreign Direct Investment is focusing on new technologies and equipment modernization. The textile and clothing industry is already integrated into the European "filičre" especially because of widespread outward processing trade (OPT), which underlies three quarters of total exports of clothing. In 1995, the EU exports in textile subsector was ECU 402.4 million, clothing - ECU 134.7 million.

Source: *Market Access Sectoral and Trade Barriers Database.* European Union Countries Tariff Schedules, Trade Barrier Information, - http://mkaccdb.eu.int/, 16/09/1999

Appendix 10 Interviews

TABLE 10.1 SEIL INDUSTRY IMPACT STUDIES: TEXTILE AND CLOTHING. COMPANIES INTERVIEWED

Companies	Established	Authorized Capital Lt	Annual turnover Lt	Number of employees	Export	Countries	Location	Production
A Grupė JSC Ltd.	1990	2,300,000.00	4,000,000.00	150	100.00%	Sweden-60%, Denmark-10%, Finland-10%, Austria-5%, USA-5%	Jonava	Home textile products
Alytaus Tekstilė JSC	1967	100,212,726.00	205,000,000.00	3600	70.00%	EU-60%, CIS-10%	Alytus	100% cotton and mixed yarn, fabrics for home textile (bedding, curtains), services (spinning, weaving, dyeing, printing, sewing)
Audėjas JSC	1946	22,000.00	50,000.00	300	75.00%	n/a	Vilnius	Jacquard fabrics, plush fabrics, flock for upholstery, tapestry
Audimas JSC	1936	2,057,651.00	15,000,000.00	400	n/a	Sweden-25%, Germany-15%, Denmark-15%, Netherlands-10%, Finland-5%	Kaunas	Sportswear for leisure, sports-team uniforms, other sport garment
Bremunas Textil JSC Ltd.	1996	n/a	n/a	300	100.00%	EU countries	Alytus	Weaving, finishing, knitting of fabrics
Brelytus Textil JSC Ltd. :	1993	n/a	n/a	710	100.00%	EU countries	Alytus	Shirts, knitted undershirts, shorts, pajamas, other production for women and men
Dainava JSC	1957	11,550,000.00	25,000,000.00	1470	95.00%	Germany-80%, Belgium-3%, France-17%	Alytus	Outerwear for women and men.
Danga JSC	1962	1,430,000.00	1,600,000.00	155	90.00%	n/a	Kaunas	Head-coverings, ties, women's blouses, trousers, skirts
Dirbtinis Pluoštas JSC	1965	96,543,400.00	189,000,000.00	1460	75.50%	Italy, South Korea	Kaunas	Acetate yarn
Dobilas JSC Ltd.	1941	1,000,000.00	n/a	700	100.00%	UK-58%, Scandinavia-28%, France-4%, Germany-5%, other countries-5%	Kaunas	Outerwear for women and men
Drobė Wool Company	1920	6,118,524.00	89,423,998.00	2326	93.10%	Western markets-68.5%, Eastern markets-24.6%	Kaunas	Wool and wool-blend fabrics for suits, trousers, jackets, dresses
Edmundas ir Co	1993	12,000.00	44,280,000.00	101	95.00%	Belgium-55%, Netherlands-40%	Kaunas	Working on CMT orders, rendering mediation, transport services
Gija JSC GM:	1940	1,050,000.00	3,000,000.00	280	95.00%	Finland, Sweden, UK, Norway	Kaunas	Pullovers, cardigans, suits, casual knitwear
Kauno Audiniai JSC	1930	24,225.00	36,190,000.00	430	91.00%	Germany-52%, Italy-35%	Kaunas	Fabrics from natural, artificial and synthetic yarns for light garments and home textiles
Kilimai JSC	1956	6,500,000.00	5,700,000.00	160	n/a		Lentvaris	Carpets and carpet products
Liteksas ir Calw AB Lithuanian-German Joint Venture	1927	47,807,489.00	54,051,294.00	812	80.00%		Kaunas	Wool fabrics for coats, suits and jackets. Scarves, plaids and blankets
Rožė JSC	1947	n/a	6,000,000.00	175	85.00%		Vilnius	Fashion garments for women

Companies	Established	Authorized Capital Lt	Annual turnover Lt	Number of employees	Export	Countries	Location	Production
Siūlas JSC	1928	n/a	n/a	500	93.00%	Scandinavian and EU countries, USA	Biržai	Linen yarn, linen fabrics, home textile (bed linen, towels, curtains)
Sparta JSC	1918	15,524,022.00	18,000,000.00	600	97%	Germany, Sweden, Denmark, UK	Vilnius	Sock, underwear, swimwear, slips
Šilkas JSC	1956	34,600,000.00	15,600,000.00	500	70.00%	Germany, Sweden, Italy, USA, Russia	Kaunas	Lining, technical fabrics, plush, velvet
Lietuvos Tekstilės Institutas	1960	5,900,000.00	8,000,000.00	212	9.00%		Kaunas	Special purpose clothing, technical fabrics, applied scientific research work in the fields of textile materials production, testing and analysis
Trikotažas JSC	1935	936,974.00	15,000,000.00	623	75.00%	Germany-5%, Scandinavian Countries-50%	Kaunas	Knitted material, underwear for men and women, outerwear and sportswear for children, men and women
Tulpė JSC	1966	2,500,000.00	3,800,000.00	207	60.00%	USA, Sweden, Germany, Greece, Latvia, Norway	Panevėžys	Home textile and fabrics, knitwear, light sewed clothing
Ukmergės Akcinė Linų Bendrovė JSC	n/a	n/a	n/a	n/a	n/a	n/a	Kaunas/ Ukmergė	Long and short flax fiber
Vernitas JSC	1975	38,840,000.00	58,300,000.00	1260	48.00%	Poland, Czech Republic, Slovakia	Marijam-polė	Polyacrilnitrile yarn for knitwear and textiles industries
Vilniaus aušra JSC	1956	1,141,350.00	3,633,300.00	295	95.00%		Vilnius	Clothes for women and girls
Vilkma JSC	1967	2,082,403.00	12,000,000.00	530	95.00%	Eu countries-95%	Ukmergė	Men's shirts, children's shirts, women blouses
Žemkalnija JSC	1955	3,000,000.00	10,000,000.00	660	95.00%	Germany-60%, Denmark-35%	Vilkaviškis	Ladies' trousers, skirts, blouses
Kaunas Technology University								Educational activities

Source: SEIL interviews, Catalogue of Light Industry Enterprises of Lithuania 2000/2001 Vol.1, Vol. 2

Appendix 11 Community Legislation applicable in the textile sector

COMMUNITY LEGISLATION APPLICABLE IN THE TEXTILE SECTOR:
23 February 1999

This consolidation contains summary of Council and Commission legislation in force at the time of its creation. These laws have been put together according to a thematic order.

List of the Community legislation in force in the textile sector[1]

1. Trade with WTO member countries and countries with bilateral agreements:

a) Trade in products not subject to normal gatt rules ("products not integrated" in WTO):

i) Basic regulation: Council Regulation (EEC) No 3030/93 (OJ No L 275, 8.11.1993, p. 1) - on common rules for imports of certain textile products from third countries.

[as amended by:

- Council Regulation (EC) No 3289/94 (OJ No L 349, 31.12.1994, p. 85) – amends R. 3030/93.
- Commission Regulation (EC) No 1410/96 (OJ No L 181, 20.7.1996, p. 15) - concerning the partial withdrawal of R. 3053/95.
- Commission Regulation (EC) No 2231/96 (OJ No L 307, 28.11.1996, p. 1) - amends Annexes I, II, III, V, VI, VII, VIII, IX and XI to R. 3030/93.
- Council Regulation (EC) No 2315/96 (OJ No L 314, 4.12.1996, p.1) - list products to be integrated into GATT 1994 on 1/1/98 - amends Annex X to R.3030/93 and Annex II to R. 3285/94.
- Commission Regulation (EC) No 447/97 (OJ No L 68, 8.3.1997, p. 16) - quantitative limits - OPT - China.
- Council Regulation (EC) No 824/97 (OJ No L 119, 8.5.1997, p. 1) - amends R. 3030/93.
- Commission Regulation (EC) No 339/98 (OJ No L 45, 16.2.1998, p. 1) - amends Annexes I, II, III, V, VI, VII, VIII and IX to R. 3030/93.
- Commission Regulation (EC) No 856/98 (OJ No L 122, 24.4.1998, p. 11) - amends Annexes I, II, III, V, VII, VIII and IX to R. 3030/93.
- Commission Regulation (EC) No 1053/98 (OJ No L 151, 21.5.1998, p. 10)- amends Annexes II, III and IX to R. 3030/93.
- Commission Regulation (EC) No 2798/98 (OJ No L 353, 29.12.1998, p. 1) - amends Annexe I to R. 3030/93.]

ii) Derogation from basic Regulation:

- Council Regulation (EC) No 1087/97 (OJ L 158, 17.6.1997, p1) - authorizing imports into Canary Islands and certain quota products originating in China without quantitative restrictions.

iii) Regulations granting additional limits for European fairs:

- 1998: Commission Regulation (EC) No 283/98 (OJ No L 28, 4.2.1998, p. 9)
- 1999: Commission Regulation (EC) No 36/1999 (OJ No L 5, 9.1.1999, p. 57)

b) Trade in products subject to normal GATT rules "products integrated" in WTO:

- Council Regulation (EC) No 3285/94 (OJ No L 349, 31.12.1994, p. 53) – repeals R. 518/94.

[As amended by:

- Council Regulation (EC) No 139/96 (OJ No L 21, 27.1.1996, p. 7) - amends R. 3285/94 and R. 519/94 with respect to the uniform Community surveillance document.
- Council Regulation (EC) No 2315/96 (OJ No L 314, 4.12.1996, p.1) - list of products to be integrated into GATT '94 on 1.1.98 and amends Annex X to R. 3030/93 and Annex II to R. 3285/94.]

2. Imports from other countries ("autonomous regime"):

a) Basic Regulation: Council Regulation (EC) No 517/94 (OJ No L 67, 10.3.1994, p. 1) - on common rules for imports of textile products from certain third countries not covered by bilateral agreements, protocols or other arrangements, or by other specific Community import rules.

[As amended by:

- Commission Regulation (EC) No 1470/94 (OJ No L 159, 28.6.1994, p. 14) - opens quantitative import quotas for products (cat. 160) from China and amends Annexes IV and V to R. 517/94.

- Commission Regulation (EC) No 1756/94 (OJ No L 183, 19.7.1994, p. 9) - opens quantitative import quotas (cat. 122, 123, 124, 125 B, 140 and 146 C) from China and amends Annexes IV and V of R. 517/94.
- Commission Regulation (EC) No 2612/94 (OJ No L 279, 28.10.1994, p. 7) - opens quantitative import quotas (cat. 127 B and 145) from China and amends Annexes IV and V to R. 517/94.
- Commission Regulation (EC) No 2980/94 (OJ No L 315, 8.12.1994, p. 2) - opens quantitative import quotas (cat. 146A and 146B) from China and amends Annexes IV and V to R. 517/94.
- Commission Regulation (EC) No 3168/94 (OJ No L 335, 23.12.1994, p. 23) - establishes in the field of application of R.517/94 a Community import licence and amending certain provisions of the Regulation.
- Council Regulation (EC) No 1325/95 (OJ No L 128, 13.6.1995, p. 1) - amends R. 517/94.
- Commission Regulation (EC) No 1627/95: (OJ No L 155, 6.7.1995, p. 8) - amends R. 3168/94, establishes in the field of 517/94 a Community import licence and amends certain provisions of the Regulation.
- Council Regulation (EC) No 538/96 (OJ No L 79, 29.3.1996, p.1) - amends R. 517/94 concerning imports of products - Yugoslavia (Serbia and Montenegro).
- Commission Regulation (EC) No 1476/96 (OJ No L 188, 27.7.1996, p. 4) - opens quotas for imports of products falling within cat. 87 and 109 originating in North Korea and amends Annexes IV and V to R. 517/94.

(corrigendum in OJ No L 225, 6.9.1996, p. 11)

- Commission Regulation (EC) No 1937/96 (OJ No L 255 , 9.10.1996, p. 4) - amends Annexes III B and VI to R. 517/94.
- Commission Regulation (EC) No 1457/97 (OJ No L 199, 26.7.1997, p. 6) – amends annexes IIIB, IV and VI to R. 517/94.]

b) Regulations concerning the import licence:

- Commission Regulation (EC) No 3168/94 (OJ No L 335, 23.12.1994, p. 23) - establishes in the field of application of R. 517/94 a Community import licence and amending certain provisions of the Regulation.

[As amended by:

- Commission Regulation (EC) No 1627/95 (OJ No L 155, 6.7.1995, p. 8) - amends R. 3168/94, establishes in the field of application of R. 517/94 a Community import licence and amends certain provisions of the Regulation.]

c) Regulations concerning the distribution of quotas:

- Commission Regulation (EC) No 2458/97 (OJ No L 340, 11.12.1997, p. 31) – (end 31.12.98) - distribution of quotas for 1998 pursuant to R. 517/94.

d) Imports from Taiwan:

- Council Regulation (EC) No 47/1999 (OJ No L 12, 16.1.1999, p. 1) – arrangements for imports - Taiwan

3. Outward processing traffic (OPT):

a) Basic Regulation: Council Regulation (EC) No 3036/94 (OJ No L 322, 15.12.1994, p. 1) - establishes economic outward processing arrangements to products reimported into the Community after working in certain third countries.

b) Implementing Regulation: Commission Regulation (EC) No 3017/95 (OJ No L 314, 28.12.1995, p. 40) - repeals Commission Regulation (EC) No 1816/95 (OJ No L 175, 27.7.1995, p.21)

Source: Trade in Goods, The textile Sector, Legislation, Reports, Texts;
http://europa.eu.int/comm/trade/goods/textile/legis230299.htm, 29 January 2000

TABLE 11.1 APPLIED TARIFF RATES (AD VALOREM DUTIES) AVERAGES PER HARMONIZED SYSTEM

Country	HS Chapters 50-63 (T&C)	HS Chapters 50-60 (T)	HS Chapters 61-63 (C)
Argentina	20.0%	19.0%	22.0%
Brazil	20.0%	19.0%	23.0%
Canada	11.0%	9.0%	19.0%
Chili	10.0%	10.0%	10.0%
China	25.0%	22.0%	30.0%
Colombia	18.0%	17.0%	20.0%
EU	9.0%	7.4%	11.9%
India	38.0%	37.0%	40.0%
Indonesia	14.0%	11.0%	19.0%
Japan	8.0%	7.0%	11.0%
Korea	10.0%	9.0%	12.0%
Malaysia	17.0%	15.0%	20.0%
Mexico	24.0%	18.0%	35.0%
Pakistan	39.0%	37.0%	45.0%
Philippines	14.0%	11.0%	20.0%
Russia	18.0%	13.0%	27.0%
South Africa	23.0%	20.0%	36.0%
Thailand	25.0%	16.0%	40.0%
US	10.2%	8.9%	11.9%

Source: Trade in Goods, The textile Sector, Legislation, Reports, Texts; http://europa.eu.int/comm/trade/goods/textile/legis230299.htm, 29 January 2000

Appendix 12 Policy Recommendations

Table 11.1 What are the main competitiveness problems in the industry?

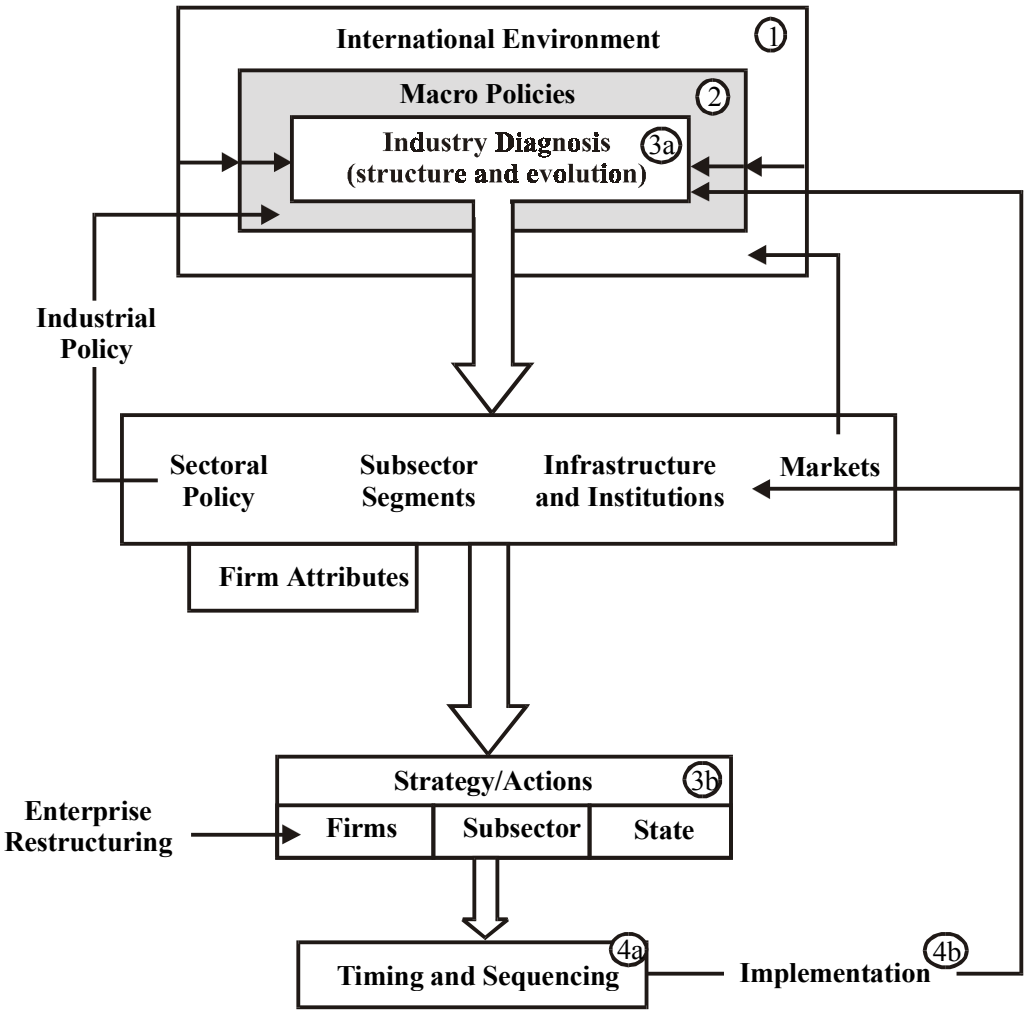
Group A		Vote	Group B		Vote	Group C		Vote	Group D		Vote	Group E		Vote	Group F		Vote
A 4	Lack of professional skills in the market economy	2	B 1	Lack of strategy	4	C 1	Unfavorable business, legal and fiscal systems, many regulating institutions	3	D 1	Quality and efficiency of production	3	E 1	Lack of enterpreneurship	3	F 1	Lack of industrial strategy	1
A 1	Imperfections of legal basis	1	B 3	Insufficient productivity	2	C 2	Unfavorable environment for foreign investments and expensive credits	2	D 2	Lack of investment resources	2	E 2	Technological underdevelopment because of the lack of capital	1	F 2	Lack of systematic market management	1
A 5	International economic policy of the country	1	B 5	Lack of cooperation	2	C 3	Lack of qualified labor force	1	D 3	Short perspective	1	E 3	Limited local demand, lack of international market knowledge	1	F 3	Lack of business culture understanding of the Single Market	1
A 2	Labor costs	0	B 2	Lack of information (market research, marketing)	1	C 4	Lack of information on markets: cooperation possibilities, partners, investment	1	D 4	Shortage of commercial (marketing) skills	0	E 4	We sell our labor force instead of selling our products	1	F 4	Lack of technological innovations and know-how	0
A 3	Education policy	0	B 4	Qualifications	0	C 5	Unfavorable for business government policy	0	D 5	Info gaps on EU integration impact	0	E 5	Shortcomings of macro-environment: unstability, complexity	1	F 5	Lack of marketing skills	0

Table 11.2 What are the solutions?

Group A		Vote	Group B		Vote	Group C		Vote	Group D		Vote	Group E		Vote	Group F		Vote
A 2	Develop new taxation system supporting business development	2	B 1	Prepare development strategy for Lithuanian industry	3	C 4	Information databases(on markets and business conditions)	3	D 3	Strengthen the relationship between science and industry	2	E 3	As part of joining the EU- to negotiate money for technological development	3	F 2	Cooperation with foreign companies	2
A 3	Search for strategic partners and attract them	2	B 3	Attraction of investment	1	C 3	Establishment of qualification system	2	D 2	Change the State's attitude towards business, improve the competence of state officials	1	E 2	Introduce sort of "Nobel" prize for the best entrepreneur	2	F 3	Development of consulting services and finance it	2
A 1	Prepare development strategy for light industry in market economy conditions (deregulation)	1	B 2	Form better conditions of the business environment: suggestions to the Government, influence implementation of those suggestions	0	C 2	Economy as a priority versus politics	1	D 4	Development of managerial competence, promotion of foreign education	1	E 1	Find the best practice production and learn from it	1	F 4	Creation of business representatives institution under the Government	2
A 5	Attract foreign banks to Lithuania	1	B 4	EU support to business culture development	0	C 5	To reduce the state regulation and even abolish it	1	D 5	Create information databases on international business conditions	1	E 4	Prepare information on professional qualifications for our system of education	1	F 1	State and business community-partners	1
A 4	Create an educational system	0	B 5	Investment into information development: state, Association members, EU	0	C 1	Create business-favorable environment-legal, fiscal and investment	0	D 1	Strategy formulation with participation of interested parties	0	E 5	Increase efficiency of capital market	0	F 5	Government institutions together with the Association have to prepare strategy	0

Table 11.3 The main competitiveness problems and solutions

Lack of strategy	4	Unfavorable business, legal and fiscal systems, many regulating institutions	3	Quality and efficiency of production	3	Lack f enterpreneurship	3	Lack of information (market research, marketing)	1	Lack of investment resources	2
Lack of cooperation	2	Shortcomings of macro-environment: unstability, complexity	1	Insufficient productivity	2	Lack of professional skills in the market economy	2	Lack of systematic market management	1	Unfavorable environment for foreign investments and expensive credits	2
Lack of industrial strategy	1	Imperfections of legal basis	1	Lack of qualified labor force	1	Lack of business culture understanding of the Single Market	1	We sell our labor force instead of selling our products	1	Technological underdevelopment because of the lack of capital	1
Short perspective	1	International economic policy of the country	1					Limited local demand, lack of international market knowledge	1		
								Lack of information on markets: cooperation possibilities, partners, investment	1		
Problems	**8**	**Problems**	**6**	**Problems**	**6**	**Problems**	**6**	**Problems**	**5**	**Problems**	**5**
Solutions	**6**	**Solutions**	**8**	**Solutions**	**6**	**Solutions**	**6**	**Solutions**	**6**	**Solutions**	**4**
Prepare development strategy for Lithuanian industry	3	Creation of business representatives institution under the Government	2	As part of joining the the EU-to negotiate money for technological development	3	Establishment of qualification system	2	Information databases(on markets and business conditions)	3	Search for strategic partners and attract them	2
Cooperation with foreign companies	2	Develop new taxation system supporting business development	2	Strengthen the relationship between science and industry	2	Introduce sort of "Nobel" prize for the best entrepreneur	2	Development of consulting services and finance it	2	Attract foreign banks to Lithuania	1
Prepare development strategy for light industry in market economy conditions (deregulation)	1	State and business community-partners	1	Find the best practice production and learn from it	1	Development of managerial competence, promotion of foreign education	1	Create information databases on international business conditions	1	Attraction of investment	1
		To reduce the state regulation and even abolish it	1			Prepare information on professional qualifications for our system of education	1				
		Economy as a priority versus politics	1								
		Change the State's attitude towards business, improve the competence of state officials	1								



Industry Adjustment and Restructuring