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**INDUSTRIAL RESTRUCTURING:  
THE CASE OF THE TEXTILE AND CLOTHING INDUSTRY IN HUNGARY\***

Prepared by the

**Regional and Country Studies Branch**

**Studies and Research Division**

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EXPLANATORY NOTE

In tables:

Three dots (...) indicate that data are not available or are not separately reported;

A dash ( - ) indicates that the amount is nil or negligible;

Totals may not add precisely because of rounding.

PREFACE

The Regional and Country Studies Branch of UNIDO, is undertaking studies on industrial structures and development trends in developed and developing countries. The aim is to provide an insight into the driving forces and pursued policies which are currently governing the processes of industrial development and restructuring. It is expected that these analyses could assist policy-makers in developing countries in their assessment of industrial development prospects and the formulation of policies.

It is in this context that the present study was prepared. It is to examine the industrial restructuring process in one developed countries - Hungary - in respect of one particular industrial subsector - the textile and clothing industry. The main purpose of the present study is to analyze past changes and future trends in the textile and clothing industry in Hungary and to describe the modalities used for its restructuring. It starts with an overview of the present situation in the sector and its role in supplying domestic needs in an international perspective emphasizing specific features of the country's economic development. The major part of the study is devoted to the analysis of current efforts to create the necessary economic conditions to induce industrial restructuring, which includes changes in such mutually reinforcing components as investment policy, technological development, employment, institutional structure, etc. The study also shows a position of the Hungarian textile and clothing industry in internal and external markets with special reference to the prospects of co-operation with developing countries.

The study is based on findings of Ms. Eva Szita, Institute for World Economics of the Hungarian Academy of Sciences, Budapest, UNIDO consultant.

## SUMMARY AND CONCLUSIONS

Hungarian industry currently generates 37.8 per cent of the country's net material product. The share of textile and clothing industry in gross industrial output makes up 5.8 per cent (4.3 - textile and 1.5 - clothing). Labour force employed by the sector accounts for 11.8 per cent (7.3 - textile, 4.5 - clothing) of the total industrial employment.<sup>1/</sup> The situation in the Hungarian textile and clothing industry differs from that in the OECD member-countries with the same level of development. While the output of the textile and clothing industry in these countries is declining, in Hungary it is experiencing some growth and the relative regression of the sector is slower. This phenomenon can be accounted for by the facts that:

- the domestic market is more protected; industry is thus given support for satisfying internal demand;
- the sector is able to supply textiles and clothing to other CMEA countries, especially the USSR;
- textile and clothing exports are assigned a major role as foreign exchange earner.

Nevertheless - as in other countries - the growth of textile and clothing industry in Hungary is much slower than that of the industry as a whole. Relative importance of the sector is diminishing in production, employment, domestic and foreign trade. The growth of demand for textiles and clothing in Hungary is slow. Its export to the OECD member-countries is adversely influenced by low dynamism of world demand, keener competition and the barriers set up by their trade policies. The previous - albeit moderate - comparative advantages of the Hungarian textile and clothing industry have diminished in recent years. Hungary processes mainly imported raw materials and semi-finished goods. At the end of the 1960s and the beginning of the 1970s the combination of relatively low wages and a medium level of technology still ensured advantages to the textile and clothing industry on the world market. But after a rapid technological growth and forceful specialization, Western countries acquired considerable advantages. While co-operation with CMEA countries in production and trade of textiles and clothing continues, it is also of importance for Hungary to expand its exports to the OECD member-countries. This would however require significant efforts to identify suitable market segment and increase competitiveness.

Owing to the specific features of the Hungarian economic system, blending market and plan elements, the textile and clothing industry is shielded off from and thus not radically affected by the changes in the world market. Nevertheless there is a need for structural adjustment. Hungarian economic strategy for the 1980s envisages that the internal structure of textile and clothing industry should be transformed in an orderly and planned way and streamlined, obsolete equipment and technology replaced and modernized, competitiveness considerably improved.

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<sup>1/</sup> Calculations on Statisztikai Evkönyvek (Statistical Yearbooks), Central Office of Statistics, Budapest.

Considering the competitive situation with developing countries, it should be noted that in some of them high technology is combined with lower wages than in Hungary. Low wage countries, however, tend to produce less sophisticated products. Hungary's aim is therefore to specialize and to expand a medium- high level product range with higher value added and higher degree of processing for export. The benefits to developing countries from exports to Hungary as well as to other European CMEA countries include the protection of their exports from the effect of shrinking Western markets. Imports from developing countries to Hungary would mitigate shortage of manpower, satisfy the requirements of restructuring process in the textile and clothing industry and substitute imports from the OECD member-countries. In addition, closer co-operation with developing countries would create favourable conditions for the expansion of Hungarian industrial - other than textile - exports with higher technological contents.



## I. THE TEXTILE AND CLOTHING INDUSTRIES IN HUNGARY: STRUCTURE AND TRENDS

### 1.1 The place of textiles and clothing within Hungarian industry in an international perspective

Large-scale industrialization began in Hungary at the end of the last century, with emphasis on heavy industry (metallurgy, engineering, chemical industry). The Hungarian textile industry covered approximately 14 per cent of domestic consumption. It was primarily a supplier of raw materials to mills in Bohemia and Austria whereas finished products were imported.<sup>1/</sup> Before World War I, Austria's textile industry was ten times bigger than Hungary's. Between the world wars emphasis was put on the light industry as a part of a protectionist industrial policy. The textile became the most rapidly growing sector for that period, attracting one third of investments in Hungarian manufacturing industry. In 1938 textiles and clothing accounted for 20 per cent of industrial output<sup>2/</sup> and fully satisfied domestic needs.<sup>3/</sup> An intensive industrialization phase occurred in Hungary in the course of the past forty years. Heavy industry was given a dominant position. Thus, the bulk of the total industrial investment (80-90 per cent) went to that sector in the period 1950-65.<sup>4/</sup> Consequently, such traditional industries as the textile, clothing and food processing rapidly lost their position. The share of the total industrial production of textiles and clothing diminished from 22.4 per cent in 1950 to 10.9 per cent in 1965.<sup>5/</sup>

These changes occurred not only in Hungary. Indeed, the share of textiles and clothing continually decreased in all countries of Western Europe. The macro-structure of Hungarian industry thus followed the pattern of equally or more developed countries. In 1964 the weight of textiles and clothing within the manufacturing industries of the OECD countries was between 10 and 14 per cent, by the end of the 1970s it had fallen to 5 - 10 per cent. It remained high only in Italy (16 per cent) and in Spain (15 per cent) and rose in Greece from 21 to 26 per cent.<sup>6/</sup>

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1/ Berend, T.I. - Ránki, Gy, A magyar gazdaság száz éve (One hundred year for the Hungarian economy), Kossuth Könyvkiadó (Kossuth Publishing House), Közgazdasági és Jogi Könyvkiadó (Publishing House of Economics and Law), Budapest, 1972, page 61.

2/ Including leather and shoes industries. Central Office of Statistics, Statisztikai Evkönyv-ek (Statistical Yearbooks), Budapest.

3/ Berend, T.I. - Ránki, Gy, A magyar gazdaság száz éve (One hundred year for the Hungarian economy), Kossuth Könyvkiadó (Kossuth Publishing House), Közgazdasági és Jogi Könyvkiadó (Publishing House of Economics and Law), Budapest. 1972, page 165.

4/ Ibid, p. 180.

5/ Central Office of Statistics, Statisztikai Evkönyv-ek (Statistical Yearbooks), Budapest.

6/ Ibid and Main Economic Indicators, OECD, Paris, several years; UN Yearbook of Industrial Statistics, New York, several years.

Table 1. The share of textiles and clothing in total industrial output of the CMEA countries, 1960-84  
(per cent)

Country	1960	1976	1984
Hungary	10.9	8.2	6.0
Bulgaria	18.7	14.0	7.6
Czechoslovakia	8.6	7.3	6.5
GDR	11.3	8.8	7.2
Poland	12.8	8.5	7.2
Romania	13.1	11.4	10.3
Soviet Union	19.5	14.7	12.9

Source: CMEA Statistical Yearbooks, Moscow.

Table 1 indicates that textiles and clothing are not among the dynamically growing sectors in the European CMEA member-countries. Between 1960 and 1983 the relative decline of clothing and textiles was faster in Hungary than on the average in other CMEA member-countries (except Bulgaria). A fundamental difference between the OECD countries and Hungary is nevertheless conspicuous. In the OECD countries the loss of weight of textiles and clothing to the benefit of other more dynamic sectors was also accompanied by a drop in their production in absolute figures. It was due to the fact, that in the course of the readjustments in the 1970s the location of some production capacities was shifted and important new suppliers appeared in their domestic markets. In Hungary, because of slower specialization in other fields, low finished products imports and unsaturated markets, the output of the sector on the average has been growing, whereas its relative weight in total industrial output has diminished. The trends in the dynamics of production in various regions of the world is shown by Table 2.

Although its share in total production decreased to a similar extent as in the most industrialized countries Hungarian textiles and clothing did not undergo the same far reaching restructuring. In the OECD countries new products and industrial processes were intensively developed in the 1970s. The new products were of higher quality, and did not only rapidly followed changing fashion, but also dictated new trends. In certain product groups striking increase in productivity was achieved in the OECD countries by the introduction of automation and/or processes based on microelectronics. At the same time a strong decline occurred in other part of the textile and clothing industry, such as in simple mass production. As a whole, however, the efficiency of the entire sector increased sharply. As a result exports and imports of different categories of finished products increased rapidly. In Hungary the emphasis during the same period was put on the quantitative growth of production. The still unsaturated domestic market did not induce major changes as of the product pattern or development of new technologies. In addition, demand in CMEA member-countries influenced the product quality of the Hungarian textile and clothing industry.

Table 2. Changes in production of textiles and clothing in selected regions, countries and Hungary, 1963-84  
(per cent)

	1963-73	1973-83	1981	1982	1983
<u>Textiles</u>					
World Total	5.0	...	-1.5	-2.5	...
OECD countries	4.5	-1.0	-3.0	-5.0	2.5
of which					
EEC	2.0	-1.5	-4.5	-3.5	-2.5
USA	4.5	0	-2.0	-8.5	13.0
Japan	7.5	-1.5	-2.0	-2.0	0
Developing countries	4.5	...	...	0.5	...
CMEA countries	6.0	2.5	0.5	-1.5	0.5
Hungary	3.8	1.2	2.1	-2.8	0.8
<u>Clothing</u>					
World total	4.0	...	-0.5	-2.0	...
OECD countries	2.0	-1.0	-5.0	-5.0	1.5
of which					
EEC	1.5	-2.0	-7.0	-3.0	-2.5
USA	2.5	0	-5.0	-9.5	(9.0)
Japan	7.5	-1.5	-2.0	3.0	-3.0
Developing countries <u>a/</u>	5.5	...	8.5	3.0	...
CMEA countries <u>a/</u>	7.0	4.0	2.5	0.5	0.5
Hungary	5.9	1.1	3.7	-2.6	-4.8

Source: UN Monthly Bulletin of Statistics; OECD, Indicators of Industrial Activity; national statistics; Collection of Industrial Data 1972; Yearbook of Industrial Statistics 1985; Main National Economic Processes 1980-83, Central Office of Statistics, Budapest, 1984; Statistical Yearbook, Budapest, 1985.

a/ Including the leather and shoe industries.

Modernization in the textile and clothing industry was taken in Hungary simultaneously in almost all other industrial sectors in the 1970s. This restructuring aimed at increasing the growth of production and the renovation of products and process technology. It led, however, not to the same fundamental change as in Western countries, in terms of phasing out some production lines. As a result Hungary, gradually fell behind these countries in the competitiveness of production of textiles and clothing with the exception of some few product groups.

## 1.2 Domestic consumption and its impact on production trends

In countries, which have reached an advanced stage of development, the consumption of textiles and clothing usually grows more slowly than total consumption. This is true in Hungary as well, although in recent decades this trend was not as steady as in many other countries of similar level of development. For instance, in the first half of the 1960s the volume of clothing consumption grew much slower than total consumption (1.2 per cent against 5 per cent), then in the second half of the decade growth was equal (5.4 per cent and 5.3 per cent respectively), whereas in the 1970s it fell considerably behind the growth in total consumption (2.1 per cent against 3.9 per cent). In 1980-1984 annual clothing consumption fell by 0.1 per cent annually as compared to 1.6 per cent growth in total consumption.<sup>1/</sup> Fifteen per cent of the total consumer expenditure in Hungary was in 1938 spent on clothing, in 1950 - 13.7 per cent, in 1970 - 11.7 per cent, and in 1984 - as small as 8.4 per cent.<sup>2/</sup> It should be noted that about half of the finished goods produced by Hungarian textile and clothing industry is intended for internal consumption and the other half is exported.

The share of clothing and textiles in the total consumption in the OECD countries and Hungary is shown in Table 3. While in the 1960s consumption of clothing and textiles in Hungary exceeded that of the OECD countries, it gradually declined to their level in the 1980s. In fact, if compared to the level of economic development, the share of clothing consumption per capita fell in Hungary relatively rapidly. This can be explained by several factors. The price structure in Hungary differed considerably from the structure in the West until the end of the 1970s. The Hungarian price structure was distorted as a consequence of policy considerations, classifying, for example, clothing as a low priority industry. Private and public services as well as food were cheap, and the prices for industrial goods were high. At the beginning of the 1960s clothing consumption therefore grew only half as fast as total consumption. The market did not become saturated because of artificially high prices. In the 1970s the price of clothing in Hungary grew faster than the average price of industrial products (Table 4). In the first half of the 1980s price rises for other industrial products have become more frequent and sometimes more significant than for clothing. Changes in the consumer prices are determined by the requirements of economic policy to balance supply and demand. This process was also affect

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1/ Central Office of Statistics: "Főbb népgazdasági folyamatok, 1980-1983" (Main National Economic Processes, 1980-1983), Budapest, 1984. And Central Office of Statistics: "Statisztikai Evkönyv"-ek (Statistical Yearbooks), Budapest.

2/ Central Office of Statistics: A lakossági fogyasztás nemzetközi adatai (International Data on Consumption of the Population), Budapest, 1980.  
Central Office of Statistics: A lakosság jövedelme és fogyasztása 1960-1979 (The Income and Consumption of the Population 1960-1979), Budapest, 1980.  
Central Office of Statistics: Főbb népgazdasági folyamatok, 1980-1983 (Main National Economic Processes, 1980-1983), Budapest, 1984.  
Central Office of Statistics: Statisztikai Evkönyv"-ek (Statistical Yearbooks), Budapest.

by the need to ensure correspondence between consumer prices and production costs. Another reason for the relative decline of clothing consumption in Hungary is growing demand for durable consumer goods since early 1970s connected with the rise in living standards. In addition, the problem of improving Hungarian convertible currency balance of payment has become a priority since early 1980s. During balance of payment stringency various mechanisms were activated to control the situation. Since the introduction of the new price system in 1980, a firm's prices and profitability on the domestic market are tied directly to its convertible currency export performance diverting to some extent attention from the domestic market. These factors resulted in the faster decline of clothing in total consumption than in most countries of Western Europe.

Table 3. Consumers expenditure on clothing (including shoe industry) as a percentage of total private consumption in the OECD countries and Hungary, 1960-1981  
(percentage)

	1960-1961	1969-1970	1978-1979	1980	1981
	average	average	average		
Canada	9.1	8.5	9.3	9.2	9.4
USA	9.1	8.1	8.4	7.9	8.2
Japan	9.1	7.7	7.5	7.2	6.9
Australia	10.4	9.4	7.3	7.5	7.5
Austria	11.6	13.2	12.2	12.7	-
Belgium	7.3	7.0	6.6	6.6	6.6
Denmark	8.1	8.8	6.4	6.4	6.6
Finland	9.0	7.4	5.1	5.4	5.2
France	8.8	8.7	6.8	6.7	6.8
Federal Republic of Germany	10.5	10.4	9.3	9.0	8.8
Greece	10.7	12.2	10.2	10.9	10.4
Ireland	8.9	10.3	8.2	-	-
Italy	9.7	9.6	9.1	9.5	8.9
Holland	-	10.9	8.6	-	-
Norway	10.6	10.2	8.6	8.6	8.5
Spain	-	10.6	9.0	8.5	-
Sweden	8.0	7.3	8.7	9.1	9.3
Switzerland	8.3	6.7	5.0	5.1	5.2
Great Britain	8.1	8.2	8.7	8.9	-
Hungary	12.0	11.5	9.2	8.9	8.9

Source: Comptes Nationaux, Textile Industry in OECD countries 1981, OECD, Paris, 1984; The Income and consumption of the Population 1960-1979, Central Office of Statistics, Budapest, for the year concerned; Main National Economic Processes 1980-1983, Central Office of Statistics, Budapest, 1984.

Table 4. Consumer price index of clothing in Hungary and its growth rates, 1970-1984 (1976 = 100)

	1970	1976	1977	1978	1979	1980	1981	1982	1983	1984
<u>Indices</u>										
Clothing	82.1	100.0	104.5	109.8	119.6	125.6	133.2	140.5	149.3	165.8
Total industrial products	83.1	100.0	103.9	108.7	118.4	129.2	135.1	144.4	154.9	167.8
<u>Growth rates</u>										
Clothing	2.3	5.2	4.5	5.0	9.0	5.0	6.0	5.5	6.3	11.0
Total industrial products	1.3	5.0	3.9	4.6	8.9	9.1	4.6	6.9	7.3	8.3

Source: Hungary Country Economic Memorandum 1985, World Bank, 1986.

### 1.3 Changing pattern of production

The share of the principal sub-branches in the textile industry and the output of some important products in 1984 are shown in Tables 5 and 6. The output of textiles rose between 1981 and 1985 by a total of 5.5 per cent at fix prices, while the output of clothing stagnated. In textiles flax, hemp, wool knitting were more dynamic, whereas the importance of the - 100 per cent import based - cotton industry fell. At the beginning of the 1980s the product pattern adjusted better to changes in fashion than in the 1970s. In fabric production the share of wovens fell, and the share of crocheted fabrics and non-woven products rose.

Table 5. The share of the principal sub-branches in the total production of the textile industry in 1984 (per cent)

Cotton industry	36
Wool industry	21
Flax and hemp industry	11
Silk industry	5.4
Haberdashery industry	7.4
Knitting industry	19.2

Source: Yearbook of Industrial Statistics, Budapest, 1985.

Table 6. The output of some important products of the textile industry, 1984

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Cotton yarn	63,400 tons
Cotton fabrics	303 million sq.m.
Flax and hemp fabrics	39 million sq.m.
Wollen fabrics	39 million sq.m.
Silk fabrics	47 million sq.m.
Knitted under and outer wear	12,400 tons

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Source: Ministry of Industry.

The use of raw materials followed international trends. The share of natural fibres dropped from 54.4 per cent to 53 per cent. The share of man-made fibres rose up to 47 per cent in 1984, while in the West European countries it fluctuated between 60 and 70 per cent. Within man-made fibres, the share of synthetics rose from 30.8 per cent in 1980 to 34 per cent in 1984. In the years to come the use of man-made fibres and filaments - including synthetic - will increase in Hungary only to a small extent, because demand for clothing made of natural materials is increasing on the both Hungarian market and traditional external markets. Man-made fibres will be used in the future to a greater extent in the manufacture of textiles for technical use.

It is likely that in cotton processing one quarter of the basic materials used will be man-made fibres. Instead of the traditional rayon used today, industry will increasingly require synthetic staple fibres and new synthetic fibres, as well as materials with improved properties for special purposes (e.g. high-strength, high-stretch, non-flammable, etc.). As regards cotton fabrics, their average width as well as the share of fabrics of a fine finish will increase. There would be high demand for some special products (poplin, batiste, velvet, impermeable, etc.). These are so far often in short supply due to the backwardness of manufacturing technology.

In the wool industry the use of natural wool is relatively low, in line with international standards and its share is slowly diminishing. In the coming years, however, it is expected that the share of wool and of synthetics will rise and the share of rayon will be reduced.

In the silk industry the use of traditional rayon yarns is gradually diminishing, while synthetics and to a smaller extent cotton and cotton-type yarns are gaining ground.

In knitting the use of cotton and cotton-type yarns has increased. The level of the use of wool and wool-type yarns has remained largely unchanged, and the quantity of products made of rayon has dropped to a minimum. In future, the use of cotton and cotton-type yarns will grow moderately in the knitting industry, with a higher demand for blended yarns. The use of wool and wool-type yarns will also grow to a small extent. The emphasis will be put on increasing the percentage of wool in blended fabrics. With the exception of the stocking and panty-hose product group, synthetic yarns are losing importance. There is a growing emphasis, though, on specially processed precious fibres with properties similar to those of natural fibres.

In the clothing industry the share of outerwear increases at the expense of underwear. In the knitting industry the share of fashionable sports and leisure goods is growing, but the output of a number of old-fashioned products is not diminishing.

The transformation of the production structure is promoted by technological progress and by increased adjustment to the market demand. Structural changes are, however, hampered by the fact that part of investments are directed only at keeping up production and by the large fluctuations of manpower and the resulting deterioration of professional skills. The modernization of the production structure is also slowed down by the fact that domestic trade relies overwhelmingly on the domestic industry which therefore is forced to produce a wide range of products. The necessity to increase the quantity of exports ties down almost all capacities and makes it difficult to phase out or replace the production of non-profitable products.

#### 1.4 Investment policy and technological development

The greater part of the present fixed assets of the Hungarian textile and clothing industries was installed in the 1970s. During the 1950s and 1960s investment was limited and so was technological development of the sector. The existing stock of machinery was used to full capacity and female labour was largely employed. In the course of the 1960s equipment became increasingly obsolete, and depreciation was set at such a low rate that not even replacement for natural wear and tear could not be ensured. The technical standard and efficiency of the sector fell far behind the international level.<sup>1/</sup>

As a result of a comprehensive programme of the rehabilitation of the textile, clothing and related industries during 1971-1980 at a cost of 36 billion forints (about US\$900 million) launched at the beginning of the 1970s, fixed assets in the sector in 1970-75 rose by 40 per cent, and by 60 per cent in 1975-80. In the light industries (approximately 62-63 per cent of which are made up by the textile, clothing, leather and shoe sectors) the ratio of investments over a longer period has been as follows: construction 29 per cent, domestic machinery 15 per cent, machinery imported from the CMEA countries 11 per cent, machinery imported from the Western countries - 35 per cent, and other investments - 10 per cent.

Restructuring has led to a significant progress in several branches. It included, inter alia, the following:

- new methods of processing cotton of lower quality were successfully worked out;
- new spindleless spinnerheads were introduced, without replacing spinning machines;
- share of automatic and shuttleless looms in 1982 reached 81 per cent;

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1/ Central Office of Statistics: A ruházati ipari rekonstrukció első szakaszának eredményei, (Results of the First Stage of the Reconstruction of the Clothing Industry), Budapest, 1977.

Fodor, L.: Lépéskényszerben a magyar ipar, (Hungarian Industry Forced to Move), Kossuth Kiadó (Kossuth Publishing House), Budapest, 1982.



- one third of the knitting machines was mechanically operated in 1982, one third mechanically controlled, and one third programmable;
- the mechanization of finishing reached approximately 60 per cent of the West European level;
- the technical standard of machinery in the clothing industry progressed most vigorously; 72 per cent of decating machines, 88 per cent of bonding (laminating) machines and 44 per cent of sewing machines were automated;
- the reprocessing of waste from the opening, cleaning and carding machines and in the knitting industry was extended;
- the specific use of energy, chemicals and other materials dropped with respect to both conventional and the new technologies.

The machinery commissioned in the course of reconstruction (1971-80) made up 65 per cent of the total, but since then the rate of investment has slowed down. In 1982 the share of machines younger than two years was 5.6 per cent, and machines older than 17 years 15.3 per cent. The situation is less favourable than the average in cotton, flax and silk industries, and better in the knitting, haberdashery and wool subsectors. The share of textile industry in the stock of fixed assets of industry in 1982 was 4.7 per cent, for the clothing industry 0.7 per cent with 73 per cent of the total machinery commissioned between 1971 and 1980, and only 12 per cent in 1981 and 1982.<sup>1/</sup>

Restructuring has not been fully successful. An adequate technological environment was not always provided for modern imported equipment. The manufacture of fabrics was unable to keep pace with the capacities of the clothing industry, in terms of quantity and quality. Some of the new machines obtained in the course of the rehabilitation were not of the highest standard. The level of technology was quite unequal in the different stages of production. Some technical disproportions appeared together with new investments. Thus, for instance, there was little attention paid to auxiliary or finishing activity, which reduced the efficiency of the entire investment programme.

As modernization of the basic production capacities and technologies was not a lasting and regular process, the technological level of Hungarian firms continued to be rather uneven combining almost entirely outdated with the latest technologies. One of the reasons hampering the effectiveness of modernization was the lack of domestic equipment. The reconstruction was based mainly on imported machinery. The efficiency of modern and automated technological processes was to some extent adversely affected by uneven delivery of imported and domestic materials, auxiliary materials and accessories and by the low degree of mechanization of such subsequent phases of production as for example, transport and wholesaling. The losses caused by obsolete technology and low profitability were more clearly revealed by the present system of economic management. However, neither the effect of low profitability nor the pressure of the world market are strong enough to ensure the rapid elimination of obsolete technologies. Consequently it is necessary to reckon with the coexistence of modern and outdated technologies for a

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1/ Central Office of Statistics: Iparstatisztikai Evkönyv-ek (Yearbooks for Industrial Statistics), 1977-1985, Budapest.

Central Office of Statistics: Statisztikai Evkönyv-ek (Statistical Yearbooks), Budapest.

longer period of time. The country's economic situation obliges the Hungarian producers to keep up supplies to the domestic market and to increase exports.

By the end of the period of large investments the external conditions had deteriorated, and the hope to improve international competitiveness could not be entirely fulfilled. World market prices for raw materials rose, opportunities for importing raw materials from the CMEA countries on more favourable terms were narrowed down, there were depressed prices on the market of finished products and the prices of new equipment rose considerably. Competition became keener not only with the OECD countries, where the dynamically succeeding firms managed to overcome the difficulties, but also with the rapidly developing Southern European and Far Eastern countries, and with other CMEA countries.

The problem was aggravated by decreasing investment opportunities in general and for the textile and clothing industry in particular. The market which had increased until the end of the 1970s shrunk considerably. Whereas investments into the textile and clothing industry in 1970-75 made up 6.4 per cent of the total industrial investment, their share was only 4.5 per cent in 1975-80 and 3.3 per cent in 1980-83.<sup>1/</sup> Between 1981 and 1985 the volume of investments was 40 per cent lower than in the preceding five years.<sup>2/</sup> At the same time, investments aiming at increasing the volume were replaced first by investments improving the quality of the product and raising its value, and second by investments increasing productivity and substituting manual labour. Investments in the textile industry were concentrated mainly in the finishing sector and in the clothing industry ready-made clothing and knitwear production was modernized.

### 1.5 New trends in employment

In the period 1950-1970 there was a flow of manpower from agriculture to industry in the Hungarian economy. At the beginning of the 1980s the flow occurred from industry to the service sector. Between 1980 and 1985 the number employed in industry fell by 11 per cent. An above average drop in manpower occurred primarily in metallurgy and in the light industries.

In 1975, there were 136,000 workers employed by the Hungarian textile industry; in 1985 - only approximately 100,000. In the clothing industry the decline of manpower was slower, and during the same period of time the number of workers dropped from 81,000 to 65,000.<sup>3/</sup> Women accounted for the greatest part of the fall and it has become more and more difficult to operate night shifts. This decline was not accompanied by adequate technological development which might have counterbalanced it. In the industrialized market economy countries the reduction in manpower is part of the far-reaching

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1/ Kádár, B. "Iparfejlődésünk a világgazdasági változások fényében" (The Development of the Hungarian Industry in the Light of the Changes in the World Economy), Világgazdasági Kutató Intézet (Institute for World Economies), Budapest, 1985.

2/ Central Office of Statistics: Statisztikai Evkönyv-ek (Statistical Yearbooks), Budapest, interviews with officials.

3/ Ibid.

mechanization, which leads to a rise in productivity. In Hungary, in the majority of factories, including all the textile and clothing industries, the share of production in the total industrial output was not accompanied by corresponding relative decline of manpower employed (see Table 6).

Table 7. Share of the textile and clothing industries in the total industrial output and in industrial employment, 1965-84  
(per cent)

		1965	1970	1975	1983	1984
Textiles	Output	8.2	6.4	6.3	4.2	4.3
	Employment	9.4	8.5	7.8	7.3	7.3
Clothing	Output	2.5	2.3	2.2	1.5	1.5
	Employment	3.7	4.3	4.7	4.6	4.5

Source: Statistical Yearbooks, Central Office of Statistics, Budapest.

While investments in the OECD countries did not aim to expand capacities, but to increase productivity, in Hungary the programme of restructuring and modernization of the textile industry in the 1970s was designed also for the expansion of capacities in addition to raising productivity. But as soon as that programme was completed investments in the textile industry dropped considerably. As a result of changes in the product structure decreasing the number of products manufactured by the textile industry and higher quality requirements in the clothing industry, labour productivity has increased in both branches.

It was anticipated that there would be more manpower even in the period of reconstruction than in the 1970s. Today, one of the obstacles to a smooth operation of the textile industry is a shortage of manpower. In addition, the level of profitability of the industry offers small scope to a rise in wages. The dynamically growing sectors attract manpower, especially to industrial areas. The manpower problem was to some extent eased in the 1970s by the relocation of some production processes and plants within Hungary. At the same time, this dispersion of production caused internal organizational problems in the large centralized companies.

So far training has not kept up with the requirements of high-tech equipment. Furthermore, the rehabilitation programme in the textile industry has not concentrated on saving manpower. It should be a decisive objective in the future. The number of workers engaged only in production processes accounts for 30-80 per cent (depending on branches) more than in the OECD countries. In the auxiliary jobs (preparation of materials, packing, transport, administration) the number of workers are sometimes three or four times higher than the optimum.

Since modernization requires substantial investments, attempts are sometimes made to expand production or at least to keep it at the same level by preserving or increasing manpower, thereby delaying the modernization of production.

### 1.6 Concentration and institutional structure of firms

Organization of firms and related matters influence the flexibility of industry and its ability to adjust. By international comparison, the Hungarian textile and clothing industry is highly centralized and concentrated. In 1983, among the forty-two state-owned firms in the textile industry twenty-three employed 1,000 - 5,000, four - over 5,000, and only fifteen - under 1,000 workers. The concentration is even more evident by the fact that 64 per cent of workers were engaged in production processes in the largest firms, 29 per cent - in large firms and only 7 per cent - in firms employing fewer than a thousand employees<sup>1/</sup> (Table 7).

Table 8. Number of firms, and employment per firm and per plant respectively in 1983

	<u>Number of firms</u>		<u>State-owned firms</u>		<u>Cooperatives</u>	
	<u>State-owned</u>	<u>cooperative</u>	<u>Number of persons employed per firm</u>	<u>per plant</u>	<u>Number of persons employed per cooperative</u>	<u>per plant</u>
Textile industry	42	12	2,480	451	270	79
Clothing industry	25	95	1,505	174	342	48

Source: Yearbook of Industrial Statistics 1983, Central Office of Statistics, Budapest, 1984.

In addition to the state-owned firms there are twelve much smaller cooperative textile producing facilities. The average number of workers employed by the state-owned textile firms was 2,480, by the cooperatives - 270. Large firms were either established after the nationalization of industry or during the mergers in the 1960s and 1970s. It was believed that the greater the centralization of management and concentration of capital was, the more efficient would the production be. The figures show that a medium or larger company has an average of 5-6 plants, operating on the principle of vertical centralization, i.e. by successive work phases.

In some cases, owing to the concentration of the means of production or the greater bargaining power, the merged large firms enjoy some advantages. However, the experience of recent years has shown that there is great strength

1/ Central Office of Statistics: "Iparstatisztikai Evkönyv"-ek (Yearbooks for Industrial Statistics), 1977-1984, Budapest.

especially in flexibility in the autonomy of the smaller units of production, particularly if they have not closely linked with the parent firm. Consequently, a gradual reduction of centralization and concentration is needed for Hungarian textile and clothing industry with the aim to increase the autonomy of firms and to promote the establishment of viable smaller and medium size units, on the basis of higher degree of specialization.

By international comparison, the concentration is high in the clothing industry, where only 25 out of 120 firms are state-owned and 95 are cooperatives. The contribution of cooperatives to the total industrial production in Hungary is about 6-7 per cent. It is approximately the same for textiles, while more than 40 per cent of the output of the clothing industry is produced by cooperatives. 56 per cent of the state-owned firms in clothing employ fewer than a thousand employees.

Previously there were only few small firms in the clothing industry. It was only in recent years that small producers and merchants have appeared. They are able to adjust flexibly to demand and their overheads are low. The experience in Hungary is the same as in many West European countries, i.e. that a network of flexible small companies does by no means result in lower productivity than a system of large companies. Such small workshops were, for instance, established in farming cooperatives as auxiliary activities.

In recent years the management system of the Hungarian economy has experimented with many other forms of entrepreneurship, and these experiments are under way at present. These include for instance, working teams, small private companies, etc. In Hungary the textiles and clothing firms were the first to call on the organizational experience of the more advanced Western countries. The application of know-how and of modern organizational methods led to the reduction in administrative staff together with improvement of its efficiency and finally to a rise in profitability.

Until recently the producers had hardly any direct contacts with their suppliers and markets. Such contacts were looked after by the large wholesaler and foreign trade companies. In the case of mass production this was useful, and it can be considered feasible even today. However, it is doubtless that this practice tends to isolate producers from the market. The increasing emphasis on the role of the market brought about the building up of direct contacts with the both domestic and external markets in such forms as: competing wholesale companies or retail chains and possibilities for the manufacturers to sell directly on the Hungarian market through their own shops and in certain cases also to directly export or import. This trend has assorted itself mainly with respect to apparel. The idea of direct contacts between firms has also turned up within cooperation between the CMEA countries.

#### 1.7 Structural changes and efficiency

The structural transformation of Hungarian industry broadly follows the trends prevailing in the industrialized market economy countries. However, sectors as heavy chemicals, iron and steel, automotive industries, which have been expanding at a lower than average rate in the world, considerably exceed the world average and especially that of the OECD countries. It is a peculiar feature of the Hungarian industrial structure that the natural resource-intensive sectors account for more than 50 per cent, and in the past two decades their share has even grown, so that until the beginning of the 1980s the material-intensity of the Hungarian industry showed an increasing trend.

The Hungarian textile and clothing industry currently processes mostly (approximately two-thirds) imported raw materials and operates a machinery and equipment of medium technological level and it therefore has little comparative advantage on international markets.

The changes, which occurred in the world economy in the 1970s including the rise in energy and raw material prices induced in Hungary and all over the world an increasing pace of restructuring, phasing out non-profitable economic activities and upgrading technologies. Industries which do not rely on a secure and cheap domestic raw material basis and/or do not operate with up-to-date equipment have lost their dynamics. It is largely due to these factors that the Hungarian textile and clothing industry productivity has grown slower than the industrial sector average. On the basis of constant 1975 prices, gross output per worker in 1975-84 rose by 44.2 per cent. Corresponding figure for the textile industry was 38.5 per cent and for the clothing industry - 30 per cent.<sup>1/</sup> Per capita value added in the Hungarian textile and clothing industry is the lowest within the whole manufacturing sector and lower than in the West European countries.<sup>2/</sup>

The Hungarian price system, which currently only starts adjusting to world market prices, makes it difficult to measure precisely the efficiency of different sectors particularly in the textile and clothing industry for which relatively high prices prevail on the domestic market. However, profitability of the textile industry is low, and that of the clothing industry is only slightly higher. Within textiles the profitability of cotton, wool and silk is lower than the average and higher for haberdashery and knitting.<sup>3/</sup> For a long time considerable differences existed between the prices on the Western markets, the market of the CMEA countries as a whole and the Hungarian market.

The producer price system prevailing during 1968-1979 had major shortcomings: prices on the domestic market were set to ensure the more or less automatic recovery of costs, but users of imports were not charged the marginal cost (i.e. prevailing world market price), because the prices of imports averaged the CMEA and world market prices. This situation distorted cost computations and tended to misguide Hungarian firms. As a result, enterprises had insufficient interest in reducing costs and obtaining the best possible prices. Besides, they could generally count on subsidies.

In 1980 a new, so-called "competitive price system" was introduced. Competitive pricing means that the prices of energy, raw materials and some semi-manufactures, regarding of sourcing, are set equal to current world

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1/ Central Office of Statistics: Iparstatisztikai Evkönyv-ek (Yearbooks for Industrial Statistics), 1977-1985, Budapest.

Central Office of Statistics: Statisztikai Evkönyv-ek (Statistical Yearbooks), Budapest.

2/ UNIDO: "Handbook of Industrial Statistics", New York, United Nations, 1985.

3/ Central Office of Statistics: Iparstatisztikai Evkönyv-ek (Yearbooks for Industrial Statistics), 1977-1985, Budapest.

Central Office of Statistics: Statisztikai Evkönyv-ek (Statistical Yearbooks), Budapest.

market prices and that changes in the domestic producer prices of manufactured goods are tied to the firm's export performance on the convertible currency markets. The fundamental objective of the new price system is to simulate what domestic prices would be if firms were facing significant competition, thus forcing them to make better import and production decisions.<sup>1/</sup>

Raw material prices were also adjusted to the world market prices, irrespective of the place where they were purchased (from the cheaper Soviet or the more expensive other sources). It was impossible, however, to give broader way to competitive prices. Many provisional corrections were made in the 1980s to ensure supplies for the domestic market and promote exports. The world market now undoubtedly affects Hungarian industry more directly and induces necessary adjustments to its conditions.

However, it should be taken into account that the technological standard of the sector is so far behind that of highly industrialized Western countries that without huge investments it is impossible to raise the textile and clothing industry to the level of leading sectors. The industry itself is unable to generate the resources for these investments nor will it enjoy any preferences in the distribution of central resources. Although it is difficult to assess the precise differences in technologies, some figures may provide an indication. For instance, in a good medium West European weaving mill the immediate working time required for one million shots is 320 minutes. This figure was double in a Hungarian weaving mill, but after the reorganization of production it has been reduced to 400 minutes. In 1977, the manpower per one hundred looms in Hungary was twice higher than in the Federal Republic of Germany. The differences were smaller in clothing industry. The specific wage cost of productivity and manufacturing time, for example in the case of men's ready-made clothing, was by 15-20 per cent higher in Hungary than in Western Europe.<sup>2/</sup>

It is true that the economical expedience of developing the textile and clothing industry for export purposes should not be exclusively considered from the point of view of differences existing in efficiency between Hungary and the more advanced countries in this field. Branches of industry can be classified as uneconomical, where this difference is greater than the average of the whole industry. However, even taking into account differences in the technology and the price level achieved in exports, the textile and clothing industry in Hungary cannot be considered a sector with comparative advantages.

Nevertheless this consideration has little impact on the country's exports, so far the textile and clothing industry is able to earn convertible currency.

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1/ East-West Technology Transfer Study of Hungary 1968-1984, OECD, Paris, 1986.

2/ Szita, E.: "A magyar textil és ruházati ipar a hetvenes években" (The Hungarian Textile and Clothing Industry in the Seventies), *Külgazdaság (Review of Foreign Economies)*, January 1983.

### 1.8 Some problems of adjustment

The role of the Hungarian textile and clothing industry in national industry as a whole, or in the country's export is not expected to change radically in the coming years. However, the sector clearly needs to encounter problems arising from further rapid changes in the world markets. Competition on the world market has become fierce, with efficient production of goods not only in Western Europe and the USA, but also in Asia and in Southern Europe. The surviving West European firms started applying a higher degree of specialization and new methods of production through automation and wider applications of micro-electronics leading to considerable improvements in quality and productivity. In order to be competitive on international markets, the Hungarian textile and clothing industry has to adjust to these new conditions.

Through the Hungarian economic management system national firms are indeed exposed to changes in the world market and are compelled to adjust accordingly. These changes could enhance efficiency, rationalize production and push out unprofitable firms and technologies. It would make it possible to concentrate resources on the development of branches or product groups offering better development prospects. The success, however, depends to a very large extent on the speed by which this process of structural changes is carried out. Speed of the restructuring process depends, in particular, on the ability of the system of economic management, to induce changes in the behaviour and motivation of firms in terms of flexibility, dynamism and responsiveness to market developments.

A programme of industrial policy reforms starting in the current Plan period, 1985-1990 includes:

- provision of greater incentives for an increase in profitability and efficiency;
- greater mobility of capital from regressive, non-profitable sectors and firms to the more prosperous ones;
- the improvement of the banking system to promote flows of capital;
- gradual elimination of subsidies and other forms of support to any non-profitable production;
- possibilities to establish new companies and to phase out old ones;
- fuller and more rational use of manpower released by other sectors;
- possibilities to establish joint ventures as well as off-shore firms.

These measures could lead even in a stagnating textile and clothing industry to a progressive product choice, including production of modern fashionable clothing, introduction of new technologies, growth in productivity and profits, improvement of quality.

Tentative investment plan of the textile and clothing industry for 1986-1990 (Table 9) envisages only slight increase compared with 1984-1985. Most of the investment is supposed to be of modernizing nature rather than concerned with capacity expansion. The realistic target of the Hungarian textile and clothing industry in terms of product range is the medium/high level of products.



Table 9. Investments in the textile and clothing sector, 1984-1990  
(billion of forints at current prices)

	1984	1985	1986-1990 <u>a/</u>
Total manufacturing	41.2	43.1	290-300
Textile industry	1.5	1.4	9.0
Clothing industry	0.5	0.5	3.0

Source: Hungary: Investment Issues and Options, World Bank, August 25, 1986.

a/ Tentative projections.

## 2. TEXTILES AND CLOTHING ON INTERNAL AND EXTERNAL MARKETS

### 2.1 Domestic demand

The Hungarian textile and clothing industry continues to play a decisive role in satisfying approximately 80-85 per cent of domestic demand. In addition, Hungary is able to supply other markets: approximately 30 per cent of the textiles output and more than 50 per cent of the clothing are exported. However, the relative scarcity of convertible currency reserves limits the Hungarian economy to cover a large part of domestic demand from imports.

On the other hand the textile and clothing industries in Hungary rely mainly on imported raw materials. Only approximately 15-16 per cent of the basic materials are derived from Hungarian sources, 18-20 per cent from CMEA countries, and 63-65 per cent from imports paid for in convertible currencies.<sup>1/</sup> Forty-three per cent of the cotton comes from the Soviet Union. Hungary supplies all the hemp, 60 per cent of wool, 30 per cent of flax fibre, and nearly 25 per cent of man-made fibres used by its own industry.<sup>2/</sup>

It is not possible to reckon with a significant rise of raw material imports from CMEA countries, mainly due to the limited opportunities for increasing such imports from the Soviet Union. Likewise it is not possible to count on a considerable rise in imports from other CMEA countries either, including the relatively large textile exporters such as Czechoslovakia and Poland since they - like Hungary - are keenly interested in increasing their exports to convertible currency markets and to the Soviet Union. On the other hand these countries are less interested in exports for roubles of such products which incorporate raw materials purchased with hard currency.

Tables 10 and 11 show the role of foreign trade in the domestic consumption of textiles and clothing. Imports from the CMEA countries remained practically unchanged between 1976 and 1983 with constant purchases of cotton and other raw materials from the Soviet Union. Imports of clothing from the CMEA countries remained stable until the 1980s. A rise of 50-60 per cent occurred only in recent years. The slight growth of trade in clothing between the CMEA countries can be accounted for by the fact that the share of clothing in domestic consumption in these countries rose from 5 to 9 per cent in the period 1976-84. Establishment of the system of intra CMEA specialization in production also contributed to an increase in mutual trade. The bulk of the convertible currency imports of the textiles consists of raw materials and semi-finished products, originating either from developing or from OECD countries.

The weight of convertible currency imports of clothing in the domestic consumption doubled between 1976 and 1984 and at present accounts for 14-15 per cent of the total consumption. Although imports partly cover accessories

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<sup>1/</sup> Including the leather and shoe industries. Calculated from input-output tables, Central Office of Statistics, Budapest.

<sup>2/</sup> Input-output tables, Central Office of Statistics, Budapest.

Table. 10 The role of foreign trade in the domestic consumption of textiles, 1976-84  
(in billion forints and in per cent)

	1976	1977	1978	1979	1980	1981	1982	1983	1984
Gross production value	40.0	42.2	43.2	43.4	42.6	46.3	45.7	47.6	51.8
Total exports	10.6	11.1	11.9	12.0	13.3	12.2	12.2	14.1	15.2
Exports transacted in roubles	4.2	5.3	5.2	5.2	4.7	5.2	5.7	5.5	5.9
Exports transacted in convertible currencies	6.4	5.8	6.7	6.8	8.6	7.0	6.5	8.6	9.2
Exports/production	26.5	26.3	27.6	27.7	31.2	26.3	26.7	29.6	29.3
Rouble exports/production	10.5	12.6	12.0	12.0	11.0	11.2	12.5	11.5	11.3
Convertible currency exports/production	16.0	13.7	15.1	15.7	20.2	15.1	14.2	18.1	17.7
Total imports	11.8	13.0	14.5	13.8	15.8	16.8	15.1	16.3	19.9
Imports transacted in roubles	2.6	3.1	3.3	3.2	2.9	3.2	3.7	3.5	4.0
Imports transacted in convertible currencies	9.2	9.9	11.2	10.6	12.9	13.6	11.4	12.8	15.9
Imports/consumption	28.6	29.5	31.7	30.5	35.0	33.0	31.0	32.7	35.2
Rouble imports/consumption	6.7	7.8	8.0	7.7	7.1	7.2	8.5	7.7	9.0
Convertible currency imports/consumption	21.5	21.4	23.5	22.4	27.5	25.7	22.5	24.7	27.1

Source: Yearbook of Industrial Statistics and Yearbook of Foreign Trade Statistics, Central Office of Statistics, Budapest, 1976-85.

- Notes: 1. Apparent consumption = production - exports + imports.  
2. The foreign trade data are based on the sectoral system, where the individual articles (both in imports and exports) belong to the product group of the sector by which they are produced. Only this data can be compared to the gross production value in Hungarian statistics.

Table. 11 The role of foreign trade in the domestic consumption of clothing, 1976-84

(in billion forints and in per cent)

	1976	1977	1978	1979	1980	1981	1982	1983	1984
Gross production value	14.0	14.6	15.4	16.1	16.2	17.2	17.0	16.9	18.5
Total exports	6.2	7.0	7.8	8.7	8.4	8.7	9.2	9.3	10.3
Exports transacted in roubles	2.8	3.1	3.4	3.2	2.9	3.1	3.9	3.3	3.3
Exports transacted in convertible currencies	3.4	3.9	4.4	5.5	5.5	5.6	5.3	6.0	7.0
Exports/production	44.3	47.9	50.7	54.0	51.9	50.6	54.1	55.0	55.7
Rouble exports/production	20.3	21.2	22.1	19.9	17.9	18.0	22.9	19.5	17.8
Convertible currency exports/production	24.3	26.7	28.6	34.1	34.0	32.6	31.2	35.5	37.8
Total imports	1.4	1.6	2.2	2.0	1.9	2.5	2.6	3.3	3.4
Imports transacted in roubles	0.6	0.6	0.7	0.8	0.8	1.1	1.4	1.4	1.4
Imports transacted in convertible currencies	0.8	1.0	1.5	1.2	1.1	1.4	1.2	1.8	1.9
Imports/consumption	15.2	17.4	22.4	21.3	19.6	22.7	25.0	30.3	30.0
Rouble imports/consumption	5.0	5.0	5.5	5.8	5.7	7.2	9.7	9.3	8.4
Convertible currency imports/consumption	7.0	9.0	12.0	10.2	9.3	10.8	9.3	14.2	14.1

Source: As Table 8.

Notes: As Table 8.

needed by the clothing industry products for final consumption were dominant. There are, however, obviously limits to further growth of imports from OECD and developing countries, since at the current stage of development the Hungarian economy and the exchange rate system would not be able to obtain adequate convertible export earnings and satisfy all convertible currency import needs. Consequently, the imports of clothing from Western countries can in the near future play only a supplementary role. The situation is more promising as far as imports from the developing countries are concerned. The opportunities and structure of Hungarian exports to these countries are much more favourable than those of exports to the Western countries (see Chapter IV).

To sum up, the Hungarian textile and clothing industry will continue to play the decisive role for domestic consumption, but imports from the CMEA, the OECD, and the developing countries will play a significant role.

## 2.2 Foreign trade in textiles and clothing

The evaluation of the role of the Hungarian textile and clothing industry in exports is less simple and it is also more difficult to forecast how it will develop in the future. In the 1950s only about 10 per cent of the production of the textile industry was exported, by the mid 1970s exports amounted to one-quarter, and in the 1980s this figure has already reached 30 per cent of the total production. This ratio is even higher in the clothing industry, where 44 per cent of the output were exported in 1976 and 55 per cent in 1984 (Table 11).

Such a high export-orientation can be found also in some smaller West European countries with an open economy and in the South European countries specializing in textile and clothing exports as well as in some developing countries. Textiles and clothing are important export branches with 25.5 billion forints of export earnings in 1984 accounting for 6.2 per cent of the total exports.<sup>1/</sup> Nevertheless, the share of the textiles and clothing in total exports is decreasing (in 1970 it still accounted for 9.1 per cent of total exports). The trend is similar to that in the OECD countries, where the export share of the sector in 1970 - 1982 fell from 7.5 per cent to 5.3 per cent.<sup>2/</sup>

Tables 12 and 13 present the changing structure of Hungarian foreign trade in textiles and clothing by groups of countries.

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1/ Central Office of Statistics: "Statisztikai Evkönyv"-ek (Statistical Yearbooks), Budapest.

2/ United Nations, Commodity Trade Statistics, New York, 1971 and 1982.

Table 12. Structure and destination of Hungarian exports, 1971 and 1982  
(in million US dollars)

EXPORTS	1971				1982			
	OECD	Developing	CMEA	Total	OECD	Developing	CMEA	Total
Raw materials (SITC 26)	12.6	0.7	0.3	13.6	40.7	3.6	8.6	52.9
Textile yarn and fabrics (SITC 65)	27.5	15.0	48.6	91.1	101.5	35.0	94.2	230.7
Apparel and clothing (SITC 84)	31.8	4.4	82.1	118.3	148.6	11.2	154.7	314.5
Total	71.9	20.1	131.0	223.0	290.8	49.8	257.5	598.1
<u>Share of goods by country groups of destination</u>								
Raw materials (SITC 26)	92.6	5.1	2.3	100	76.9	6.8	16.3	100
Textile yarn and fabrics (SITC 65)	30.2	16.5	53.3	100	44.0	15.0	41.0	100
Apparel and clothing (SITC 84)	26.9	3.8	69.3	100	47.2	3.6	49.2	100
Total	32.2	9.1	58.7	100	48.6	8.3	43.1	100
<u>Share of country groups in exports of goods</u>								
Raw materials (SITC 26)	17.5	3.5	0.3	6.1	14.0	7.3	3.3	8.8
Textile yarn and fabrics (SITC 65)	38.3	74.6	37.1	40.9	35.0	70.3	36.6	38.6
Apparel and clothing (SITC 84)	44.2	21.9	62.6	53.0	51.0	22.4	60.1	52.6
Total	100	100	100	100	100	100	100	100

Source: Commodity Trade Statistics, U.N., 1971, 1982, New York.

Table 13. Structure and origin of Hungarian imports, 1971 and 1982  
(in million US dollars)

IMPORTS	1971				1982			
	OECD	Developing	CMEA	Total	OECD	Developing	CMEA	Total
Raw materials (SITC 26)	21.9	23.6	32.6	78.1	44.1	32.0	71.2	147.3
Textile yarn and fabrics (SITC 65)	43.0	15.7	17.2	75.9	16.6	67.0	37.3	270.3
Apparel and clothing (SITC 84)	9.1	1.9	9.7	20.7	32.8	36.8	58.5	128.1
Total	74.0	41.2	59.5	174.7	242.9	135.8	167.0	545.7
<u>Share of goods by country groups of origins</u>								
Raw materials (SITC 26)	28.1	30.2	41.7	100	30.0	21.7	48.3	100
Textile yarn and fabrics (SITC 65)	56.6	20.7	22.7	100	61.7	24.8	13.8	100
Apparel and clothing (SITC 84)	44.0	9.2	46.8	100	25.6	28.7	45.7	100
Total	42.4	23.6	34.0	100	44.5	24.9	30.9	100
<u>Share of country groups by individual goods</u>								
Raw materials (SITC 26)	29.5	57.3	54.8	14.7	18.2	23.6	42.6	27.0
Textile yarn and fabrics (SITC 65)	58.2	38.1	28.9	43.4	68.3	49.3	22.3	49.5
Apparel and clothing (SITC 84)	12.3	4.6	16.3	11.9	13.5	27.1	35.1	23.5
Total	100	100	100	100	100	100	100	100

Source: Commodity Trade Statistics, U.N., 1971, 1982, New York.

The analysis of export shows that:

- exports of raw materials to the Western countries are relatively high;
- in 1971 approximately 60 per cent of total exports went to the CMEA countries, while corresponding figure for 1982 is only 43 percent;
- the share of the Western countries in the exports of clothing rose considerably.

Reviewing the import data we can find that:

- the share of the CMEA countries fell from 34 per cent to 30.6 per cent, the share of raw materials in these imports increased from 41.7 per cent to 48.3 per cent;
- the share of textile yarns and fabrics from the developing countries rose considerably;
- the share of clothing from developing countries rose even faster, in 1971 it accounted for 4.6 per cent of imports, and in 1982 it exceeded one-quarter of total import of clothing.

Textile and clothing exports play an important role in Hungarian exports to the CMEA member-countries and first of all to the Soviet Union (Table 14). Approximately 11-12 per cent of the output of the textile industry and 40 per cent of its exports goes to the CMEA; 35 per cent of the output and approximately two-thirds of the exports of the clothing industry have the same destination. It is important that the Soviet Union, as Hungary's largest trading partner offers a secure market in the form of long-term contracts. It must also be taken into consideration that nearly 30 per cent of Hungarian imports derived from the Soviet Union, including the overwhelming part of imported primary energy and raw materials, basic machinery, indispensable vehicles, chemical products, etc. Consequently, in order to pay for imports from the Soviet Union, Hungary has to manufacture products, which could be exported to that market. Textiles and clothing definitely belong to these products.

Indeed, in the Soviet Union and other CMEA member-countries, there is a large demand for Hungarian textiles and clothing. To meet this demand, however, larger investments would be required than foreseen by the Hungarian industrial strategy and in the framework of the co-ordination of five-year plans of the CMEA member-countries. This co-ordination is the basis for co-operation among the CMEA countries. It sets the level for mutual trade also in the textile and clothing industry, specifying the composition of goods in terms of five-year trade agreements. Precise supplies are annually agreed on by the foreign trade firms (for raw materials the agreements can be signed for five year term). These agreements bind particular firms in terms of lists of goods, prices, deliveries, schedules, etc. The contracts obviously offer security for both the suppliers and the buyers, but tend to slow the reaction to fast-changing production and market trends.

Inter-governmental negotiations are usually conducted without participation of producing firms. It therefore can occur that whereas overall economic benefits are being achieved it is not necessarily advantageous for all individual firms concerned in the agreements. In such cases these companies are compensated by the Government through favourable credit terms, compensatory funds, tax concessions, and other means.



Table 14. Foreign trade in textiles and clothing with the European CMEA member-countries, 1983

Countries	E X P O R T				I M P O R T			
	Textile yarn and fabrics		Apparel and clothing		Textile yarn and fabrics		Apparel and clothing	
	<u>Value</u> (US\$ million)	<u>Share</u> (per cent)	<u>Value</u> (US\$ million)	<u>Share</u> (per cent)	<u>Value</u> (US\$ million)	<u>Share</u> (per cent)	<u>Value</u> (US\$ million)	<u>Share</u> (per cent)
Bulgaria	2.3	3.7	1.2	1.1	0.3	0.9	4.5	12.8
Czechoslovakia	5.0	8.0	5.6	4.9	11.5	33.2	9.8	27.8
German Democratic Republic	6.6	10.6	5.3	4.7	13.0	37.5	10.3	29.3
Poland	5.7	9.1	3.1	2.7	4.9	14.2	5.2	14.8
Romania	3.2	5.1	0.9	0.8	3.8	11.0	5.4	15.3
USSR	39.7	63.5	97.2	85.8	1.1	3.2	-	0.0
Total	62.5	100.0	113.3	100.0	34.6	100.0	35.2	100.0

Source: Commodity Trade Statistics, 1983, United Nations, New York, 1985.

Before 1973 all payments between the CMEA countries were made on the basis of the world market prices, except, however, for cyclical fluctuations. After the first oil price explosion the sliding scale principle was introduced, which every year relies on the average of the world prices of the preceding five years. The aim is to protect the economies of the CMEA countries from drastic price changes occurring on the world market. In addition, in the practice of the CMEA countries a parallel evaluation system independent of prices divides commodities into the so-called "hard" and "soft" goods. Over a long period of time the products of the investment-intensive raw materials and energy sectors were considered "hard" and manufactured products - "soft" goods. Although some shifts occurred from time to time, when for instance farm products and research-intensive products were included among the "hard" goods, textiles and clothing have always been treated as "soft" goods even in cases, when there was considerable demand for them. Owing to this classification, individual countries have endeavoured to balance not only their total trade, but also separately their trade in "hard" goods.

A problem in the textile and clothing trade between the CMEA countries is how to make prices reflect higher quality, product advancement, faster adjustment to fashion and production costs. In the past 15-20 years Hungary has succeeded in achieving a leading position in the markets of the CMEA countries by following the world's fashion trends. The time lag in fashion has been reduced from several years to a couple of months. Hungary could improve its comparative advantage even more by attaining a surplus income promptly keeping up with fashion, reflecting it in prices and providing its firms with additional inducement.

Since the Hungarian textile industry has mostly processed imported raw materials its net foreign exchange balance has been negative. In the 1980s exports by the clothing industry, which exceed the imports needed for its operation have counterbalanced the foreign exchange outflow. This picture differs considerably from that in West European countries, where textile and clothing imports considerably exceeded exports since the 1970s. Italy is an exception to this pattern, having a large and increasing export surplus in both product groups, based on the traditions of the North Italian textile industry and of "Italian design", which has lately dictated fashion trends.

The maintenance and even temporary growth of exports for earning convertible currencies obviously is a necessity for Hungary, particularly until the foreign debts accumulated at the end of the 1970s are partly repaid. At present these exports account for approximately 18 per cent of the total production of textile and approximately 35 per cent of the clothing industry, adding up to 7-8 per cent of total convertible currency exports. In spite of keener international competition Hungary continues to export textiles and clothing to Western Europe. Among the country's main trading partners are Federal Republic of Germany, Austria, Italy, France and other countries listed in Table 15. In the longer term when more efficient sectors are expected to take over the role of producers for exports, clothing production can simultaneously be restructured so that mass produced goods are reduced and apparel of the highest quality is increased.

### 2.3 Competitiveness on the external markets

As in many other countries, in Hungary too, the textile industry is the least efficient sector today. The textile industry was 21st out of 24 manufacturing branches in 1981 on the basis of per capita value added, and the

Table 15. Foreign trade in textiles and clothing with selected market economy countries, 1983  
(US\$ million)

Countries	Export		Import	
	Textile yarn and fabrics	Apparel and clothing	Textile yarn and fabrics	Apparel and clothing
Austria	17.6	16.1	26.6	7.6
Belgium-Luxemburg	3.2	1.4	0.7	0.2
Canada	2.3	4.4	0.4	0.7
Denmark	2.8	2.7	0.4	-
Finland	4.2	1.4	1.2	0.3
France	3.4	11.4	7.7	0.2
Federal Republic of Germany	16.9	53.0	50.7	2.3
Greece	1.3	-	8.5	
Italy	7.4	5.7	15.4	4.4
Netherlands	1.9	12.9	8.5	0.1
Sweden	4.4	3.2	6.4	1.8
Switzerland	5.4	5.6	6.6	1.8
UK	4.6	8.2	6.9	-
USA	1.9	16.2	6.2	-

Source: Commodity Trade Statistics, 1982, United Nations, New York, 1985.

clothing industry was ranked 24th.<sup>1/</sup> A slow decline of the textile and clothing industry as exports producer can be shown by the fact that Hungary's share in the world industrial exports fell from 1.0 per cent in 1965 to 0.52 in 1982, while the share in textile exports - from 0.89 to 0.46 per cent and in clothing exports - from 2.22 to 0.78 per cent.<sup>2/</sup>

1/ Handbook of Industrial Statistics, UNIDO, New York, 1985.

2/ Yearbook of International Trade Statistics, United Nations, New York, several years.

The competitiveness of Hungarian textiles and clothing on the world market especially on the markets of the OECD countries is strongly influenced by internal economic factors. In the 1960s and at the beginning of the 1970s the combination of relatively low wages and medium level technology gave Hungarian products advantages on Western markets, where technology was of a higher level, but wages were much higher. In spite of the fact that wages were much lower in the developing countries, a higher level of Hungarian technology, European fashion and traditions stipulated some advantages.

By the beginning of the 1980s the situation had changed. In the industrialized countries the technological level of the textile industry rose considerably and industry began to produce special high quality products. The clothing industry was marked by technological improvements and specialization. Quality and fashion assumed a great role. The relatively low wages no longer offered a sufficient advantage to Hungary as it was difficult to keep up to required textile qualities. In the clothing industry some advantages remained in subcontracting especially with regard to relatively higher quality goods. At the same time some of developing countries were able to combine cheap manpower employed in three shifts with modern technology mainly in textiles, and in some cases also in the clothing industry. Those countries, which had lower technologies, but much cheaper manpower overtook Hungary in the production of mass goods mainly owing to wage advantages. It should be added, that the tariff preferences granted by the OECD countries to the developing countries also contributed to elimination of Hungarian textile and clothing industry's advantages.

In the late 1970s and early 1980s Hungary's overall export performance improved less rapidly than world average. As a result, Hungary will probably be outpaced by the performance of its principal competitors. The need to restructure domestic production and exports toward more dynamic export categories (high-tech products, automobiles and sophisticated machinery) appears now evident in Hungary. Since there seem to be no comparative advantages for the Hungarian textile and clothing industry it cannot be considered as a promising export sector in the longer perspective. However, the present financial situation of the country suggests that these exports in the short term should continue to be stimulated by the Government.

Owing to both the slowly expanding domestic market and the presently still growing export needs, it is necessary to reckon with rising raw material imports. In view of the strive for rational combination of import sources, it is expected that Hungary attempts to maximize imports from CMEA countries, expand imports from developing countries and maintain trade relations with OECD countries.

#### 2.4 International co-operation

In recent years Hungary has expanded its co-operation with the CMEA countries through participation in the comprehensive long-term programmes aiming at the harmonization of industrial development. Hungary has also established bilateral co-operation in the production of textiles with some socialist countries, for example with Poland in exchange of man-made fibres.

Since the mid 1970s various forms of co-operation have come into being with Western firms. They include mostly subcontracts combined in some cases with the transfer of technology and purchasing or leasing of equipment.

In 1983 almost one quarter of all signed co-operation agreements referred to Hungarian textile industry, 63 agreements - with Western firms and 30 - with socialist countries. In the clothing industry about 80 firms had co-operation agreements.<sup>1/</sup> The majority of these agreements included subcontracting, which became the main form of international co-operation and an important instrument for expanding convertible currency export. Thus, in the early 1980s a large share of clothing exports to the West, about 40 per cent, was produced under subcontracting agreements.

The benefits of the Western firms in subcontracting in the clothing industry include transfer of processes, which are not profitable for them (for example sewing), obtaining capacities with lower risk and leasing of equipment. They are attracted by relatively low wages and by the proximity and production traditions of Hungarian producers. Participation in subcontracting agreements enable Hungary to export its clothing to markets, where other forms of trade are subject to established quotas or other obstacles.

These agreements have positive effects on expanding the product mix and improving production processes in Hungary. They also contribute to transfer of production and managerial experience and lead to a rise in productivity (up to 20-25 per cent). In addition, they make it possible to maintain relatively long-term relations. However, the number of subcontracts is unlikely to expand considerably in the 1980s, because many other socialist countries as well as some developing countries managed to have more comparative advantages in penetrating these non-expanding markets. Besides, there are doubts in future profitability of Hungarian firms as prices and payments for subcontracting will hardly rise, or even decrease. Co-operation agreements, which serve the transfer of technology will therefore, be given priority.

Following these trends Hungarian firms are compelled to either look for new subcontracts or try to enter new markets by producing high quality goods on the basis of the domestic raw materials.

## 2.5 Prospects of co-operation with developing countries

At present, one quarter of imported textile raw materials, semi-finished and finished products and apparel comes from the developing countries. The pattern of imports has changed considerably in recent years. Imports have shifted toward more highly processed products. Although the quantity of textile raw materials increased, the role of developing countries in the imports of textile raw materials fell from 30 per cent in 1971 to 21 per cent in 1982. This is partly due to the fact that imports of man-made fibres from other regions increased considerably. In the same period of time the share of developing countries rose in the imports of semi-finished products, e.g. in the imports of textile yarns and fabrics, from one fifth of total imports to one quarter. Their share has increased even more in the imports of clothing from 9.2 per cent in 1971 to 27 per cent in 1982.<sup>2/</sup>

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1/ Central Office of Statistics: Iparstatisztikai Evkönyv-ek (Yearbooks for Industrial Statistics), 1977-1985, Budapest.

2/ Commodity Trade Statistics, United Nations, New York, 1971, 1982.

In imports the share of various countries differs considerably from one product group to another. More than one-third of the total raw material imports from the developing countries comes from Egypt, followed by Turkey and a few Latin American countries such as Mexico, Uruguay, Nicaragua. In 1983 more than one-half of the semi-finished and finished textiles were imported from Brazil and Pakistan. In the imports of apparel Hong Kong, Pakistan, Brazil and India had a share of more than ten per cent (Table 16).

Table 16. Foreign trade in textiles and clothing with selected developing countries, 1983  
(US\$ million)

Countries	Export		Import	
	Textile yarn and fabrics	Apparel and clothing	Textile yarn and fabrics	Apparel and clothing
Algeria	4.8	-	-	-
Brazil	-	-	28.5	3.2
Egypt	-	-	0.8	0.7
Hong Kong	-	-	0.2	6.5
India	-	-	1.5	4.7
Iran	6.9	-	0.3	-
Kuwait	1.1	3.2	0.2	-
Pakistan	-	-	8.5	3.9
Philippines	-	-	-	0.9
Saudi Arabia	2.0	5.4	-	-
United Arab Emirates	1.3	1.1	-	-
<b>Total developing countries</b>	<b>29.0</b>	<b>11.1</b>	<b>50.4</b>	<b>29.2</b>

Source: Commodity Trade Statistics, 1983, United Nations, New York, 1985.

In spite of the fact that the Hungarian textile and clothing exports to the developing countries are much lower than imports from them, there is a considerable interest in Hungary to expand imports from developing countries, to this end Hungary supports imports from the developing countries in the form of preferential tariffs. The expansion of economic relations with the developing countries is also promoted by the structure of Hungarian exports to these countries. Thus, industrial products account for 75-80 per cent of the

total Hungarian exports to these countries. For Hungary such exports are more profitable than exports of raw materials or semi-finished goods to the OECD countries. In addition, Hungary exports to developing countries a relatively large number of turnkey factory equipment and production systems.

It is obvious that there are limits to the increase of textile and clothing imports from the both the CMEA and OECD countries, and, it is therefore, only imports from developing countries which could be considerably expanded. It is of interest to Hungary to import more clothing on favourable prices, thereby releasing production capacities for manufacturing more expensive products (e.g. in the knitting industry). For example, imports of ordinary grey fabric helped to the build up production of blended colour fabrics in Hungarian weaving mills. At the same time, the fact that developing countries themselves are interested to export goods with a higher degree of processing very often coincides with restructuring efforts in Hungary.

An increase in the import of semi-finished and finished textile and clothing products from developing countries not only contributes to the restructuring process in the Hungarian textile and clothing industry, but also makes it possible to concentrate resources and efforts on development of more efficient branches of industry.

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