Industry in cyrus economic development

Andreas George Theophylactoy
Atlanta University

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INDUSTRY IN CYPRUS ECONOMIC DEVELOPMENT

A Thesis Submitted to the Faculty of Atlanta University in Partial Fulfillment of the Requirements for the Degree of Master of Arts

By

Andreas George Theophylactoy

Department of Economics

Atlanta, Georgia
June 1982
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Series</strong></td>
<td><strong>Unit or Base</strong></td>
<td><strong>1973</strong></td>
</tr>
<tr>
<td><strong>Area:</strong> 9,251 sq. km. (3,573 sq. miles)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Population</td>
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<td>Gross National Product</td>
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<tr>
<td></td>
<td>''</td>
<td>343.8</td>
</tr>
<tr>
<td>Private consumption at current market prices</td>
<td>''</td>
<td>241.7</td>
</tr>
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<td>Fixed investments at current market prices</td>
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<td>Per capita G.N.P. at prices of 1973</td>
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<td>542.3</td>
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<tr>
<td>Total taxes as percent of G.N.P.</td>
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<td>Tourists per 1,000 population</td>
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<tr>
<td>Persons per private car</td>
<td>''</td>
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<tr>
<td>Persons per doctor</td>
<td>''</td>
<td>1,059</td>
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<td>Telephone per 1,000 population</td>
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<td>T.V. sets per 1,000 population</td>
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<tr>
<td>Electricity consumption per capita</td>
<td>KWTT</td>
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1 Cyprus pound = US $2.80 (31.8.1980)
CHAPTER 1

THE NATURE OF CYPRUS ECONOMY

Introduction

The industrial sector has traditionally been one of the major sectors in the economy of Cyprus and it has played a leading role in the country's economic development. After the Turkish invasion of Cyprus in July 1974 and the seizure of 40 percent of the territory, including the most fertile lands, and 70 percent of the country's economic and natural resources, the industrial sector and especially manufacturing, assumed much greater attention and received further impetus. This was the direct result of the government's decision to reactivate the depressed economy mainly by encouraging fast expansion of the industrial sectors, particularly export-oriented industries. The experiment, as the subsequent developments showed, was quite successful.

The primary intent of this study is to discuss these developments in the industrial sector. I shall give special emphasis to the progress that has been achieved during the period after the 1974 invasion, and I will present the main reasons for that progress. Also, I will make a detailed reference to the major industrial activities today with particular emphasis on the prospects of each activity, and the problems they are facing or will face in the future.

1The Cyprus Popular Bank Limited, Newsletter, Volume 4, No. 4, July-August 1980, p. 11.
The developments in the industrial sector are divided into two main periods. First, the period after independence and before the Turkish invasion (1960-1974), and second, the period after the invasion until today (1974-1981).

In order to make the reader familiar with the country and its economic conditions, I shall begin the first chapter with a description of Cyprus and its people. The second chapter will be a presentation of the developments in the industrial sector during the years after independence. Here, I will investigate why the government resorted to development planning to achieve progress and whether this progress was satisfactory. In the third chapter I shall discuss the economic consequences of the Turkish invasion of Cyprus. It is a well known fact that the invasion caused tremendous economic and other survival problems to the country. The efforts that the government made to tackle these problems will be analyzed. Chapter four will deal with the present situation in the industrial sector (1974-1981). As I mentioned above special emphasis will be given to reasons of the recent growth and to the problems that the industries are facing today.

The promotion of exports, in view of the small size of the domestic market, is the only alternative for sustained growth of manufacturing output. This factor, as well as other factors relevant to the growth of the sector, I shall examine in the last chapter. The problems connected with production and productivity, industrial training and employment opportunities, plans for investments and marketing in the sector are other subjects that are examined.
Geography and Climate

Cyprus is an island republic in the northeast corner of the Mediterranean Sea. It lies about 40 miles west of Syria. Geographically, Cyprus is part of Asia but its people live much like southern Europeans and have a standard of living second to Israel's in the eastern Mediterranean area. Cyprus commands a crossroad position linking the east with the west, Europe with Africa and the Middle East. It guards the Suez Canal and most of the sea and air routes linking the continent of Europe, Africa and Asia. Because of its strategic location, Cyprus throughout history, has been subject to the political and economic forces at work in the Mediterranean.

The island's main morphological features are its two mountain ranges, one in the north and the other in the southwest surrounded by coastal and inland plains. The northern Kyrenia range, a limestone formation, is largely barren. It follows the northern coastline for about 50 miles and rises to 3,000 feet. The forest-covered Troodos range contains Mount Olympus 6,400 feet above sea level, and igneous and limestone formation. The shoulders of the mountain ranges and the central plain which connects them, known as the Mesaoria, provide Cyprus its agricultural land for citrus plantings along the Sea, grapes and olives, carobs, and deciduous fruit trees on the terraced hillsides, cereals on the flat expanses of the plain.

Cyprus has a typical Mediterranean climate; summers are hot and virtually rainless with mean temperatures in the lowland plains avera-
ing in the low eighties and those in the mountains in the low seventies. Summers are humid along the coast and dry inland. Winters are mild and invigorating with mean temperatures averaging from 50 to 55 degrees throughout most of the island and 30 to 36 degrees in the higher mountains.

Rainfall is a constant problem. Average annual rainfall is 19.8 inches. Cyprus suffers from periodic droughts; once in ten years the island suffers a really serious drought, and one in three a moderately serious one. The years 1972 and 1973 were marked by the most severe drought in a century.  

The Population and its Ethnic Distribution

In 1980 the population of Cyprus was 628,500. About 80 percent of the people are Greeks while 18 percent are of Turkish origin. The remainder are composed of Armenians, Maronites, and English. The Greeks and Turks lived and worked in separate communities even before the Turkish invasion of the island and the occupation of 40 percent of total area.

Economic separatism in colonial Cyprus between Greek and Turkish communities gained momentum after 1957. Due to the uncertainty over the island's political future a form of economic dualism began to be developed. Boycotte of Greek merchants by Turkish consumers and vice-versa rose and fell in intensity with shifts in the political climate.

2Haralambides, T. The Economic Consequences of the Turkish Invasion of Cyprus, (New York 1976) p. 21.
Despite initial successes of the advocates of economic separatism, it did not sustain for long its early momentum because the Turkish community, largely agricultural and employed in government quickly expended most of its investment funds in non-separatist enterprises and the Greek business community abandoned its occasional annoyance on the subject.

Although there were no significant changes in the composition of population, important changes occurred in geographical distribution. These included the relocation of thousands of Turks, who fled to communities dominated by their compatriots during the first six months after the outbreak of armed conflict between Greek and Turkish Cypriots in December 1963. A reduction in the number of villages with mixed populations, scattered throughout the island, resulted. Until 1968 there was a restriction on the movement of goods and people, but after that year government restrictions were lifted and there was a renewal of the commercial and financial contracts.

However, the two communities continued to be separated. The Turks, who were controlling only 2 to 3 percent of total area, were contributing about 5 percent in G.N.P. Widespread unemployment existed in the Turkish controlled areas. On the other hand in the rest of the economy the labour supply was tight and was officially considered a bottleneck in economic development.

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Haralambides, T. *The Economic Consequences of the Turkish Invasion of Cyprus*, (New York, 1976), p. 23.
Economic Developments Since Independence

The economy made great strides from independence in 1960 to mid-1974 when, as a result of the Turkish invasion, the economy collapsed and economic development was halted. But thanks largely to prompt Government action and the initiation of emergency measures, the economy began to pick up again and by 1980 had made impressive progress.

The pre-invasion period was marked by rapid economic growth following the emergence and expansion of the tourist and manufacturing industries, and modernization of agriculture. Before independence Cyprus was predominately an agricultural country with about 46% of the economically active population engaged in the agricultural sector although its contribution to G.N.P. was a mere 18 percent.

The Economy Today

The recovery of the Government-controlled part of the island, after the 1974 invasion, has been described abroad as an "economic miracle". But for all the economic gains, the upheaval caused by the Turkish invasion has brought problems in its wake which tend to slow down further development. Having achieved full employment, growth is now constrained as a result of the severe reduction of resources, loss of rich farmlands and shortage of labour.

Despite the significant growth in exports and the contribution of tourism to invisible earnings, the trade gap has widened and the economy is now overheated. The main contributing factors were massive Government expenditure on relief programmes for the displaced population, and on essential infrastructure projects necessitated by the division of the island, as well as growing consumer demand for durable goods to replenish new refugee households. The need to replace productive assets has meant heavy investment which in turn is exerting pressure on the balance of payments. The strong pressure of demand coupled with such massive losses of resources and the rising cost of imported oil resulted in accelerating inflation. From 1975 to 1978 inflation was kept down to about 5 percent per annum but it shot up to 9.5 percent\(^6\) in 1979 and rose to 13.5 percent in 1980. The oil bill in 1973 was a mere C 8 million but by the end of 1979 it jumped up to C 42 million. The cost for 1980 was C 73\(^7\) million or about 19 percent of the total import bill.

Undoubtedly, most of the island's economic problems stem from the Turkish invasion. Because of its small size and uneven distribution of natural resources the island had, of necessity, an interdependent, integrated and balanced economy. Not surprisingly, therefore, the artificial division of the economy has hampered development and undermined progress. The obvious answer to most of these problems is


\(^7\)The rate of exchange in 1980 was an average C 1: US $2.80
the return to pre-invasion economy. The country should start function-
ing as a single entity once more. Under the circumstances, however,
the economic achievements of the island cannot be underestimated.
CHAPTER 2

THE INDUSTRIAL SECTOR IN CYPRUS
PRE-INVASION PERIOD

During the first fourteen years of independence the Cyprus Government has resorted to development planning in an effort to promote the attainment of higher economic goals. Industry was not an exception. In the particular circumstances of Cyprus there were strong reasons necessitating a planned approach to the industrial sector, and generally to the problems of development. The small size of the economy and its heavy dependence on international trade, the weaknesses inherited from the past, and the need to promote social development in general, called for a rationalization and acceleration of the development effort through planning.

Before the island's independence in 1960 no industry or very little industry existed. This was due to the policy of the colonial Government for the disposal of their products into the island and the lack of the necessary know-how and capital. Before 1960 manufacturing industry was characterized by the existence of small workshops (tailor shops, blacksmiths, goldsmiths, etc.) and the only industries of some size and importance were those utilizing to some extent local raw materials such as bricks and tile factories, wineries and some food industries for the processing of meat and dairy products. Most of the local raw materials (mainly agricultural produce and minerals) were exported in their raw form.
Period After the Island's Independence and Before the Turkish Invasion (1960 - 1974)

At the time of Independence the contribution of the industrial sector to the Island's production was small and much below that was warranted by the size of the country and the level of its income. The really sizable industrial units organized on modern factory lines were to be found among industries processing locally produced raw materials (wineries, fruit canning, cement) or "market based" industries (footwear, tobacco, bottling plants). Many factors can be held responsible for this "stagnation": the limited size of the market; lack of the necessary infrastructure to create sufficient external economies; the lack of adequate encouragement and incentives; the shortage of long-term finance and the absence of appropriate institutions for the channeling of such finance; the development of a lucrative import trade (which inter alia had the effect of conditioning the Cypriot consumer to foreign goods) and the existence of opportunities for other more remunerative forms of investments (e.g. in real estate). Thus, at the time of Independence, the manufacturing sector, like agriculture, was characterized by the predominance of the small firm. With few exceptions, firms either imported their raw material requirements or brought them from agriculture. There was little interdependence with the industrial sector. The standards of technology, management and skills were in general low and so was productivity. These factors combined to keep costs of production high and make Cyprus manufactured goods uncompetitive.

During the decade 1960 - 1970 the Government has unquestionably
made substantial progress in its effort to develop its manufacturing sector. Value added at constant 1966 prices originating from manufacturing industry more than doubled during the 1962 - 1971 period, having risen from 11.0 mln. in 1961 to 24.1 mln. in 1971, i.e. by an average rate of growth of 8.2 percent per annum.\footnote{Republic of Cyprus, The Third Five-Year Plan (1972-1976), p. 172.} Industrial employment expanded at a smaller pace rising from 31,281 in 1961 to 36,300 in 1971. However, the pattern of development had not been uniform. During the First Five-Year Economic Plan, value added increased at an average rate of 7.1 percent per annum under conditions of relative prices and cost stability. During the next five years (1967 - 1971) there was a faster growth in G.D.P. accompanied by an acceleration of industrial growth, with real value added rising at an average rate of growth of 9.2 percent per annum. World wide inflation meant that manufacturing output was produced under conditions of rising prices, which undoubtedly acted as a powerful stimulus to growth. Furthermore, during the 1962 - 1966 period exports of manufacturing goods were limited and of the traditional type, whereas in the post - 1966 period priority export industries started to emerge and successfully penetrated foreign markets with new products competing mainly in terms of a price advantage. The acceleration of industrial growth exerted strong pressures on the labour market. Until 1966 expansion output was achieved by utilizing existing capacity with little additional labour require-
ments. In the 1967 - 1971 boom years, rising expectations, the need to tackle difficult import substitution areas and possibly tariff protection stimulated fast expansion of new capacity with parallel increase in labour requirements, thus lowering productivity growth. However, the problem of excess capacity became acute. On the other hand, the broadening of the horizons of Cyprus industry and the need to adopt complicated and sophisticated production processes focused attention on the structural problems and raised questions of management, organization and expertise.

Development During the First Economic Plan (1962 - 1966)

During the period of the First Plan, the contribution (value added) of manufacturing to Gross Domestic Product increased from 13.2 million in 1961 to 16.8 million in 19662 (at constant, 1966 prices). This represents an average annual rate of growth of 4.9 percent and, although this was below the overall growth of the economy, it is a creditable performance if one takes into account the barriers which had to be overcome in the development of this sector.

One of the basic objectives of the Government in the First Plan was the creation of suitable conditions for the fostering of private initiative by carrying out the necessary infrastructural and other works. Another objective was to establish an institution to provide long-term finance.

In line with this policy, tariff changes were designed to provide incentives for the establishment and expansion of viable industries. Industrial research was undertaken and in the light of the results, such research policies of encouragement and promotion were formulated and implemented. A Development Bank (The Cyprus Development Corporation) was established to offer long-term credit and technical assistance to industry. New methods of industrial development were tried: for example an industrial estate was established in Nicosia to offer industrialists adequately equipped factory sites for lease at reasonable rentals. Plans were prepared for the establishment of similar estates in Limassol and Larnaca.

In its efforts to promote exports of manufactured products, the Government participated regularly in international fairs and amended the Customs Drawback regulations, thus enabling manufacturers to claim refunds of import duties paid on materials embodied in exported goods. Cottage industry was also assisted in an effort to create employment opportunities in rural areas. Various handicraft activities were encouraged and two Handicraft Organizations were established.

To raise the level of skills of workers and supervisory personnel, a Productivite Centre was established. To complement the technical education system an Apprenticeship scheme was also introduced to train on the job those who cannot attend technical schools.
Performance of Particular Groups

Details regarding the growth of manufacturing industry between 1961 and 1966 are given in Table 1.

Net Output of Cyprus Manufacturing Industry, 1961 and 1966
(At 1966 prices - 000)

Table 1

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<td>1. Food</td>
<td>1,719.3</td>
<td>2,485.6</td>
<td>144.6</td>
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<td>2. Beverage</td>
<td>2,221.0</td>
<td>3,083.9</td>
<td>138.9</td>
<td>6.8</td>
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<td>3. Tobacco</td>
<td>414.3</td>
<td>371.9</td>
<td>89.8</td>
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<td>4. Textiles</td>
<td>125.1</td>
<td>279.7</td>
<td>223.6</td>
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<td>5. Footwear and Clothing</td>
<td>2,099.7</td>
<td>2,388.2</td>
<td>113.7</td>
<td>2.6</td>
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<td>6. Wood and Cork</td>
<td>299.9</td>
<td>305.6</td>
<td>101.9</td>
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<td>7. Furniture</td>
<td>476.6</td>
<td>671.8</td>
<td>141.0</td>
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<td>8. Paper and Paper Products</td>
<td>4.4</td>
<td>635.2</td>
<td>146.4</td>
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<td>9. Printing</td>
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<td>10. Leather and Fur</td>
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<td>110.4</td>
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<td>11. Rubber</td>
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<td>117.0</td>
<td>124.2</td>
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<td>495.0</td>
<td>226.1</td>
<td>17.7</td>
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<td>13. Non-metallic minerals</td>
<td>962.1</td>
<td>1,207.9</td>
<td>125.5</td>
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<td>14. Metal Products</td>
<td>572.1</td>
<td>746.0</td>
<td>130.4</td>
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<td>15. Machinery excl. Electrical</td>
<td>247.4</td>
<td>433.3</td>
<td>175.1</td>
<td>11.8</td>
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<td>16. Manufacture of Electrical Machinery</td>
<td>37.6</td>
<td>110.3</td>
<td>293.4</td>
<td>24.0</td>
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<td>17. Transport Equipment</td>
<td>725.2</td>
<td>932.9</td>
<td>128.6</td>
<td>5.2</td>
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<td>18. Miscellaneous</td>
<td>190.4</td>
<td>290.2</td>
<td>152.4</td>
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<tr>
<td>Total</td>
<td>10,903.8</td>
<td>14,664.9</td>
<td>134.5</td>
<td>6.1</td>
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Source: Planning Bureau and Statistics and Research Department.

4Excluding cottage industry.
The food industry expanded by an average rate of growth of 7.7 percent per annum with net output rising from 1.7 million to nearly 2.5 million. The meat industry, in particular, expanded fast under the impetus of Government promotional efforts. Milk bottling and dairy production expanded under the stimulus of the demand of foreign residents and the opening of export outlets, but this expansion is still slower than the increase in milk supplies. The canning sector, encouraged by the growth of domestic raw materials and the invaluable export demand, grew at a fast pace. The cheese, biscuit and flour milling industries were strengthened through the establishment of new factories; other industries implemented a nationalization of operations programme. Exports expanded by 12.0 percent per annum.

The performance in the other main sub-sectors was as follows: in the beverage industry growth was spectacular. Exports rose from 816,000 in 1961 to 2,246,000 in 1966. In clothing and footwear there was an extensive nationalization of existing industries whereas new clothing, hosiery and knitwear factories were established. Also important developments took place in the "Chemical and Non-Metallic Minerals" sector. New soap, paint, matches, lime and cement factories were established.

**Situation by 1966**

The position of manufacturing industry by the end of the first five-year plan may be summarized as follows:

(a) As Table 2 shows 13.7 percent of the gainfully employed population was engaged in the manufacturing industry. In 1966 exports of
manufactured goods amounted to 17.3 percent of total domestic exports, a large proportion of which consisted of semi-processed agricultural products. The share of manufacturing in the Gross Domestic Product was 12.2 percent.

(b) There was little inter-industry dependence and heavy reliance on imported raw materials.

(c) The industry was dominated by the small production unit, averaging only 2.6 persons per establishment. In 1962, 22 percent of the manufacturing output was produced by 51 percent of manufacturing labour force engaged by 11,085 establishments employing under five persons each.

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<td>Value added (mln)</td>
<td>138.2</td>
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<tr>
<td>Gainfully employed (000's)</td>
<td>228.6</td>
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<tr>
<td>Exports (mln)</td>
<td>27.2&lt;sup&gt;6&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

(d) There was a shortage of skills, both managerial and technical, in certain sectors and this impeded productivity improvements.


<sup>6</sup>Domestic Exports
(e) A number of industries were reported to be facing a shortage of working capital.

(f) Many of the industries were inward-looking with little export orientation.

Performance of Manufacturing Industry during the Second Plan Period

Overall Performance

Manufacturing value added increased from 15.5 mln in 1966 to 24.1 mln in 1971, thus attaining an average annual rate of growth of 9.2% during the 1967 - 1971 period. This rate is above the average rate of growth of the economy as a whole but falls slightly short of the target set in the Second Plan, which envisaged a rate of growth of at least 10% per annum. The main reasons for the failure of the manufacturing industry to attain the targets set can be attributed to the delay in the establishment or the postponement of some major products of high value added content such as the oil refinery, the fertilizer plant, the forest industry complex and the cement asbestos plant.

Despite the above remarks, the fact must be conceded that substantial progress has been achieved. Industrial output became more diversified, new projects were implemented, exports expanded and generally industrial performance was creditable and progress was faster than that achieved during the First Plan. In what follows, the performance of the manufacturing sector during the Second Plan, is examined in more detail.

Performance of Particular Groups

In the food industry, output became more diversified. The main engine of growth here was the fruit canning industry, which benefited from buoyant export and local demand. In some instances, however, the industry began to feel the pressure of local raw materials.

Other industries within this sub-sector also recorded satisfactory growth. The meat industry has successfully entered the export market. The dairy industry made satisfactory progress both in local and foreign market, but output was expanding at a slower pace than milk supplies and consumption of milk products.

The developments in the other main sectors were the following:

a) The beverage industry was strengthened with the addition of new projects. The wine industry continued its satisfactory export performance.

b) In textiles, the knitwear and hosiery industries expanded considerably.

c) The industries in footwear and clothing, through their successful penetration into foreign markets, developed into dynamic engines of industrial growth.

d) The sector of wood and cork, despite some development, was a lagging sector in relation to its potential.

e) In chemicals and non-metallic mineral developments were mixed.

In the case of chemicals, the main expansion force emanated from the
### Table 3

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>15,181</td>
<td>21,884</td>
<td>2,898</td>
<td>5,262</td>
<td>1,499</td>
<td>3,034</td>
</tr>
<tr>
<td>Beverages</td>
<td>5,343</td>
<td>9,003</td>
<td>2,898</td>
<td>4,313</td>
<td>2,284</td>
<td>3,854</td>
</tr>
<tr>
<td>Tobacco</td>
<td>2,124</td>
<td>2,678</td>
<td>559</td>
<td>737</td>
<td>167</td>
<td>185</td>
</tr>
<tr>
<td>Textiles</td>
<td>889</td>
<td>2,210</td>
<td>415</td>
<td>1,085</td>
<td>37</td>
<td>2,214</td>
</tr>
<tr>
<td>Footwear and Clothing</td>
<td>5,188</td>
<td>9,714</td>
<td>2,437</td>
<td>4,459</td>
<td>101</td>
<td>2,214</td>
</tr>
<tr>
<td>Wood and Cork</td>
<td>643</td>
<td>1,565</td>
<td>263</td>
<td>629</td>
<td>2</td>
<td>10</td>
</tr>
<tr>
<td>Furniture and Fixtures</td>
<td>1,868</td>
<td>3,233</td>
<td>822</td>
<td>1,636</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Paper and Paper Products</td>
<td>216</td>
<td>1,274</td>
<td>57</td>
<td>380</td>
<td>65</td>
<td>214</td>
</tr>
<tr>
<td>Printing</td>
<td>1,285</td>
<td>2,314</td>
<td>736</td>
<td>1,372</td>
<td>18</td>
<td>6</td>
</tr>
<tr>
<td>Leather Products</td>
<td>428</td>
<td>1,029</td>
<td>127</td>
<td>316</td>
<td>284</td>
<td>391</td>
</tr>
<tr>
<td>Rubber Products</td>
<td>300</td>
<td>587</td>
<td>135</td>
<td>287</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Chemicals</td>
<td>1,052</td>
<td>2,549</td>
<td>468</td>
<td>1,023</td>
<td>17</td>
<td>80</td>
</tr>
<tr>
<td>Non-Metallic Minerals</td>
<td>2,271</td>
<td>5,333</td>
<td>1,370</td>
<td>2,901</td>
<td>133</td>
<td>195</td>
</tr>
<tr>
<td>Metal Products</td>
<td>1,820</td>
<td>3,638</td>
<td>837</td>
<td>1,560</td>
<td>2</td>
<td>194</td>
</tr>
<tr>
<td>Machinery (non electrical)</td>
<td>783</td>
<td>1,361</td>
<td>502</td>
<td>859</td>
<td>27</td>
<td>74</td>
</tr>
<tr>
<td>Electrical Machinery</td>
<td>195</td>
<td>440</td>
<td>120</td>
<td>252</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Transport Equipment</td>
<td>1,514</td>
<td>2,622</td>
<td>1,102</td>
<td>1,987</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>901</td>
<td>2,291</td>
<td>336</td>
<td>892</td>
<td>13</td>
<td>111</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>42,007</strong></td>
<td><strong>73,725</strong></td>
<td><strong>16,082</strong></td>
<td><strong>29,950</strong></td>
<td><strong>4,650</strong></td>
<td><strong>10,571</strong></td>
</tr>
</tbody>
</table>


9. Excluding Cottage Industry

Table 3 contains statistics on gross output, value added and exports of the various manufacturing sub-sectors for the years 1966-1971.
detergent product group. Things were better in "non-metallic minerals" where the expansion of this dynamic sector followed closely the construction boom. Some pressure on cement capacity developed which led to investment and further capacity expansion.

Diversification of Output Structure

The output structure became more diversified with the traditional sectors declining in importance in favour of the faster growing ones (Table 4). The share in manufacturing value added of the traditional food and consumer goods industries had declined from about 57 percent in 1966 to 53 percent in 1971, whereas industries supplying the construction sector became more prominent.

Structure of Value Added, 1966 and 1971 (%)

Table 4

<table>
<thead>
<tr>
<th>Group</th>
<th>1966</th>
<th>1971</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Food, Beverages and Tobacco</td>
<td>39.5</td>
<td>34.4</td>
</tr>
<tr>
<td>B. Textiles, Footwear and Clothing</td>
<td>17.7</td>
<td>18.5</td>
</tr>
<tr>
<td>Group I (A and B)</td>
<td>57.0</td>
<td>52.9</td>
</tr>
<tr>
<td>C. Wood and Furniture</td>
<td>6.8</td>
<td>7.6</td>
</tr>
<tr>
<td>D. Paper and Printing</td>
<td>4.9</td>
<td>5.8</td>
</tr>
<tr>
<td>E. Leather</td>
<td>0.8</td>
<td>1.1</td>
</tr>
<tr>
<td>Group II (C, D and E)</td>
<td>12.5</td>
<td>14.5</td>
</tr>
<tr>
<td>F. Rubber and Chemicals</td>
<td>3.8</td>
<td>4.4</td>
</tr>
<tr>
<td>G. Non Metallic Mineral Products</td>
<td>8.5</td>
<td>9.7</td>
</tr>
<tr>
<td>H. Metal and Allied Products</td>
<td>15.9</td>
<td>15.5</td>
</tr>
<tr>
<td>I. Other</td>
<td>2.1</td>
<td>3.0</td>
</tr>
<tr>
<td>Group III (F, G, H and I)</td>
<td>30.3</td>
<td>32.6</td>
</tr>
<tr>
<td>Total Manufacturing</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Employment and Productivity

Industrial employment increased by an average of 4.2 percent per annum rising from 27,930 in 1966 to 34,235 in 1971, thus creating 6,305 new jobs as the Table no. 5 shows. In the Second Plan it was estimated that employment would be rising at a rate of about 4.6 percent per annum. The slower expansion of industrial employment was realized within the context of a slower output growth. This fact underlines two factors which were operating during the Plan period. Firstly, the realized shift of employment to higher productivity units was slower than that anticipated and, secondly, productivity increased at a slower pace than the target rate.

Table 5

<table>
<thead>
<tr>
<th>Year</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1966</td>
<td>27,930</td>
</tr>
<tr>
<td>1967</td>
<td>29,326</td>
</tr>
<tr>
<td>1968</td>
<td>30,779</td>
</tr>
<tr>
<td>1969</td>
<td>31,831</td>
</tr>
<tr>
<td>1970</td>
<td>33,170</td>
</tr>
<tr>
<td>1971</td>
<td>34,235</td>
</tr>
</tbody>
</table>

Value added per head increased from 548 in 1966 to 698 in 1971, recording an average rate of growth of 5.0 percent per annum as follows:

Table 6

<table>
<thead>
<tr>
<th></th>
<th>1966</th>
<th>1971</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value added at Constant</td>
<td>15.3</td>
<td>23.9</td>
<td>156.2</td>
</tr>
<tr>
<td>1966 prices 11</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employment</td>
<td>27,930</td>
<td>34,235</td>
<td>122.6</td>
</tr>
<tr>
<td>Value added per head ( )</td>
<td>548</td>
<td>698</td>
<td>127.4</td>
</tr>
</tbody>
</table>

11 In million Cyprus pounds

12 The rate of exchange in 1966 was C 1: U.S. $2.90
The non-implementation of certain high productivity projects and the slower redistribution of employment from small to larger establishments explain the relatively slower pace of productivity advance which in the Second Plan was assumed to reach 5.5 percent per annum.

Exports

Exports of manufactured goods went up from 4.7 mln. in 1966 to 10.6 mln in 1971 (at 1970 prices), thus surpassing the target set in the Second Plan. It should be noted that earnings from manufacturing exports increased at a faster rate than total domestic exports thus augmenting their share in domestic exports from 17.1 percent in 1966 to 20 percent in 1970 and 25.1 percent in 1971. The sectors which witnessed the highest expansion in exports were (in 000):

Table 7

<table>
<thead>
<tr>
<th>Sector</th>
<th>1966</th>
<th>1970</th>
<th>1971</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canning of fruit and vegetables</td>
<td>268</td>
<td>713</td>
<td>1,288</td>
</tr>
<tr>
<td>Clothing</td>
<td>68</td>
<td>501</td>
<td>955</td>
</tr>
<tr>
<td>Footwear</td>
<td>39</td>
<td>952</td>
<td>1,138</td>
</tr>
</tbody>
</table>

Situation by 1971

The role of the sector in the Cyprus economy may be assessed by the following referring to 1971.

---

The Role of the Industrial Sector in the Economy by 1971

Table 8.14

<table>
<thead>
<tr>
<th></th>
<th>Total Economy (1)</th>
<th>Manufacturing Industry (2)</th>
<th>Relation of 2:1 (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value added (mln)</td>
<td>232.7</td>
<td>28.0</td>
<td>12.0</td>
</tr>
<tr>
<td>Gainfully employed population (000's)</td>
<td>245.7</td>
<td>36.3</td>
<td>14.8</td>
</tr>
<tr>
<td>Domestic Exports (000's)</td>
<td>42,061</td>
<td>10,561.15</td>
<td>25.1</td>
</tr>
</tbody>
</table>

14 Planning Bureau, Nicosia, The Third Five-Year Plan (1972-1976) pp. 177, 178

15 Including processed agricultural products.

It is evident from the above that manufacturing industry was playing a relatively small role in the economy even by standards of certain other developing countries. On the other hand, despite the low contribution of the industry to G.D.P. manufacturing exports accounted for 25 percent of domestic exports.

The structure of manufacturing industry was marked by the existence of many small units with a relatively low productivity. Such a structure did not lend itself to an increase of production on a really large scale nor did it enable the most efficient use of human and material resources with the result that an unfavourable cost structure with a high ratio of variable to fixed costs was created. In many cases, excess capacity has developed. There were also problems connected with the capacity of the local market, the security of a variety of indigenous raw materials, problems relating to financing and shortage of skills. To these one should add the family base ownership of many enterprises which did not facilitate the entry to the industry of new
managerial talent. Because of the small size of industrial units generally and due to other limitations associated with it, the search for new markets abroad was not promoted to a satisfactory degree.
CHAPTER 3

THE ECONOMIC CONSEQUENCES OF THE TURKISH INVASION OF CYPRUS
AND THE GOVERNMENT REACTIVATION POLICY

Introduction

This study would not be a complete one without the economic consequences of the Turkish invasion of 1974. It is a well known fact that the post-independence years were characterized by a quite satisfactory rate of growth and all the economic indicators show that Cyprus was going through a period of prosperity unprecedented in its history. During the 1961 - 1971 period the gross domestic product at constant prices was rising by 7.1 percent and the per capita gross national product by 5.9 percent annually. Substantial investments were made in infrastructural projects all over the island, while the productive capacity of the economy in all sectors was strengthened, modernised and expanded. Between the years 1961 and 1971 the real value added of the agricultural sector almost doubled, while that of industry increased by 119 percent. The development of tourism was spectacular. The number of tourists who visited the island increased from 40,000 in 1961 to 179,000 in 1971 and Cyprus became an international tourist centre. Increase in incomes made possible a substantial improvement in social services. The balance of payments generally showed a surplus. Exports were diversified and increased and invisible earnings showed a constant increase. There was a steady inflow of foreign capital, foreign exchange reserves were maintained at a satisfactory level and the exchange value of the cur-
rency remained stable, which contributed to increased confidence of the public in the economic future of the island.

The Turkish invasion, however, halted this upward trend and caused instead tremendous economic and other survival problems. The adverse consequences of the invasion are well known. About 40 percent of the Cyprus territory has been occupied, including most productive and developed areas. It is estimated that in 1972 about 70 percent of the total gross production of the country emanated from these areas or affected adjacent areas. Moreover, the Turkish invasion forces occupied a vast wealth of fixed capital assets, productive and natural resources in the form of hotels and other tourist establishments, houses, factories, groves, arable and irrigated fertile land, mines and quarries, water resources, tourist land of inestimable value, etc. The value of the land and investment in fixed assets belonging to Greek Cypriots in the Turkish held areas is estimated at 2.5 billion. The economic problems created by the Turkish invasion and the Government efforts to tackle them will be summarized in the following pages. Also, the efforts of the Government to reactivate the industrial sector will be presented.

(a) Substantial reduction of overall economic activity

The occupation of a large part of productive units and resources of the island by the invaders resulted in a reduction of production and incomes in general. Also, there was a serious decline of economic activity in all sectors so that many factors of production in the rest

of Cyprus became idle with cumulative effects.

This situation was restrained through a series of general and specific measures. In the first place, the executive of Government projects, both those included in the Development Budget and entirely new projects, was speeded up. The demand created by the public sector aimed at counterbalancing, as far as possible, the reduction of demand in the private sector. At the same time, measures were taken to encourage and help the reactivation of the private sector. For example, with a view to promoting bank credits to the private sector the percentage of liquidity required from banks was reduced and a new system of penalties was introduced for banks which tended to maintain excessive liquidity. For the same purpose a scheme under which Government guarantees are provided for loans granted by banks to the private sector in priority fields was introduced. The Development Bank was assisted to issue development stock of 1 mln. for the financing of priority sectors. Bank interest rates were regulated. Subsequently, a Special Fund was created at the Central Bank, within the framework of the Emergency Plan, to finance projects in priority sectors (construction and manufacturing sectors). The initial resources of the Fund amounting to about 6 mln. emanated from the transferring to it 3 percent of total bank deposits.

(b) Unemployment

The next most serious problem created by the Turkish invasion was the unemployment problem. Following a decade of continuous full
employment conditions, the number of registered unemployment reached, after the invasion, 22,542, i.e. 11.4 percent of the economically active population of the free areas (see Table I); non-registered unemployed amounted to an equal number, while underemployment increased considerably.

In addition to various other measures taken with the object of reactivating the economy, which also helped ease the unemployment problem, concrete measures had been taken to regulate employer-employee relations. For example, with a view of regulating the problem of arbitrary and unilateral dismissal of employees by employers the Termination of Employment (Temporary Restrictive Provision) Lw, 1974, was enacted providing for the procedure and terms of termination of unemployment of staff.

(c) Foreign Exchange Resources

As a result of the fall of production and of the conditions created in general, foreign exchange receipts have also been adversely affected. Exports of agricultural produce grown in occupied areas amounted to approximately 60 percent of all such exports and 42 percent of all domestic exports. Mineral exports from occupied areas amounted to 43 percent of all mineral exports and 10 percent of all domestic exports.2 Under normal conditions tourism was expected in 1974 to yield 30 mln. in foreign exchange earnings but 16 mln. were lost despite the fact that during the first half of the year there was a

---

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Unemployed (average)</th>
<th>% of Economically Active Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1966</td>
<td>3,484</td>
<td>1.4</td>
</tr>
<tr>
<td>1967</td>
<td>2,857</td>
<td>1.1</td>
</tr>
<tr>
<td>1968</td>
<td>3,174</td>
<td>1.2</td>
</tr>
<tr>
<td>1969</td>
<td>2,703</td>
<td>1.1</td>
</tr>
<tr>
<td>1970</td>
<td>2,810</td>
<td>1.1</td>
</tr>
<tr>
<td>1971</td>
<td>2,846</td>
<td>1.1</td>
</tr>
<tr>
<td>1972</td>
<td>2,524</td>
<td>0.9</td>
</tr>
<tr>
<td>1973</td>
<td>3,314</td>
<td>1.2</td>
</tr>
<tr>
<td>1974</td>
<td>3,728 (1st half)</td>
<td>1.3</td>
</tr>
<tr>
<td></td>
<td>18,685 (2nd half)</td>
<td>9.1</td>
</tr>
<tr>
<td>1975</td>
<td>22,542</td>
<td>11.4</td>
</tr>
</tbody>
</table>

Note: Figures on the registered unemployment and the economically active population for the 2nd half of 1974 and 1975 refer to people living in areas controlled by the Cyprus Government.

Source: Ministry of Labour and Social Insurance
Haralambides T, *The Economic Consequences of the Turkish Invasion of Cyprus*, (New York, 1976), p. 63
satisfactory increase in tourist traffic.

Of course, parallel to the loss of substantial foreign exchange sources, because of the fall in purchasing power and economic activity in general, imports have also decreased with the result that the deficit in the balance of payments has been contained within acceptable limits. The expansion and development of foreign exchange sources has been a primary concern of the Government. An export guarantee scheme for the promotion of exports of manufactured products has been put into effect and co-ordinated effects were made to provide better air and other facilities for exports. Import duties on various goods, especially raw materials, have been reduced mainly with a view of lowering the production cost of exportable goods.

On the other hand, travel exchange has been reduced in order to economize on foreign exchange reserves. Also, efforts have been made to attract foreign capital and tourists, to raise foreign loans and secure grants. In several cases efforts made have been crowned with success.

(d) Situation of Public Finances

A serious arresting factor in the effort to revitalize and invigorate economic activity was the deficit in the Government budget that aggravated because of the Turkish invasion. The sharp reduction in public revenues, mainly because of the fall in private incomes, coupled with the need to increase substantially expenditure on aid to displaced persons and other needy people, led to large deficits in the State budgets. This situation limited the size of investments to be undertaken
by the State. Nevertheless, the Government did not hesitate, within the limits allowed, to proceed with investments with a view to invigorating the reduced investment activity of the private sector, while at the same time it tried to find resources from abroad to finance the desired level of investments.

(e) Reduction of Productive Capacity

Apart from the reduction of effective demand, the occupation of the northern part of the island by the Turks resulted in a substantial reduction in the productive capacity of Cyprus. For example, in the case of the broad agricultural sector, the occupied area comprised practically the entire wheat growing Mesaoria plain, the Karpass with its tobacco plantations, the rich citrus, olive and carob growing district of Kyrenia and the fertile plain of Morphou with its developed citrus groves. Apart from these enormous capital resources, other major agricultural investments were occupied by force. Capital investments in the form of agricultural machinery, animals, stockbreeding installations and equipment worth more than 26 mln. fell into the hands of the invaders. More than 45 sq. miles of citrus groves or more than 80 percent of the total area planted with such trees are facing a serious danger of irreparable destruction. As Table 2 shows the agricultural production index has been reduced from 123.0 in 1972 to 73.0 in 1975 while the production index of important crops like citrus and cereals has been reduced from 212.7 in 1973 to 55.1 in 1975 and from 110.5 in 1974 to 43.0 in 1975 respectively. Also the meat food index was reduced from 183.8 in 1973 to 98.7 in 1975.
<table>
<thead>
<tr>
<th>Weights</th>
<th>Total</th>
<th>Citrus</th>
<th>Cereals</th>
<th>Meat Food</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100.0</td>
<td>10.8</td>
<td>14.3</td>
<td>18.4</td>
</tr>
<tr>
<td>1968</td>
<td>97.5</td>
<td>122.3</td>
<td>65.1</td>
<td>111.3</td>
</tr>
<tr>
<td>1969</td>
<td>109.2</td>
<td>122.0</td>
<td>96.6</td>
<td>136.7</td>
</tr>
<tr>
<td>1970</td>
<td>105.1</td>
<td>118.1</td>
<td>52.2</td>
<td>148.1</td>
</tr>
<tr>
<td>1971</td>
<td>125.8</td>
<td>185.2</td>
<td>110.7</td>
<td>158.6</td>
</tr>
<tr>
<td>1972</td>
<td>123.0</td>
<td>166.2</td>
<td>87.8</td>
<td>168.3</td>
</tr>
<tr>
<td>1973</td>
<td>104.7</td>
<td>212.7</td>
<td>4.0</td>
<td>183.8</td>
</tr>
<tr>
<td>1974</td>
<td>106.2</td>
<td>160.5</td>
<td>110.5</td>
<td>138.8</td>
</tr>
<tr>
<td>1975</td>
<td>73.0</td>
<td>55.1</td>
<td>43.0</td>
<td>98.7</td>
</tr>
</tbody>
</table>

Source: Statistics and Research Department, Ministry of Finance. Haralambides T. *The Economic Consequences of the Turkish Invasion of Cyprus* (New York, 1976), p. 68
In the mining and quarrying sector capital installations and equipment of the order of 16 mln., i.e. about 43 percent of the total investment in this sector, were seized.

Tourism also suffered a most heavy blow. Capital investments in the tourist sector amounted to 92 mln. (hotel beds, ancillary activities). Sixty-one percent of these assets are now under Turkish control. The occupied areas comprise the two popular tourist resorts of Famagusta and Kyrenia, which before the invasion attracted 75 percent of tourists staying in hotels. As Table 3 shows the number of tourists has been reduced from 264.1 (thousands) in 1973 to 47.1 in 1975 while the number of beds has also been reduced from 10,796 in 1973 to 3,880 in 1975. We can also see here the reduction in earnings from tourism. These earnings have been reduced from 23.8 millions in 1973 to 5.4 millions in 1975.

Table 3

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tourists (000's)</td>
<td>264.1</td>
<td>150.5</td>
<td>47.1</td>
<td>180.2</td>
<td>172.2</td>
</tr>
<tr>
<td>Hotel capacity</td>
<td>13,050</td>
<td>13,050</td>
<td>13,050</td>
<td>13,050</td>
<td>13,050</td>
</tr>
<tr>
<td>No. of beds</td>
<td>10,796</td>
<td>4,682</td>
<td>3,880</td>
<td>3,880</td>
<td>5,067</td>
</tr>
<tr>
<td>Earnings from Tourism (Cm)</td>
<td>23.8</td>
<td>13.9</td>
<td>5.4</td>
<td>20.7</td>
<td>23.8</td>
</tr>
</tbody>
</table>


6 Until 6.30.1974

7 6.30.1974

8 The sharp increase in that year was mainly because of the civil war in Lebanon, and the arriving of 78,000 Lebanese refugees in the island.
In the industrial sector, apart from the destruction of a number of factories, the value of plant and machinery of the occupied industries is estimated conservatively at 36 mln. Moreover, the value of abandoned stocks of finished industrial products and raw materials is estimated at 19 mln. The main problems which affected the reactivation of the sector may be summarized as follows:

(a) The displacement of a large part of the population and the reduction of purchasing power, which substantially reduced demand for industrial products.

(b) The loss of important industrial investments of sources of raw materials for industry.

(c) The observed reduction as a result of the abnormal situation, in the financial liquidity of many manufacturing units.

Government Policy for the Reactivation of the Industrial Sector

The industrial reactivation policy, like the policy for other sectors, was an integral part of the policy intended to solve the various problems facing the country. These problems were, as stated elsewhere, the high unemployment problem, the pressing need for a more rational use of fixed capital resources, the need to secure or replace lost sources of foreign exchange, to economize on foreign exchange, and the need to increase production, especially of food and raw materials.

The strategy of the industrial programme had a strong export orientation owing to the insufficiency of domestic demand. Exports and import substitution encouraged in a variety of ways and formed an

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important feature of the policy for industrial development. More specifically, the industrial policy of the government was:

(a) The creation of as many employment opportunities as possible through the promotion of labor intensive manufacturing activities.
(b) The establishment of new and the expansion of existing export industries.
(c) The immediate reactivation of existing industrial units which either possess idle production capacity or have margins of increasing production without additional investment of fixed capital, so as to achieve full utilization of invested capital.
(d) The recovery of lost industrial production to the maximum possible extent through the speedy replacement of those productive units now under Turkish occupation which either could secure or save foreign exchange or facilitate the development of other manufacturing sectors.
(e) The establishment of industries which were engaged in the processing of domestic raw materials and by-products.
(f) The encouragement of industries which use semi-finished goods as raw materials, so as to enable them to widen their scope of activity.
(g) The greater participation of the State in new industrial investments in co-operation, mainly, with the private sector, whenever the private sector appeared reluctant to undertake these investments by itself or in cases of large investment projects or projects to process raw materials belonging to the Government.

Apart from the above measures, the Government continued to encourage the inflow of foreign capital and technical know-how with a view of promoting the development of the sector. Also a campaign took place to
inform foreign investors on the advantages of Cyprus as a centre of production for exports in the Middle East countries.
CHAPTER 4

THE RESPONSE OF THE SECTOR TO THE GOVERNMENT POLICIES
AND TO NON-POLICY EVENTS

Introduction

The purpose of this chapter is to present the leading industrial sub-sectors which led the development of the broad industrial sector after the Turkish invasion of 1974. I divided the chapter into two parts. In the first part, I examine what measures the Government took at that critical period to help in the reactivation of the sector. Also I present some non-policy events which played a very important role towards industrialization in the aftermaths of the invasion. Changes in the political conditions during the last five years in the Middle East region gave great opportunities to the Cypriots. Also I make a detailed reference to the major industrial units of the country, and I give special emphasis to the prospects of each activity and the problems that are likely to be encountered in the near future.

Industrial Reactivation Policy

As I mentioned earlier in this study, several reasons contributed to the industrial expansion of the country after the 1974 war. If someone examines the data on industrial production, he will see that the progress of that sector was impressive. In the early days of 1975 the Government of Cyprus gave great significance on the exportation of industrial goods. This policy on exports was aiming at the full exploitation of the geographical location of Cyprus (geographically, Cyprus is in the middle of Europe, Asia and Africa), its relatively
low labour cost and the availability of well trained force, which at that time, was idle. These efforts to strengthen and enlarge production for exports succeeded mainly because of: (a) The promotion of labour intensive industries such as clothing, footwear, leather goods, assembly units and industries processing semi-finished goods. (b) The promotion of the production of goods made from local raw materials of high quality. (c) The production of handicrafts.

The effort to promote exports was multi-sided and intensive. The reopening of the Suez Canal at that critical period, presented a great opportunity for Cyprus and the commercial opening to the Arab countries was a very important step towards industrialization of the country. In addition attempts have been made to promote exports to the countries of Western and Eastern Europe. The Government also established trade centers in certain foreign countries for this purpose.

As already mentioned, to facilitate financing, especially for industry, the Government devised a scheme which had been implemented successfully and which aimed at facilitating the financing by banks of those firms the establishments, resumption of activities, expansion or continuation of operations were difficult due to the insufficient liquidity of lack of capital. Under this scheme the Government was guaranteed their financing under certain conditions. Moreover, the Government established a special fund through the transfer to it part of Bank's liquidity, so as to enable the granting of additional financ-

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ing facilities for the erection of industrial buildings and the purchase of other items of fixed capital. Also, the Development Bank took a more active role in the efforts to reconstruct the economy and the provision of technical assistance to industry.

Other measures that the Government took for that purpose were the following: (a) It prepared a new legislation for the grant of tax incentives to industry. This measure played an important role for the expansion of the sector in the aftermaths of the Turkish invasion. (b) It financed the participation of industrialists in specialized exhibitions abroad, investigated in depth the effects on exports in general of factors unrelated to the competitiveness of Cyprus products, and took the necessary measures. (c) By the end of 1974 the Government started an intensive publicity campaign for the promotion of sales of Cyprus industrial products in the local market. Also, at the same time, a special publicity campaign took place abroad with a view to projecting the advantages of Cyprus as a country suitable for foreign investments. (d) Another important measure for the expansion of industry was the "Export Credit Guarantee". Through this scheme, which has been in operation since February, 1975, the Government provides to exporters cover for certain risks regarding approved products. The cover extends up to 90 percent of the value of exports. (e) One other program that the Government implemented in cooperation with the United Nations is the Industrial Extension Service. This program, which has been in operation since 1974, assists industries to adopt modern methods of production. In this connection industrialists were given advisory services on a wide variety of matters, such as the choice appropriate
mechanical equipment, the maintenance of existing ones, production planning, simplification of production methods, the rational use of raw materials, etc. During the period of the Emergency Plan (1975 - 1976) priority manufacturing sectors received special attention. A special footwear centre equipped with machinery in the application of modern methods of production and the adoption of quality control procedures established in cooperation with industry and a specialized training course for the higher managerial and production staff organized. Clothing manufacturing industries also assisted to improve the designs of their products by inviting to Cyprus specialists in the field.

Apart from these reasons I have mentioned above, the political and economic breakdown in the neighboring Lebanon, which was one of the main sources of imports for the Arabian oil rich countries, gave a great opportunity to the Cypriot industrialists to exploit that market. Today we can say that the Cypriot industrialists did very well in this area.

Main Industries Today---Prospects and Problems

Before I start analyzing the problems and prospects of the major industrial units of the country, I present a very interesting table which portrays the sector's absolute and relative position in the economy during the period 1973-1980. As the table shows, both output and value added by manufacturing have tripled since 1973, raising the sector's share in the Gross Domestic Product to 17 percent in 1980, from 14 percent in 1973. Fixed investment expenditure has also followed a steady, upward trend, but as a proportion of total fixed capital formation has been declining since 1977. Exports of manufactured goods staged an
### TABLE 1

A Portrait of the Manufacturing Sector 1973-1980

<table>
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<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Output - (Cm.)</td>
<td>111.4</td>
<td>112.3</td>
<td>105.3</td>
<td>163.4</td>
<td>209.5</td>
<td>243.8</td>
<td>292.0</td>
<td>348.0</td>
</tr>
<tr>
<td>Value Added - (Cm.)</td>
<td>43.3</td>
<td>38.4</td>
<td>36.8</td>
<td>53.7</td>
<td>70.3</td>
<td>85.4</td>
<td>102.0</td>
<td>119.0</td>
</tr>
<tr>
<td>as % of G.D.P. (at factor cost)</td>
<td>14.0</td>
<td>13.6</td>
<td>15.2</td>
<td>17.0</td>
<td>17.4</td>
<td>17.9</td>
<td>17.3</td>
<td>17.0</td>
</tr>
<tr>
<td>Capital formation - (Cm.)</td>
<td>8.0</td>
<td>10.0</td>
<td>6.6</td>
<td>9.8</td>
<td>20.4</td>
<td>24.1</td>
<td>26.5</td>
<td>30.0</td>
</tr>
<tr>
<td>as % of Total Capital formation</td>
<td>10.0</td>
<td>15.0</td>
<td>17.4</td>
<td>15.7</td>
<td>17.0</td>
<td>14.0</td>
<td>12.4</td>
<td>11.5</td>
</tr>
<tr>
<td>Exports of Manufactured goods - (Cm.)</td>
<td>15.0</td>
<td>18.3</td>
<td>24.0</td>
<td>47.7</td>
<td>65.2</td>
<td>69.9</td>
<td>86.3</td>
<td>105.0</td>
</tr>
<tr>
<td>Index of Industrial Production</td>
<td>100</td>
<td>76</td>
<td>67</td>
<td>86</td>
<td>101</td>
<td>111</td>
<td>120</td>
<td>128</td>
</tr>
<tr>
<td>Index of average rates of pay</td>
<td>100</td>
<td>115</td>
<td>117</td>
<td>128</td>
<td>159</td>
<td>196</td>
<td>253</td>
<td>303</td>
</tr>
<tr>
<td>Index of average real rates of pay</td>
<td>100</td>
<td>99</td>
<td>97</td>
<td>103</td>
<td>119</td>
<td>135</td>
<td>159</td>
<td>180</td>
</tr>
<tr>
<td>Employment - No. of persons as % of the Economically active population</td>
<td>38,019</td>
<td>30,967</td>
<td>24,833</td>
<td>30,406</td>
<td>33,731</td>
<td>36,795</td>
<td>37,850</td>
<td>38,200</td>
</tr>
</tbody>
</table>
| 4 Including Cottage Industry
| 5 The Year 1973 represents the Pre-invasion Period
| 6 Source: Department of Statistics and Research, Ministry of Finance, Newsletter, Volume 4, No. 4, p. 12.
impressive growth, from C 15.0 m in 1973 to about C 105.0 m in 1980.

In the pages that follow a detailed reference is made to the major industrial activities today, with particular emphasis on the prospects of each activity and the problems that are likely to be encountered.

**Clothing**

The value of gross output of clothing in 1980 amounted to C47.5 m., i.e. it was constituted approximately 14 percent of total gross manufacturing output.

Employment is expected to remain at the level of the previous year, i.e. at 8,700 persons. A recent development is the shift of workers from smaller units, which are currently facing a crisis, which is likely to be protracted, to larger industrial units. The contribution of clothing to the Gross Domestic Product in 1979 was C15.5 m., and, according to estimates, it will approximate C18 m. or 15 percent of total value added in the manufacturing sector.

Domestic demand could be fully satisfied by local production. If this is not 100 percent the case, it is only due to the fact that part of the consuming public prefers imported goods which are, however, incomparably more expensive and of doubtful superiority compared to the local ones.

**Exports**

The main problem this industry now faces is that customs and quota restrictions imposed by the United Kingdom would adversely affect exports, especially by small units. In general, the European market requires an organized and planned approach. It is selective market where consistency
is crucially important; the products should be delivered in every detail in accordance with orders, in regard to colour, time schedule and the like.

In the case of the Arab markets, certain manufacturers-exporters succeeded, on a personal basis, to secure the preference of Arab merchants despite strong competition on behalf of Far Eastern countries. This was made possible, thanks to their readiness to adjust to the Arabs' preferences and to execute extraordinary orders, however small in volume. The countries of the Far East do not offer such an advantage, and are unwilling to respond to small orders.

Exports of clothing, which registered a spectacular growth in the last three years, rose to C28 m. by the end of 1980 and represents about 18 percent of total domestic exports. The corresponding exports for 1979 were C22.1m. and a bare C2.1m. in 1973. The most important markets for Cyprus clothing are, by order of size, the United Kingdom, Libya, West Germany, Kuwait, Denmark and Saudi Arabia.

The main problems faced by the sector in the last few years were:
(1) The shortage of local raw materials, which is of a permanent nature. As a consequence, producers have had to commit substantial part of their funds in the form of inventories.

Meanwhile, the clothing sector is strengthened and broadened with new weaving units, the extension of existing synthetic fibre spinning mill, and the expansion in the range of facilities offered by the dyeing units. On the other hand, the knitting industry in Cyprus which is steadily surging ahead, has successfully countered foreign competition in the domestic market and penetrated in quite a few markets overseas.
(2) The disproportionately high rises in labour costs reduced competitiveness in the foreign markets, particularly in Europe, and exercised a restraining influence on production. Even though wage demands are still high, after the experiences of the last two years, and against the background of economic recession, labourers and trade unions are beginning to realize the repercussions of the incipient recession. A shift of workers is taking place from smaller to larger units, for more professional security; the fact that the rate of shift of units of doubtful viability has been minimized, is conducive to the improvement of labour productivity in the bigger units.

Footwear

During the last five years footwear manufacturing has experienced growth. Employment in the sector is presently of the order of 2,500 persons, showing tendencies, as in the case of clothing, of concentration in large units. Gross output has been steadily rising and in 1980 exceeded slightly C19 m., compared to C14.6 m. in 1979. The contribution to the sector's Gross Domestic Product in 1980 was C7.2 m., or a share of 6 percent, i.e. almost C2 m. above 1979's level. The successful record of footwear manufacturing was made possible thanks to high quality, which is in no way inferior to the European, the full coverage of the Cyprus market, with the exception of a small class of consumers, and the meticulous market research conducted by the Cypriot manufacturers themselves.

It is obvious from the above table that the growth in the exports of manufactured goods was impressive. If we compare the years 1973 (which belong to the pre-invasion period) with 1980 we can see that the value of the exports rose from C15.019 m. in 1973 to C105.0 m. in 1980.
Food preserving and canning

With 350 units, the sector is the second largest, after footwear and clothing. Total employment fell to 4,000 persons from an average of almost 5,200 persons in the period 1970-74, mainly through the introduction of modern machinery.

The sector received a severe blow as a result of the Turkish invasion and the capture of important sources of raw materials, like citrus and cereals. Although it was quickly re-activated, some problems remain still unresolved. More specifically, the 14 large units engaged in fruit and vegetable preservation face difficulties in securing a regular supply of raw materials, caused by competitive, mainly foreign demand for fresh products or by poor harvests. Furthermore, there are some varieties of fruit, vegetables or legumes (peas, mangoes, haricot beans and others) which are in great demand if preserved, but are not at present produced in sufficient quantities in Cyprus and, as a consequence, have to be imported.

At the present stage, it can be said that the industry is experiencing difficulties. In 1980, the output of preserved fruit fell by about 20 percent to 2,700 tons while that of preserved vegetables declined by almost 40 percent to 2,550 tons. Their respective prices have risen by 6 percent and 15 percent over those of 1979.

The output of juices and fruit drinks, on the other hand, was 8,500 tons, or an increase of 30 percent over 1979; but prices fell significantly. Jam and marmalade production is steadily increasing, while pickle production is improving its share of the total, thanks to strong local demand and to competitive prices. The total value of gross
output of this activity in 1980 was of the order of C4 m., i.e. 10 percent below that of the preceding year, reflecting the various problems facing food preserving and canning.

The gross output of special food items, such as preserved coffee, carobs, different types of oil, feeding stuff, salt, and bakery products is substantial. However, its value added, as a ratio to gross output, is relatively low and is in the region of 20 percent.

Finally, there are about 10 large and 20 small units engaged in meat preservation, mainly pork. The sausage producing units, with a wide range of products, satisfy almost entirely the domestic market. The possibility of producing beef sausages could promote exports to the Arab countries. On the other hand, the venture of quail exports has begun to produce results.

**Dairy Products**

Cheese production in Cyprus has a long tradition, as confirmed by historical evidence. At present there are 66 dairy product units employing 500 persons; half of them are engaged in cheese production and account for 40 percent of total employment. One of the fundamental problems facing cheese producers is regular supply of milk in sufficient quantities. This is caused by the strong demand for milk by the 15 yoghurt producers, another 15 ice cream manufacturers and 4 large milk pasturizing units. With external demand for dairy products steadily on the rise, the question of supply becomes still more acute.

In general, the sector of food preserving, canning and dairy products is facing problems related to the supply of raw materials and the cost of production. Most of these problems could only be overcome if
agricultural production moved in harmony with the sector's growth, but this important problem is not the object of this study.

With the gross output and value of the broad sector rising at an average annual rate of approximately 10 percent, in the year 1980 the value of gross output of food products was approximately C47 m. and that of dairy products C11 m. Exports are expanding at a rather faster rate and are provisionally forecast at about C9.5 m. It should, nevertheless, be stressed that their future depends, to a great extent, on the problems mentioned earlier as well as on the quality and prices of the products, which should remain competitive.

**Beverages**

Vine growing is one of the oldest agricultural activities in Cyprus and wines have a life-span of about 30 centuries. Nowadays, Cyprus boasts first place in per capita wine production in the whole world. The wine industry is vigorous and adequately organized; its products are excellent quality, guaranteed by tradition, modern laboratory equipment and the long experience of its personnel, both at the scientific as well as at the other levels. The industry is not entirely without problems, such as rising production costs, which are further exacerbated by ever-increasing labour costs. However, this is a problem affecting almost all wine industries in the world and, consequently, it is not a very acute one. A more acute problem is the question of customs duties imposed on Cypriot wines by importing countries, which determine, to a great extent, their marketing and promotion.

In particular, the recently introduced new customs regulations by the European Economic Community in favour of Spain, a candidate for future
membership, enabled Spanish sherry to penetrate the British market. The impact of this development was that Cyprus sherry manufacturers faced problems in selling it in the traditional market of Great Britain. The repercussions on sherry output were immediate: production in 1980 has dropped to 12 m. litres, i.e. approximately 70 percent of sherry production in 1979 and 55 percent of that of 1978. The problem, therefore, causes serious concern. It could perhaps be advisable for Cyprus to seek preferential treatments, given that the EEC has authorized the United Kingdom to retain such an arrangement with its traditional markets, which are members of the Commonwealth. Moreover, the Cyprus sherry has been tested for decades and its reputation has been deservedly high; therefore, it would not be difficult to market it in other countries as well, such as East and West Germany, Sweden, Switzerland and others.

The gross output of the alcoholic and non-alcoholic beverage industry which employs about 1,700 persons, has reached the amount of C24 m., of which C7.7 m. was their contribution to value added. The outlook for the future hinges significantly on marketing and promotion. Nevertheless, there are several markets from which Cyprus imports goods without exporting to them almost anything (Japan, U.S.A. and others). It would, perhaps, be worthwhile to try to persuade these countries to reduce, to some extent, their favourable trade deficit with Cyprus by importing wines.

Cigarette Manufacturing

The Turkish invasion and the capture of Karpass peninsula in 1975 deprived the industry of its only local source of raw materials. But the efforts to cultivate tobacco in the Government controlled areas, especially in the north part of Paphos district (Polis Chryso-
chour and Pomos) have already met with success. Foreign experts have confirmed that the quality of tobacco leaves produced there is comparable to, if not higher than, that of Karpass tobacco; hence, no problems have been experienced in blending imported with local tobacco.

Automation introduced in the last few years has been impressive. The departments of processing, cutting and wrapping of tobacco, as well as the methods of adding the filter tip, operates on modern lines comparable to those of foreign tobacco manufacturers and in accordance with international standards.

Total employment in the sector approximates 580 persons and is rising at a slow pace; specialization in the entire range of production techniques and training in the use of new machinery are a permanent feature. The volume of production in 1980 remained at the level of the previous years, i.e. at 2.9 billion cigarettes but its value was in the region of C9.6 m., i.e. 4 percent higher than that of 1979. The volume of exports and its destination is conducted in coordination with associated foreign companies, while local demand, which is relatively small importance, is fully satisfied. It can therefore, be concluded that the sector's future depends mainly on the promotion of exports to other countries.

Furniture

Despite the losses inflicted by the Turkish invasion, in the form of installations and equipment, the sector was quickly reacti-

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8 The Cyprus Popular Bank, Newsletter, Volume 4, No. 5, September-October 1980, p. 13
vated. An important contributory factor was the rapid rate of growth of the construction sector generated by the erection of thousands of new housing units and the need of displaced persons to replace their lost furniture. Furthermore, in the last four years the sector was also favoured by the spectacular expansion of tourist installations.

At present, there are 80 large units in operation employing, on the average, 14 persons each. Notwithstanding the introduction of modern automatic machinery and equipment, an important problem remains unresolved; the ability to adjust to mass production conditions while they could also produce the various models which are currently in demand.

In addition to the large units, there are also 44 small units which are in a position to cope with any type of small orders of any specifications; their contribution to the sector's value added is in the region of 40 percent. The large units solve most of their problems by channelling small orders to small units, because it would be costly for them to divert from their own programme of work.

Export margins can be widened. However, intensive studies and research should be carried out in the foreign markets coupled with visits to international trade fairs and state encouragement and assistance. The rich and valuable experience acquired by the sector in the last six years renders it able not only to advance in the already emerging markets of Europe but to respond positively to the substantial needs of the neighbouring Arab states which are likely to show interest in such articles.
Chemical Products

In the aftermath of the Turkish invasion, the important Arab market proved of vital significance to the chemical products industry. Nevertheless, a wrong start was made, as a result of which a substantial quantity of products exported were of doubtful quality and poor packaging. At that stage, the responsible authorities could not intervene to set appropriate criteria for quality because the encouragement of the export drive was then of primary importance. As a consequence, whereas in 1977 exports of chemical products were of the order of C3.5 m., in two years' time they fell by C2 m. The most hard-hit group was cosmetics.

Since then, however, the large units engaged suitably qualified personnel and are conducting special research. Gradually, the quality and the method of packaging has improved, while at the same time efforts are under way to broaden the spectrum of production with the addition of new chemical products. As quality is improving, the prospects for further reactivation and even expansion of exports to the Common Market is a difficult task for a basic reason: it would be extremely costly to promote (advertise etc.) and thus persuade the Europeans that the Cyprus products are almost or as good as their own.

One fundamental problem still facing the Cypriot manufacturer is that he is still mainly engaged in the final stages of the production process. An attempt at vertical integration is deemed necessary. Such an effort would contribute to an increase in the value added of the product while at the same time it would reduce the risks from the
competition of similar industries in other countries which also specialize in the final stages of the production process.

Organic or inorganic chemicals, fertilizers, medicinal and pharmaceutical products would enhance the prospects of the branch both in the production as well as in the exports sphere. It need not be overemphasized that the manning of the sector with specialist scientists and the production of items in accordance with international standards are indispensable elements for the efforts to succeed.

Exports in 1980 expanded appreciably and reached C3.5 m. (in 1973 C.172 m.). This is mainly ascribed to the successful promotion, mainly of insecticides in Iraq and to a lesser extent, of cosmetics in Saudi Arabia and Libya.

**Paper Products and Printing**

The manufacture of paper and carton products began several decades ago but its output remained at a low level for a long time. The few items produced were neither of superior quality nor of lower price, compared to imported ones.

The printing industry, with a long tradition too, was in a better position. Despite the fact that it was made up of very few large and numerous small printing units, its gross output was significantly higher for the period 1960-73; it was 4½ times higher than the corresponding output of the paper industry.

The above picture has been gradually changing, particularly after 1975. Large paper and carton units equipped with modern machinery were established producing all types and sizes used in packing and preserving either for the domestic market or for direct export.
The expansion in cigarette, shoe and other similar manufacturing activities boosted the demand for a side range of such products, from paper boxes and packets to corrugated paper.

The need for printing, design and, generally, an attractive appearance of these items contributed towards a further expansion of the printing sub-sector. Thus, with the introduction of new technology, lithography, off-set and others, the sector maintained its upward trend.

The sector of paper products consists of 38 units employing 750 persons. Only one unit employs more than 300 persons, and the majority of the other units are engaged in the production of paper articles, such as for packing and wrapping, toilet paper, etc. There are approximately 160 printing units with a total employment of 1,500 persons. Only two of these units employ more than 200 persons each, while 90 of them are small printing offices.

The total value of the gross output of the sector in 1980 was C20 m., of which 41 percent was its contribution to the Gross Domestic Product.

The industry is presently operating on a sound basis. The superior quality of its products, which conforms with international standards, and strong demand from abroad, are not chance events. Besides its modern methods of production, the industry has set up research departments for the development of new types of products which would be attractive in appearance and/or of higher resistibility, depending on the consumers' preferences. Moreover, techno-economic consultancy is also provided, covering economic and safe packaging
ideas for designs, colours, etc.

Direct exports of paper boxes for 1980 were expected to approximate C7.5 m. compared to C.331 m. in 1973.

The outlook for the sector is optimistic. Investment in new equipment, such as the gravure type, which prints simultaneously five or more colours, will multiply production capabilities. This form of automation will not lead to personnel redundancies, given that new investment projects presently under consideration will offer new employment opportunities, after a short re-training of the personnel for the use of the new machinery which is to be imported.

Plastics

The plastics industry was severely hit by the Turkish invasion, at a time when it was expanding at a rapid rate, despite its young age. The technical know-how, however, was not lost. The experienced personnel were re-activated and financing for its re-activation was promptly provided.

Nowadays, the sector is undergoing dynamic expansion, although significant problems remain unresolved. The simultaneous activation of other sectors provided a strong impetus to the demand for plastic pipes and other plastic products, thus strengthening their position in the domestic market.

The problems facing the plastic industry relate mainly to storage and sea transport. The establishment of a free port would benefit the plastics industry, which has to convert a sizeable part of its available space to stores, to maintain high inventories for consid-
erable lengths of time, thus committing to these purposes a substantial part of its working capital. The question of transport, on the other hand, both with regard to raw materials as well as with regard to exports, is a serious impediment to the normal operation of the sector. Another emerging problem is the price of oil, which is exerting an upward pressure on the prices of plastic products.

Finally, the export drive is increasingly directed towards Europe rather than towards the Arab countries. This is because there are no high import duties on plastics imports to Europe, production and labour costs are by far higher than in Cyprus, and transportation facilities are readily available. On the contrary, in the case of the Arab countries, both transportation as well as freight charges are a serious impediment.

Non-Metallic Products

This category of activity, consisting of units producing cement, bricks, mosaic tiles, asbestos pipes, gypsum and lime, played an important role in the aftermath of the Turkish invasion in the general effort to satisfy the resultant huge housing needs. As a consequence, its contribution to gross output rose substantially and its value added as a proportion to the Domestic Product has been steadily increasing. The above two magnitudes in 1980 were of the order of C33 m. and C15 m. respectively.

The two big units producing cement employ at present more than 700 persons. Their gross output in 1980 was slightly over C21 m., while their value added was in the region of C9 m., i.e. one-fourth
higher than that of 1979. This significant increase was brought about by higher prices both in the domestic market as well as in the foreign markets rather than by an increase in the volume of production, which expanded by only 3 percent in 1980, to a total of 1.15 m. tons.

The high quality of Cyprus cement and the proximity of the country to the Arab markets which entails low transport costs and incomparably quicker service, were sufficient for paving the way to such markets. One characteristic of the Arab market is the appearance, in succession, of one important Arab market after the other. Thus, Lebanon and Saudi Arabia followed Syria; Egypt emerged later, to be followed during the last two years again by Syria.

Total exports of cement in 1980 reached the amount of C13 m., as compared to C10.3 m. in 1979.

The production of asbestos pipes, which started a few years ago has exhibited growth capabilities. With local raw materials amply available (asbestos, cement), their value added content as a ratio to gross output is as high as 60 percent. Demand is buoyant, since various important projects are under way, such as sewerage systems, road construction, water supply and irrigation and others; meanwhile, there is evidence of demand from abroad.

Machinery and Equipment

Water pump production satisfies fully the small domestic market and, following a relevant survey, its products are in considerable demand in several African countries. Two major problems were encountered: Firstly, exchange difficulties were faced by importers,
as a consequence of strict exchange controls imposed by the Governments in importers' countries. The problem was resolved in most cases, such as Zambia, Nigeria and Sudan, where a number of positive measures were taken, among which the joint guarantee for such transactions by the Central Bank of Cyprus and the countries concerned (in the form of facilities regarding repayment period). The second problem which remains unsolved is sparse communications, exerting a strong upward push on freight charges till final destination. However, the total exports in 1980 reached C1.8 m., as compared to C.345 m. in 1973.

New markets in the Asian area, such as Saudi Arabia, Iraq and other countries, are of equally great interest. Agreements signed with large international companies, such as German, providing for imported engines to be equipped with metallic frames, pumping system, accessories and other similar mechanisms for re-export, can be regarded as notable achievements. The extension of these agreements will secure still brighter prospects for this branch of industry.

Another main item in this sector, industrial refrigerators, have registered a significant increase in production. The technical expertise of Cypriots in this field compares favourably with that of the Europeans and the progress achieved is considerable. With exports in 1980 approaching C0.6 m., the prospects of sales promotion in the warm climates of the Middle East and Africa are enormous, provided that research is conducted on a systematic basis.

Prefabricated Buildings

The idea of producing prefabricated buildings and other structures is not novel. However, it was only applied on an appreciable
scale in the aftermath of the Turkish invasion when the need to accommodate 200,000 displaced persons was pressing and the alternative of temporary and low-cost housing units was the most expedient.

In general, prefabricated dwelling units are practical and low cost. Since a significant part of the population, belonging to the middle and low income brackets express a strong demand for housing units, prefabricated buildings may be a good proposition. In addition, there is growing demand for this type of buildings for use as country-homes. The margins for expansions become much wider, reckoning the huge housing needs in the war-stricken Middle East region.

Although the housing needs in the Middle East are higher compared to earlier years, exports of prefabricated buildings from Cyprus in 1980 were lower than the previous year's exports (C2.6 m.). It would, therefore, be advisable that the issue be thoroughly studied and research be conducted on a permanent basis.

**Metallic Products**

The rapid expansion of the construction sector provided a strong impetus for the manufacture of metallic pipes and the production of door, window and other frames of aluminum. Furthermore, the upsurge in other industrial sectors produced the preconditions for the establishment of units for the production of metal boxes.

The recent slow-down in the rate of construction activity is causing problems to the producers of metallic pipes, whose number has in the meantime risen substantially. The alternative of channelling the products to the foreign markets would give rise to transportation
problems, despite the fact that the construction prospects in the wider Middle East region are in general promising.

The units specializing in the manufacture of aluminum products have been favoured by the modern tendencies of building rather simplified dwelling units as well as prefabricated houses. Demand for aluminum frames remains buoyant, the number of aluminum products is ever-increasing and the outlook for exports is encouraging. Exports in 1980 expanded substantially and reached C3.5 m. compared with C1.160 m. in 1973.

Transport Means

The motor vehicle industry, which came into being towards the end of the 1960's as an assembly unit, mainly of buses, developed into a complete industry and attained international recognition within five years. This achievement was made possible through the expansion of its activities to the design stage and its ability to complete the production process in accordance with international standards.

With the prices of imported vehicles constantly on the rise, demand for domestically produced vehicles has been increasing and is presently almost fully satisfied. Demand from the Middle East and Africa is even stronger. In order to utilize fully the strong foreign demand, which is due to the privileged geographical position of Cyprus and the good name, which is not unrelated to the reasonable price of the Cypriot transport vehicle, the industry should maintain substantial stocks.

Steady technological improvement has raised the ratio of value
added to gross output to one-third. This ratio is forecast to rise still higher, thus rendering the industry more robust, if:

(1) More advanced technology is steadily introduced in the production process, and

(2) A smaller number of engine variations is produced. This would permit mass production, with the main objective of energy conservation.

The prospects of the industry are indeed good, but they could even be better if the conditions became more favourable; the extension of the urban bus network and satisfactory solution of the problem of sufficient stocks, would improve the degree of response, even in cases of unexpected demand. However, as a consequence of the above-mentioned circumstances, exports of motor vehicles are fluctuating; whereas in the two years 1976-77 their value averaged almost C1 m., in the following two years, which coincided with the shift in emphasis to the local market, it dropped to C0.2 m. Recently, the industry has managed to respond more satisfactorily to demand from abroad, such as from Greece and the Arab countries; hence, exports in 1980 reached C0.8 m. compared to C.085 m. in 1973.

**Solar, Electrical and Electronic Equipment**

The solar heater is nowadays widely used for the production of hot water for domestic use. The long periods of sunshine in Cyprus constitute a significant source of energy which should be fully utilised.

In Cyprus there are at present numerous manufacturing units producing solar heaters, some of which have attained a high degree of
efficiency. The steady increase in oil prices has prompted a substantial number of households to appreciate the need to install such solar equipment. Two measures, however, which would be of decisive importance in this respect are:

9 (1) Tax incentives, at least for those who intend to replace the existing heating installation and, consequently, will sustain the cost of the change, and

10 (2) The existing producing units should be encouraged to conduct research with a view to developing additional methods of utilizing solar energy, such as solar central heating, the heating of terraces and floors by sunbeams, etc.

The production of electric products, especially batteries, telecommunication equipment and electric plugs, has been expanding appreciably. The units engaged in such production import the raw materials and components and are only involved in the final stages of the production process. Motor car batteries satisfy fully the ever increasing local market and are gradually becoming known in the Middle East region. Although exports in 1980 remained at the previous year's level of Co.35 m., there are indications that they will increase in the future. (1973's exports were at the level of C.013 m.).

Sophisticated electronic products could have an even brighter future in Cyprus. This is so, not only because demand for them is

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9, 10 The Cyprus Popular Bank, Newsletter, Volume 4, No. 5, September-October 1980, p. 22.
very strong, but also because they offer employment opportunities to experts and technicians, of whom there are numerous in Cyprus.
CHAPTER 5

FUTURE PROSPECTS AND PROBLEMS OF THE SECTOR

The prospects of the sector the last five years were very good. Today, these prospects remain good, but the Government and the private sector should start working together in order to face possible problems that may arise in the near future. In this final chapter of this study I will analyze some important problems and I will also examine the prospects of the sector today.

Employment - Productivity

Industrial training, re-training and specialization in the use of newly introduced technology are of primary importance for steady rises in productivity, which meanwhile has dwindled to the low figure of 3.6 percent in the past year. The Industrial Training Authority and the Productivity Centre, following closely the emerging needs of the manufacturing sector and expediting their programmes, are expected to play an increasingly significant role in this field.

Wage demands are expected to influence the competitiveness of manufacturing products, unless an agreement is reached between the three interested parties, the government, the employers and the employees, which should be in harmony with real per head increases in output.

Employment during the next three years is forecast to continue to rise at an annual average rate of 3 percent; the stabilizing
tendencies, in the form of shifts to more productive and remunerative activities, are also expected to continue.

Production

The fundamental problems connected with production are:

(1) Full utilization of available local raw materials. A start has already been made. The endeavour can be pursued further by setting up units of bentonite, lime, ceramic tiles, terra umbra, even processing of leather and carobs. However, such steps should be preceded by feasibility studies, including the search for stable foreign markets. The present scale of processing of some raw materials, such as clay, sulphuric acid, salt, asbestos, etc., could also be extended.

(2) Rational structure of units by size and location. Undoubtedly, the small units contributed positively towards the solution of several problems; they have moderate unemployment, while at the same time they have been of help to the large units. However, on account of the many problems confronting them, mainly due to their small size, they exercise a restraining influence on the sector's growth rate. For this reason, the responsible authorities should conduct regular assessments of the optimum number of such units. The encouragement of small units to merge into bigger ones could be considerably promoted, in the first place, through tax incentives and parallel Government concerted action.

On the other hand, a unit may grow in size, provided of course its relative magnitudes, such as value and volume of exports which contribute to the sector's expansion, also grow in size.
It goes without saying that action should be taken by the competent authorities to control the expansion of negative factors, such as pollution.

Turning now to the establishment of units near the sources of raw materials or idle manpower, such a step should be accompanied by the necessary infrastructure, in case they are not already available. (3) Less Products and greater vertical integration. The efforts to reduce the number of products would raise the degree of specialization, thus exercising a restraining influence on production costs. It would, certainly, be recommendable that any such decision be preceded by a thorough study of its implications. Finally, the highest possible integration, which would contribute to increased value added, should not only be pursued by the existing units but should also set as a criterion for prospective units.

Investment Plans

The most important factor impeding the sector's upward trend is the slow-down in the rate of new fixed investment. The value of new fixed capital formation in the sector has been rising at a rapid rate until 1977; thereafter, it has declined to an average annual rate of 15 percent. Provisions for depreciation continue to increase at a steady pace, while capital stock is growing by approximately equal absolute amounts.

For the revival of fixed investments in the sector it is not sufficient for the sector to be relieved from the heavy tax burden which (including special contribution) as a percentage to profits is
presently the highest in Europe. Some obstacles should be removed and some constructive initiatives should be encouraged and backed.

The promotion of industrial projects should be the duty of a special service within the Ministry of Commerce and Industry which should be adequately manned to ensure speedy and rational implementation. Such a service could coordinate the efforts of enlightening and guiding prospective investors. Admittedly, there is today a multitude of problems that should be tackled. As an example, one could mention the need to broaden the provisions of the Companies Law, the risks inherent in an excessive increase in the price electricity for industrial purposes and the inflexibility of the customs regulations which encourage the establishment of many inefficient units in a saturated sector.

An increase in the number of public companies will, as already pointed out, render borrowing directly from the private sector possible. In this respect, the state could initiate some action in cases where the private sector may be rather reluctant to step in.

In addition to the protection extended to some industries, the state should also set some medium-term objectives which these industries should be asked to further. Thus, they will be able, at a future date, to stand on their feet, while the state would be in a position to divert its attention to other units which would be in need of such support.

Finally, the criteria for the establishment of a unit and the methods of financing it should be applied on a selective basis and be revised from time to time in accordance with current economic policy.
Exports and Their Contribution to the Expansion of the Manufacturing Sector

As it has been mentioned several times earlier in this study, in view of the small size of the domestic market, the only alternative for sustained growth of manufacturing output is promotion of exports to foreign and stable markets. The stability of demand will also be a function of the degree of differentiation in as many select foreign markets as possible.

Marketing

The prices of manufacturing products are of vital importance to the further development of the sector. Regarding price control, however, it should be emphasized that such a control for a group of widely consumed goods or for products temporarily under protection would be sufficient. The efforts to extend price controls to other goods of lesser demand, would on the one hand be injurious to the concept of free competition while on the other hand it would entail additional administrative costs, for the extra staff to be recruited to ensure implementation of the relevant regulations.

Conversely, state encouragement and care for steady qualitative improvements would render locally produced goods more competitive vis-a-vis the imported, both in the domestic as well as in the foreign markets.

Export promotion, as I already pointed out, should be thoroughly looked into by the authorities. Exports of manufactured goods, which reached C105 m. in 1980, will face a host of problems in the future, such as competition from the Far East and quantitative restrictions
in the EEC region. The establishment of an Export Promotion Council to co-ordinate marketing activities would, hopefully, render the whole endeavour more effective.

Summary and Conclusions

Summarizing the main points of my study, I would say that by the end of the pre-invasion period the industrial sector made quite satisfactory progress. On the other hand, it was evident that the sector was still playing a relatively small role in the economy even by standards of other developing countries.

After the Turkish invasion of 1974, which halted the upward trend of the whole economy, the Government took some important measures for the reactivation of the manufacturing industry. These measures, along with some non-policy events (Civil War in Lebanon in 1976, opening of the Suez Canal), played a very important role towards industrialization. Today, the manufacturing sector is playing the most important role, after the tourism industry, in the economy of the country.

As I stated elsewhere, most of the country's economic problems stem from the Turkish invasion. Cyprus, because of its small size and uneven distribution of natural resources, had an interdependent, integrated and balanced economy. Therefore, the artificial division of the island's economy, which resulted because of the invasion, has hampered development and undermined progress. The best answer to these problems is the return to a united economy. The domestic market of 637,000 people is too small and any attempt to divide it will only create inefficiency and economic backwardness.
In the particular case of industry, after seven years of impressive growth, some problems have arisen. High wage demands influence the competitiveness of the products. Productivity dropped to low figures in the past year. Another problem is the decline in fixed investments as a proportion of total fixed capital. Also, exports of manufactured goods will face difficult problems in the future, such as competition from the Far East and quantitative restriction in the Common Market region. So, although the Government reactivation policy after the invasion has succeeded and the growth of the sector was impressive, these problems start to influence its upward trend. The Government should revise its policy in accordance with the current economic conditions. It must take into account the quantitative restrictions in the E.E.C., and the high competition from the Far East countries. It would be advisable that the responsible authorities, the private sector and the labour unions should start working together in order to face these problems.
Bibliography


Industrial Production Survey, 1973 (Nicosia, 1974)

Industrial Production Survey, 1976 (Nicosia, 1977)

Industrial Production Survey, 1979 (Nicosia, 1980)


Public Information Office. Cyprus: Its Tragedy as a Result of the Aggressive Invasion by Turkey, Republic of Cyprus, (Nicosia, 1974)

Turks Usurp Cyprus Produce, (Nicosia, 1975)


Camp, Glen D. Greek - Turkish Conflict Over Cyprus (Spring, 1980)

Attalides, Michael. Cyprus: Nationalism and International Politics. (1979)

Cyprus: Ministry of Finance, Department of Statistics and Research. Shipping and Imports-Exports Statistics 1978. (Nicosia, Cyprus, 1979)

Cyprus: Ministry of Finance, Department of Statistics and Research. Demographic Report 1976 (Nicosia, Cyprus)
Cyprus: Ministry of Finance, Department of Statistics and Research.  
Demographic Report 1977.  (Nicosia, Cyprus 1978)


Cyprus: Ministry of Finance, Department of Statistics and Research.  
Demographic Report 1975 (Nicosia, Cyprus 1976)

Cyprus: Ministry of Finance, Department of Statistics and Research.  

Gianavis, Nicholas V. Economic Development: Thoughts and Problems. 1978

Glezakos Constantine. Inflation and Growth: A Reconsideration of the Evidence from the LDC's (less developed countries) 1978

Going for Growth (World Economic Growth) Tables, Charts. Economist (London, 1979)

Kahn, Herman. World Economic Development, 1979 and Beyond '79. Prepared with the assistance of the staff of the Hudson Institute


1980 Exporters' Encyclopedia. World Marketing Guide. Dun and Bradstreet International

Cyprus: Ministry of Finance, Department of Statistics and Research.  
Statistics for Imports and Exports for the Year Ended 31st December 1977.  (Nicosia, Cyprus 1978)

King, Russel. Cypriot Refugees in Cyprus (Economic Situation of Southern Cyprus, where three quarters of the island's population is located). Jan. 1980, Nicosia, Cyprus

Cocburn, Patrick. Greek Cypriots Well on Way to Economic Recovery. Middle East Economy Dig., 1976

Cyprus Ministry of Finance, Department of Statistics and Research.  
Statistics of Imports and Exports for the Year Ended 31st December 1975 - (Nicosia, Cyprus 1976)


(Washington, D.C., August 1972)

Melbourne University. Cyprus Expedition Publication No. 1 (Melbourne, 1975)

Cyprus Crisis 1974 - Turkish Intervention (Nicosia, 1975)


Triseliotis, John. Social Welfare in Cyprus. 1977


David Shirreff. A Trimmed Greek Cypriot Economy Waits for Lift Off. Middle East Economy, 1976

Tax Incentives in Cyprus to encourage economic re-activation and growth, and more particularly, capital investment, exports, and the inflow of foreign capital. Bul Internal Fiscal Documentation. April 1976


Titos Phanos. Cyprus and the European Economic Community (E.E.C.) 1973 Nicosia, Cyprus


Monthly Economic Indicators. Ministry of Finance, Republic of Cyprus (September 1980)


The Cyprus Popular Bank: Newsletter. No. 6 November-December 1980 (Nicosia)

Address Before the House of Representatives on Economic Developments During 1980 and the Prospects and Budgets for 1981: By the Minister of Finance, Mr. A. Afxention (Nicosia, 29th January, 1981)


The Cyprus Popular Bank: Facts About Cyprus. (Nicosia 1981)