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THE WINE AND SPIRITS INDUSTRY IN CYPRUS

By

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PREFACE

The idea for writing this thesis came from the importance of viticulture and the wine industry in Cyprus. The thesis does not claim and is not intended to be an expert's report but rather an academic study.

I have attempted to achieve three aims: (1) to present the organization, the particular characteristics and functioning of the wine and spirits industry as well as Cyprus viticulture; (2) to analyze the general and particular problems faced by this industry and to suggest possible solutions or the steps before a solution is decided upon; (3) to show whenever possible how business theory and techniques could help the industry's management and to illustrate how important recent knowledge is to the solution of these problems. The thesis, therefore, could be of use to the interested outsider, the academic researcher and the industry's management.

Despite the breadth of the subject, my analysis is not complete. Lack of information, unwillingness on the part of the industry's management to cooperate, and the limited time have made a fuller analysis impossible. Furthermore, I have had to establish facts which in more developed countries are readily available. Despite these limitations, which prevent definitive conclusions and suggestions, the work hopefully fulfills its aims. Apologies are made for any unintentional misquoting of information or inaccurate estimates.

A great debt is owed many people. Acknowledgements should be made to Messrs. Dimitri Haggipavlou, Andreas Andreou, Panayiotis Psaras and Andreas Azinas for their encouragement, and to Messrs. Rolandos Viraldi, Andreas Michaelides and Spyros Psomas for their help. Acknowledgements should also be made to all company officials and employees and all government officials with whom I had interviews. Without their cooperation, this work would have been impossible. Even those who did not cooperate provided (by their example) material for my thesis. Finally, I wish to take this opportunity to express appreciation to Professors Muhammad Atallah, John Cordell and Aziz Marmura. My work has benefited greatly from their criticism of the manuscript.

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INTRODUCTION

The first mention of wine and vines in history was with reference to Noah's leaving the ark and planting a vineyard.¹ The European grapevine (*vitis vinifera*) was first cultivated in Cyprus at a later time, no doubt, but the event occurred in antiquity: Stasinus, the author of the Cypriot Epic Songs, writes that vine cultivation in Cyprus dates back to 3,000 B.C., and Homer speaks of the good quality of the island's wines.² The wines of Cyprus are referred to in Solomon's Song of Songs and there is historical evidence that during the festivities, which followed the symposia of Gods in Greek Mythology, the famous *kyprion nama* was served.³

Marrison writes that "much of the wine of Cyprus is made by villagers for their own consumption by the methods of their forefathers: it is stored in earthenware jars . . . and transported in goatskins."⁴ This description is now out of date but accurate perhaps some thirty or forty years ago. Today, wine making in Cyprus is an organized industry.⁵

¹ L.W. Marrison, Wines and Spirits (London: Penguin Books Ltd., 1958), 28.

² Phocas J. Vryonides, "Notes on the Vine Industry in Cyprus," (unpublished study), Limassol, May 1962, 1.

³ N.H. Rhodas, "The Vine Growing Cyprus," An article prepared for publication in the *Encyclopedia of the Wines and Spirits of the World*, May 5, 1962, 2.

⁴ Marrison, op. cit., 170.

⁵ Vryonides, op. cit., 4.

PART I. VITICULTURE

CHAPTER I

VIEW OF AND PUBLIC INTEREST IN VITICULTURE

Main Physical Features of the Island of Cyprus

Location and climate.-- Cyprus is the third largest island in the Mediterranean Sea, exceeded in area only by Sicily and Sardinia. Its extreme length is 140 miles, its greatest breadth is 60 miles and its area is 3,572 square miles.¹ The climate is typical of the Mediterranean. On the plain the rainfall is normally low and confined almost entirely to the winter months. Summers are hot, especially on the plain, while the winters are relatively cold, particularly in the higher altitudes.²

Topography.-- A long narrow mountain range rises in the north of Cyprus to a height of 3,300 feet, and runs eastward to form the backbone of the Karpass peninsula. In the center of the island, there is a great mountain massif, the Troodos range, rising to 6,400 feet at its highest point on Mount Olympos. Between the two, lies the wide plain known as Messaoria which rises from sea level to 700 feet. Between the mountains and the sea there are narrow coastal plains.³

¹Cyprus, Ministry of Agriculture and Natural Resources, Department of Agriculture, Annual Report, (1963), p. 1.

²Ibid.

³Ibid.

Economic Significance of the Vine Industry

The importance of viticulture to the Cyprus economy can be shown by comparisons with other countries, by its contribution to the gross domestic product and the number of people deriving their living out of it. With about 240,000 donums¹ of vineyards, or 8 per cent of the total cultivable land, Cyprus is relatively more dependent on grape production than the grape growing countries of southern Europe.²

Table 1 shows that viticulture contributes £ 2.2 million or about 12 per cent of the gross domestic product generated in agriculture, the sector in which 40 per cent of the labor force is employed. Out of a total farming population of 64,000 families some 30,000 families, or one-fifth of the population, derives all or part of its livelihood from vine cultivation.³ Therefore, 12 per cent of agriculture's contribution to the gross domestic product supports almost 50 per cent of agriculture's families. In addition, Mr. Korallis estimates that about 200,000 people are employed in occupations related in some way to either vine cultivation or wine production.⁴

¹One acre equals 3.025 donums.

²J. Branas, Concerning some problems in Viticulture on the Island of Cyprus, trans. Ruth Parker (Nicosia: Department of Agriculture, November 1957), p. 9. (Mimeographed.)

³Fred J. Rossi, An Investigation into the Vine Industry of Cyprus (Nicosia: Cyprus Government Printing Office, 1956), 1, 6.

⁴K. Korallis, The Cyprus Viticultural Problem: Suggested Solution and Expected Results (Limassol: By the author, December 1960 Mimeographed, in Greek), p. 49.

TABLE 1

CONTRIBUTION OF VITICULTURE TO CYPRUS GROSS DOMESTIC PRODUCT IN AGRICULTURE
(IN CYPRUS POUNDS)

Year	Production By value	GDP in Agr.	Per Cent	% Empl. in Agr.	Population (Number)
1958	1,237,500	17,900,000	6.9	-	558,000
1959	2,317,500	16,800,000	13.8	-	567,000
1960 ^a	1,845,000	15,500,000	11.9	40.3	573,000
1961	2,250,000	19,200,000	10.7	40.3	577,000
1962	2,272,500	21,800,000	10.4	40.3	580,000
1963	1,170,000	21,100,000	5.5	40.2	589,000
Average 1959-62	2,171,250	18,325,000	11.89		

^aThe census year of population and agriculture.

Source: Cyprus, Ministry of Finance, Department of Statistics and Research, Economic Report, (1963), 15, 35., and Ministry of Agriculture and Natural Resources, Department of Agriculture, Statistics Section, Agricultural Statistics, (1959-1961), (1962), (1963).

TABLE 2

AREA OF LAND UNDER VINEYARDS
(THOUSAND DONUMS)

District	1946	1960	Per Cent Change	1963	Per Cent Change
Nicosia	49.9	40.7	-18.6	14.3	-64.9
Kyrenia	1.8	.8	-55.6	1.2	50.0
Famagusta	5.9	4.2	-18.0	2.9	-31.0
Larnaca	15.7	12.0	-23.6	13.3	10.8
Limassol	86.0	88.8	3.3	119.9	35.0
Paphos	49.0	69.0	40.8	103.4	49.8
	208.3	215.5	3.4	255.0	18.3

Source: Cyprus, Ministry of Finance, Department of Statistics and Research, Census of Population and Agriculture: 1960, VI, 28., and Ministry of Agriculture and Natural Resources, Viticulture and Oenology Section, Annual Report, (1963), 4.

The Area and Varieties of Vines

Vine area.-- The total area of Cyprus is about 7 million donums. The privately-owned agricultural land comprises 66 per cent of the total and the state forests another 10 per cent.¹ The vine area is greater than that allocated to any crop other than cereals.²

Table 2 shows that the vine area increased by only 3.5 per cent between 1946 and 1960 and also shows a geographic shift in the land under vineyards. An estimate for 1963 shows an annual increase of 6.1 per cent between 1960 and 1963 and indicates a greater shift of the vine area from the Nicosia and Famagusta to the Paphos and Limassol districts. The estimate cannot be accepted with confidence since there has been no census of vineyard-plots. Nevertheless, the recent rapid increase in the vine area is a fact; the decrease shown in some districts is explained by the substitution of vines by more profitable crops.

Regional distribution.-- The main grape cultivating districts are Limassol, where more than one-fourth of the cultivable land contains vineyards, and Paphos.³ The small per capita land-holdings⁴ and the lack of alternative uses for the vine areas make viticulture an indispensable feature of the Limassol district population. The same varieties are grown in all districts. Limassol leads in the production of both local and table varieties; Paphos follows closely.⁵

¹Department of Agriculture, Statistics Section, Annual Report, (1962), p. 3.

²Department of Statistics and Research, Census of Population and Agriculture: 1960, VI, 7, 33.

³Department of Agriculture, Annual Report, (1963), 3.

⁴See Table 3.

⁵See the table showing the area of vines by variety and district in 1960 in the Census of Population and Agriculture: 1960, VI, 29. For the definition of "local" and "table" varieties see sub-section on varieties of grapes.

Classification.-- The 1960 census of agriculture classified the vine areas by irrigation facilities and productivity. About 94 per cent of the wine grapevines were productive whereas this was true of only 75 per cent of the table grapevines.¹ The lower productivity of the table variety might be explained by the fact that some vines were immature. The productivity of wine grapevines, in this sense, does not necessarily indicate efficient production. As an official of the Cyprus government indicated, vines on the mountains are between 25 and 40 years old and have a very low yield.²

As far as irrigation is concerned, only 3 per cent of the productive vines were irrigated, whereas nearly 12 per cent of the unproductive vines were irrigated.³ This might be again due to the new plantings of table varieties which, though not yet productive, were irrigated.

The vine area may also be classified whether it is on hillsides or on plains. It is noted that the grape vine is best suited on mountainous slopes. Table grape production, however, is more efficient on plains.⁴

¹Department of Statistics and Research, Census of Population and Agriculture: 1960, VI, 39.

²Interview with Mr. Phocas Vryonides, Viticulturist and Oenologist, Viticulture and Oenology Section, Limassol, March 13, 1965.

³Department of Statistics and Research, Census of Population and Agriculture: 1960, VI, 30.

⁴United Nations, Food and Agriculture Organization, Expanded Technical Assistance Program. Improvement of Grape and Wine Production: Report to the Government of Cyprus, prepared by P. Marcout, Report No. 1024 (Rome: Food and Agriculture Organization, 1959), p. 18.

TABLE 3

TOTAL AND VINE AREA PER DISTRICT AND PER
CAPITA OF RURAL POPULATION
(DONUMS)

District	Area	Per cent vine area		1960 per cap. area	
		1960	1963	Total	Vine
Nicosia	848,591	4.8	1.7	7.79	.37
Kyrenia	248,610	.3	.5	9.04	.03
Famagusta	793,299	.5	.4	9.97	.05
Larnaca	413,568	2.9	3.2	10.65	.31
Limassol	454,733	19.5	26.4	7.14	1.39
Paphos	474,195	14.6	22.8	9.66	1.41
	3,232,996	6.7	7.9		

Source: Department of Statistics and Research, Census of Population and Agriculture: 1960, VI, 10, 33, Statistical Abstract, (1962), 13., and Viticulture and Oenology Section, loc.cit.

TABLE 4

AREA OF VINES BY VARIETY IN 1960
(DONUMS)

Variety	Area	Per Cent
Local white	29,289	13.6
Local black	173,825	80.7
Sultana	7,747	3.6
Others	4,603	2.1
Total	215,464	100.0

Source: Department of Statistics and Research, Census of Population and Agriculture: 1960, VI, 29.

Census of vineyards.-- Marcout, an agricultural scientist, recommended a census of vineyards in 1959.¹ The census report which should be ready in April 1966, considers the area of each vineyard, the age and variety of the vines, the steepness and fertility of soil, the use of mechanical power and irrigation facilities and the yield.² These statistics are expected to be used in implementing recommendations made over the last decade by different vine experts.

Varieties.-- All grape vines are derived from the single species, *vitis vinifera*.³ Varieties are usually classified according to whether they yield wine or table grapes. Table grapes are not good for wine-making, and wine grapes are not attractive as a food item.⁴ The main wine grape varieties in Cyprus are the local black, comprising 81 per cent of the total vineyard area, and the local white, comprising 13 per cent.⁵

Table grape varieties such as sultana, fraoula, rozaki, veriko and ophthalmo have been introduced recently. Since 1955 an important export trade for table grapes was developed.⁶

¹ Ibid., p. 22.

² Interview with Mr. Phocas Vryonides, Viticulturist and Oenologist, Viticulture and Oenology Section, Limassol, March 13, 1965.

³ Marrison, op. cit., p. 45.

⁴ Ibid.

⁵ See Table 4.

⁶ Ministry of Agriculture and Natural Resources, Annual Report, (1962), 4.

Among these seedless sultana is the most popular.¹ Table grape cultivation is favored because of an advantage possessed by Cypriot growers. They can place their grapes on the market earlier in the year than their foreign competitors.² This may be due to the warmer Cyprus climate. Organized farms such as the Phassouri and Lanitis farms use irrigated vineyards on the plains for production of table varieties. The Archangelos farm, a new farm, was able in 1965 to export as early as July 3.³

Unlike European countries where a large number of grape varieties are used for wine production, Cyprus uses only two major varieties.⁴ The development of more varieties however, has been recommended by various wine experts as a means of producing better wines and developing the table grape market.⁵ Cuttings were imported in 1958, by various vine nurseries for experimental purposes.⁶ Tentative results indicate good prospects, particularly for sherry-type grapes.⁷

¹Cyprus, Ministry of Agriculture and Natural Resources, Department of Agriculture, Viticulture and Oenology Section, Annual Report, (1961), 2.

²Ibid., (1960), 5.

³Eleftheria (Nicosia), July 9, 1965, p. 6.

⁴See Table 4.

⁵See later section on "The Consultants' Reports".

⁶Viticulture and Oenology Section, Annual Report, (1958), 5., (1961), 5, (1963), 5.

⁷Interview with Mr. Phocas Vryonides, Viticulturist and Oenologist, Viticulture and Oenology Section, Limassol, March 13, 1965.

Production and Uses of Grapes

Production.-- Table 5 shows that grape production reached a peak in 1959 with a volume of 103 million okes¹ but in 1963 it dropped to half this volume due to a severe attack of downy mildew. The average production of 96.5 million okes between 1959 and 1962 represents a 36 per cent increase over the 1953-1956 average and a 140 per cent increase over the 1945-1949 average.

Other Uses.-- Grapes may be also used for zivania² or raisin production. These are not commercial products; they are made by the growers themselves for the purpose of absorbing the excess grape production. The demand for grapes by wineries, primarily a function of the demand for wines and brandies, increased between 1953-56 and 1959-62 by 57 per cent. Production of zivania increased by 16 per cent during the same period.³ Raisin production has experienced severe fluctuations which seem to be a sole function of annual grape production.⁴

¹ An oke is about 2.75 pounds.

² Zivania is raw grape alcohol.

³ See Table 5.

⁴ Viticulture and Oenology Section, Annual Report, (1961), 3.

TABLE 5
 PRODUCTION AND USES OF GRAPES^a
 (IN MILLION OF OKES)

Year	Wineries	Zivania	Sold fresh	Raisins	Total
1964	-	-	-	-	-
1963	24.5	11.0	13.0	3.5	52.0
1962	31.5	26.0	16.5	27.0	101.0
1961	34.0	25.7	15.0	25.3	100.0
1960	25.0	20.0	15.0	22.0	82.0
1959	33.0	28.0	15.0	27.0	103.0
1958	29.3	8.2	13.0	4.5	55.0
1957	25.0	20.0	14.0	16.0	75.0
1956	25.0	21.0	13.0	15.0	74.0
1955	22.0	18.0	13.0	17.0	70.0
1954	9.0	23.0	10.0	23.0	65.0
1953	18.0	24.0	12.0	21.0	75.0
Averages:					
1945-49					40.3 ^b
1953-56	18.5	21.5	12.0	19.0	71.0
1959-62	30.9	24.9	15.4	25.3	96.5
Increase	67%	16%	28%	33%	36%
Proportions:					
1953-56	26%	30%	17%	27%	100%
1959-62	32%	26%	16%	26%	100%

^a Calculated from: Figures obtained from the Office of the Vine Products Controller, Limassol.

^b The Average for 1945-1949 was obtained from the Department of Agriculture, Annual Report, (1962), 13.

The Vine Products Scheme Office

Collection of raisins and zivania.-- After the second world war Cyprus wine trade declined and big quantities of undisposed vine products accumulated.¹ To avoid a crisis, a Vine Products Scheme was established by the government of Cyprus in 1949 to undertake the purchase of raisins and zivania at guaranteed prices.² The scheme is still in operation and the prices and subsidies are shown in Table 6. Its effect, however, has been to increase production of both of these low quality products.³

Subsidy on grapes delivered to wineries.-- By 1955, vine growers did not receive an adequate price for the fresh grapes delivered to wineries because of insufficient demand.⁴ A government committee suggested a direct subsidy for all vine products to avoid "hardship and distress" of growers.⁵ Since 1955, a subsidy has been paid on grapes and commandaria⁶ delivered to wineries. The new subsidy scheme proved popular with both growers and

¹ Viticulture and Oenology Section, Annual Report, (1961), 5.

² Rossi, op. cit., 1

³ N.H. Rhodas, "The Vine-Products Scheme and the Vine Industry in Cyprus" (unpublished study), Limassol, January 18, 1958, pp.1-5.

⁴ A.F. Bates et al., "Report on Marketing of Vine Products" Report submitted to the Cyprus Government in 1956, p. 14.

⁵ Department of Agriculture, Annual Report, (1963), 20.

⁶ Commandaria is a typical Cyprus wine, originally made by the Knight Hospitaliers at Kolossi Castle, Limassol.

TABLE 6

SUBSIDIES AND PRICES OF VINE PRODUCTS OTHER THAN GRAPES
(IN CYPRUS MILS)

Item	Price Paid Growers	Sales Price - Scheme
Zivania	122 mils per oke	83½ mils per oke
Export rebate		-28 " " "
Cess		+39 " " "
Raisins	65-68 mils per oke	57 " " "
Commandaria (per 128 okes)	Price paid by wineries. Subsidy £1,000-£2,000	

Source: The Office of the Vine Products Controller, Limassol.

TABLE 7

SUBSIDIES AND PRICES OF GRAPES 1950-1964
(IN CYPRUS MILS PER OKE)

Year	Black and White grapes		Malaga grapes	
	Subsidy	Price	Subsidy	Price
1950 ^a	-	9.7 (¾)	-	12.5 (2¼)
1951-52 ^a	-	16.7 (3)	-	18.5 (3)
1953 ^a	-	13.9 (2½)	-	19.4 (3½)
1954 ^a	-	11.1 (2)	-	16.7 (3)
1955	4.5	18.0	4.5	23.0
1956	6.0	21.0	8.0	23.0
1957	6.0	22.5	8.0	24.5
1958-64	4.5	22.5	6.5	24.5

Source: The Office of the Vine Products Controller, Limassol.

^aThe old piastres (9 per shilling) shown in the parantheses have been changed to new mils (50 per shilling).

manufacturers.¹ Table 7 shows the subsidies and prices of grapes since 1950. The price of grapes after the subsidy scheme, particularly after 1957, is 131 per cent higher than that of 1950 and 67 per cent higher than that of 1955 without any subsidy.

Problem.-- One problem involved in the administration of the scheme was the accumulation of big stocks of zivania and raisins. An agreement between Cyprus and U.S.S.R. provided for the export of 5,000 tons of grape alcohol to the Soviet Union in 1965, 6,000 tons in 1966, and 7,000 tons in 1967. Exports of raisins were stipulated at 8,000 tons annually for the same period.² The agreement solves all problems of disposing of zivania and raisins for the period 1965-67.³

Related Public Bodies

The governmental bodies concerned with viticulture are the Ministry of Commerce and Industry and the Ministry of Agriculture and Natural Resources. The former exercises control over exports while the latter operates an extension service which provides advice on general agricultural and viticultural matters.³ The Viticulture and Oenology Section, established in 1925 and

¹Department of Agriculture, Annual Report, (1963), 35.

²Copy of the Agreement between the Cyprus Republic and the U.S.S.R. found in the files of the Section of the Ministry of Commerce and Industry, Limassol.

³Interview with Mr. N.H. Rhodas, Vine Products Controller, Limassol, April 23, 1965.

located at Limassol, controls wine exports and performs technical work in viticulture and oenology.¹ In addition, the Agricultural Research Institute at Athalassa, established in 1962 and cosponsored by the Cyprus government and the United Nations² has a proposed program for pure research in various aspects of viticulture.³

The Consultants' Reports

F. Rossi's Report.-- In 1955 at the invitation of the government, Mr. F. Rossi, a wine trader of London, investigated the marketing problems of vine industry.⁴ He concluded that greater sales efforts and improved quality would enable the industry to dispose of its entire annual output.⁵ He proposed continuation of subsidies, replanting with better varieties of vine, various forms of control and promotion, and proper administrative procedures to implement his recommendations.⁶ His report apparently has been given serious consideration by the government but full implementation of his recommendations is still beyond its reach.

¹Viticulture and Oenology Section, Annual Report, (1960), 10.

²Cyprus, Ministry of Agriculture and Natural Resources, Cyprus Agricultural Research Institute, Annual Report, (1962-1963), 5.

³Interview with Dr. T. Christou, Director, Agricultural Research Institute, Athalassa, Nicosia, April 24, 1965.

⁴Rossi, loc. cit.

⁵Ibid., 14.

⁶Ibid., pp.2-4

Professor Branas' Study.-- In 1957, Professor Branas of the National School of Agriculture at Montpellier prepared another study. Stressing the similarity of climate between some parts of Cyprus, France and Spain, he suggested the encouragement of sherry production, red wines for blending and a variety of table grapes.¹

P. Marcoub's Recommendations.-- Under the Technical Assistance Program of the United Nations, P. Marcoub surveyed the viticultural regions of Cyprus and prepared a report in 1959. He suggested improvements in cultivation techniques, grape varieties and vinification equipment, and proposed regulation of marketing.²

Tentative Conclusions

Viticulture has widespread effects among the farming population of the Limassol and Paphos districts. It is also vital to the population of the mountain district of Limassol.

The vine area increased slightly between 1946 and 1960 but a great increase took place afterwards. The greatest increase is of plain viticulture and mostly of wine grapes. The production of grapes has increased more than demand. The industry's demand for grapes increased by 57 per cent in 6 years, but due to greater production zivania and raisin production have continued to increase. The table grape trade has recently expanded and looks promising.

¹Branas, op. cit., 5.

²Food and Agriculture Organization, op. cit., 18.

The development of more and better varieties seems necessary for the development of both the table grape trade and the wine industry. Table grape trade which is favored, as stated earlier, by the climate of Cyprus might be an additional target to the development of the wine industry.

The public interest in viticulture is reflected through the various government departments concerned with agriculture and commerce. The viticulture and oenology section specializes in viticulture but its scope is limited. In addition, the agricultural research institute promises pure research on viticulture.

A real benefit may be expected from the implementation of the experts' recommendations made during the last decade. The pace of such implementation seems quite slow but it is expected to increase after the census reports are available.

CHAPTER II

ANALYSIS AND MAJOR PROBLEMS

Problems of General Agriculture

General agriculture problems relate to mechanization, soil conservation, use of fertilizers, use of irrigation facilities, disease protection, product insurance and agricultural credit. Measures to help solve these problems often are taken by the government of Cyprus. The government operates a soil conservation scheme and pays subsidies on approved measures.¹ Another scheme, introduced in 1956, provides limited insurance against natural calamities.² In addition, the Agricultural Bank of Cyprus in 1962 held £700,000 in 6 per cent loans.³ Furthermore, a cooperative system supplies farmers with cheap fertilizers and insecticides.⁴ Finally, research is performed. Preliminary experimental results of such research have indicated no change in the yield after fertilizer treatment⁵ but increased yields have been obtained after proper irrigation.⁶

¹Department of Agriculture, Annual Report, (1962), 21.

²Ibid., 23.

³Ibid.

⁴Ibid., 16.

⁵Ibid., 31-32.

⁶Cyprus Agricultural Research Institute, op. cit., (1963), 21.

Some progress is also made by growers. Greater use is made by vine growers of tractors where their plantations are suited to mechanical cultivation,¹ and some use of fertilizers is made at the organized farms and at the sultana vineyards.² Systematic dustings and sprayings are conducted by growers³ but, nevertheless, a downy mildew appeared in 1964 and damaged half the year's crop.⁴

Despite the government's interest in solving these problems and the progress made by individual growers, it may seem that Cyprus' agriculture continues facing these problems as obstacles to higher efficiency. As a consequence, viticulture may reflect underdevelopment resulting from these general agricultural problems.

Fragmentation of Vine Area

The problem of farm fragmentation in Cyprus agriculture is not as acute as in some other Mediterranean countries.⁵ But viticulture in Cyprus has a higher degree of fragmentation than agriculture as a total. Table 8 shows that almost two-thirds of the vine area is owned by holders of 60 donums

¹Department of Agriculture, Annual Report, (1962), 24.

²Interview with Mr. Phocas Vryonides, Viticulturist and Oenologist, Viticulture and Oenology Section, Limassol, March 13, 1966.

³Viticulture and Oenology Section, Annual Report, (1962), 4.

⁴Ibid.

⁵See the table on the size of agricultural holdings in Mediterranean countries in the United Nations, Food and Agriculture Organization, Mediterranean Development Project (Rome: Food and Agriculture Organization, 1959), 36.

TABLE 8
 TOTAL AREA AND VINE AREA BY SIZE OF HOLDING IN 1960
 (IN DONUMS)

Size of holding (Donums)	Total Area		Vine Area		Vine Area % Total
	(Donums)	%	(Donums)	%	
20 - less	254,294	8	43,030	20	16.9
20 - 60	882,687	27	92,788	43	10.5
60 - 100	696,949	22	42,183	20	6.1
100 - 500	1,168,044	36	33,471	15	2.9
500 & above	231,022	7	3,992	2	1.7
Total	3,232,996	100%	215,464	100%	6.7%

Source: Department of Statistics and Research, Census of Population and Agriculture: 1960, VI, 7, 33.

and below whereas one-third of other agricultural land is held in such small parcels. In addition, every holding in the main viticultural districts consists of between 9-9.5 pieces of land.¹ This astounding condition might, despite some form of possible cooperation among farmers, contribute to high costs of production as labor and equipment have to move from one piece to another. Unlike in other problems, legislation seems to be very effective in stopping further fragmentation, even if it might be less effective in consolidating land.

Relative Production of Different Vine Products

The great proportion of grape production used for zivania and raisin making instead of wine making may be considered as a problem. The total world channelled 77 per cent of the grape production between 1961 and 1963 into wine-making; Europe and Africa channelled more than 90 per cent.² Only 32-40 per cent³ of Cyprus' grape production is, however, used for wine making.

Limited Use of Wine Making Cooperatives

Wine-making cooperatives have been established in main villages to undertake wine-making mostly of the commandaria type which for technical

¹Department of Statistics and Research, Census of Population and Agriculture: 1960, VI, 10.

²Ratios computed from figures of total grape production and grapes used for wine in the United Nations, Food and Agriculture Organization, Production Yearbook (1963), 104-107.

³The average for the years 1959-62 is 32 per cent. The estimate for 40 per cent is arrived at when the zivania used for the strengthening of wine is considered. In recent years about 12,500 metric tons of zivania or 10 million okes of grapes were used for this purpose. Figures obtained from the Customs and Excise Office, Limassol.

reasons¹ takes place in the villages. These cooperatives are seen as contributing to the standardization of the quality of commandaria, the reduction of zivania and raisin production² and the avoiding of spoilage resulting from transportation delays.³ Unfortunately, they are not profitable concerns, probably because of organizational malfunctioning; ten cooperatives with 1,044 members reported a total profit of only £984 in 1963.⁴ This profit may not justify the capital investment but in view of the other advantages of cooperatives, their improvement and expansion might be sought.

Adverse Effects of the Subsidy Scheme

Subsidies were intended to provide temporary income for the small but efficient grower.⁵ It is probable that the increased production of grapes, raisins and zivania are effects of the subsidy scheme. Since the subsidy is specific, viticulture is encouraged on the plains where it gives increased yields. In addition, the big producer benefits more. Thus the subsidy scheme seems to have failed to reduce excess grape production or to help small grower.

¹The production of zivania requires that the grapes be exposed to the sun before the crushing; this is not possible in the town factories but it is convenient in the villages.

²Viticulture and Oenology Section, Annual Report, (1961), 3.

³Branas, op. cit., 24.

⁴Office of Cooperative Development, Annual Report, (1963), 9.

⁵Rossi, op. cit., 4, 17.

The most necessary step seems to be the restriction of the vine area, preferably to mountainous areas because they are unsuitable for other crops and because the quality of grapes produced in the mountains is better. An increase in the table grapes vine area would be desirable only if accompanied by an increase in effective demand.

For the subsidy scheme, however, to achieve any sustained increase in the agricultural income, subsidies must be implemented by measures which raise productivity. If an income subsidy is necessary, this may be administered in such a way as to help primarily the needy grower.

Lack of Control of Viticulture

While viticulture in Cyprus is uncontrolled, in other vine cultivating countries it has been regulated for many years. France passed its first wine law in 1905, Germany in 1932 and Italy in 1936. These laws provide for the regulation of production and labelling, size of the vine area, varieties to be grown and cultivating techniques.¹

A step towards the control of viticulture in Cyprus is embodied in the proposed Vine Industry (Regulation and Control) Law. The law, when passed, will appoint a commission and an advisory committee "to promote and undertake scientific research . . . and regulate and control the plantations and cultivation of vines."² The bill was referred by

¹Marrison, op. cit., 95-97.

²Mimeographed copy of "A Law to make Provision for the Regulation and Control of the Vine Industry for the Purpose of its Protection, Advancement and Improvement and for the Protection of the Public and for Matters connected therewith or incidental thereto."

the Parliament for further study.¹

Inefficiency

The increase of the gross value of grape production from £850,000 in 1954, to more than £2,250,000 in 1962 including about £400,000 of subsidies,² is due partly to higher prices and partly to increased production. Also, the increase of the average yield per donum from 265 okes in 1957 to 330 okes in 1962³ is due largely to additional cultivation on the plains rather than the hills. It is generally believed that yields on the hill-sides where vines are getting old increased slightly or not at all.⁴

Table 9 shows aggregate yields in different countries and regions. Comparing regions worldwide, the Near East has the lowest yield, Europe has about the average and North America has the highest. Compared with the Near East, Cyprus viticulture shows average yields. The estimated current yield for Cyprus, (3.3-4.4 metric tons per hectare), is below that of South Africa, Australia, France and Italy but above that of Spain.

Efficiency cannot be measured entirely in terms of yield per hectare of land. Average total cost of producing grapes must also be considered. Though this comparison is not possible because of the lack of

¹Eleftheria, (Nicosia), June 12, 1965, 1.

²This is an estimate.

³Viticulture and Oenology Section, Annual Report, (1962), 1.

⁴Interview with Mr. Phocas Vryonides, Viticulturist and Oenologist, Viticulture and Oenology Section, Limassol, March 13, 1965.

TABLE 9
 AVERAGE GRAPE YIELDS IN DIFFERENT COUNTRIES AND
 WORLD REGIONS IN 1961-1963^a

Country or Region	Area (000 hect.)	Production (000 metr.tons)	Yield Metr.ton/Hect.
Cyprus	29-38	127	3.3-4.4
Australia	52	543	10.4
South Africa	67	621	9.3
France	1,431	9,557	7.7
Spain	1,742	3,512	2.0
Italy	1,776	9,341	5.3
Europe	6,593	29,233	4.4
North America	247	2,863	11.6
Latin America	457	3,634	8.0
Near East	1,090	4,197	3.8
Africa	550	3,223	5.9
World	10,067	46,400	4.6

^a Calculated from: United Nations, Food and Agriculture Organization, Production Yearbook, XVII (1963), 104.

data, the evidence may suffice to show the viticulture in Cyprus is relatively undeveloped compared to other major vine cultivating countries.

Tentative Conclusions

Viticulture seems to face the problems of agriculture in general. These relate to mechanization, soil conservation, use of fertilizers, use of irrigation facilities, product insurance and agricultural credit. These problems reflect a degree of insufficiency of the present measures taken.

In addition, viticulture faces the problems of land fragmentation and uneconomic grape production. Legislation might be effective in the first case whereas in the second case the control of viticulture and the encouragement of cooperatives may be helpful. The whole subsidy scheme seems to require a whole reorientation in order to achieve its short-term aim and a long-term increase in agricultural income. The yield in quantity, though a crude criterion of efficiency, suggests that Cyprus viticulture is rather undeveloped compared to other grape producing countries.

PART II. WINE AND SPIRITS INDUSTRY

CHAPTER III

ORGANIZATION AND ADMINISTRATION

Origin, Size and Concentration of the Industry

Origin of the Industry.-- Wine-making has been a traditional activity in Cyprus. The origin of the industry on commercial scale, however, dates from the decade following the first world war. Prior to the origin of the industry and for some time thereafter wine was made by villagers and a few family-owned, small-scale distilleries operated at Limassol. Christ. Haggipavlou was established in 1887, whereas KEO was established in 1927 by a businessman from Limassol and merchant-investors from Athens. The industry grew during the war but wine trade slackened and demand from grapes fell after the war. The government then supported an attempt by the cooperative movement to establish a company for the marketing of grapes in the form of wine.

Location of the Industry.-- Limassol is the major producing center for the industry, though several grape crushing plants operate at some villages during the harvest period.¹ Convenience to vineyards and to market outlets probably has been the major factor determining winery location. The

¹See the first section of the chapter on production.

city of Limassol lies within a major viticultural district and is also an important seaport.

Number and size of firms.-- At the end of 1964, 27 licenses for the manufacture of intoxicating liquors, 2 beer licenses, and 3,706 village still permits were in effect.¹ Although data on output and capital investment are not available to measure the degree of concentration, data on inputs provide alternative means of measurement. Table 10 shows that in 1963-64 three major firms received 83 per cent of total grape input factors (exclusive of labor) and employed 81 per cent of labor force in the industry. Thus, the industry is dominated by three wineries.

This study is concerned primarily with aggregate data for the industry as a whole. However, occasional reference will be made to the three major firms: (1) The Cyprus Wine Company Limited - known as KEO; (2) The Haggipavlou group consisting of: Christ. Haggipavlou and Sons Limited, The Cyprus Wine Association Limited (ETKO) and Haggipavlou Distributors Limited; (3) The Vine Products Cooperative Marketing Union Limited (SODAP).²

Quality and Ideology of Management

Criteria such as profit maximization, efficient organization of people and work, employee morale, customers' goodwill, society's attitudes

¹Interview with Mr. Pambos Charalampous, Officer, Customs and Excise Office, Limassol.

²Cyprus, Ministry of Commerce and Industry, Cyprus Industry: 1959 Classified List of Industries (Nicosia: Public Information Office, 1959), 13-14.

and stockholders' opinion are often used to judge management's performance. The quality and ideology of management may be influential factors affecting its performance. Quality is determined by the practice of sound management principles and techniques and the training and experience of managers. Ideology may influence the extent to which management desires to apply such knowledge.

The writer has met "middle" managers with secondary or even college education. The top stratum of management often has some kind of college education as well as the experience of foreign travel. Generally, however, they seldom have any training in management. Most of the managers interviewed were technical personnel, such as chemists. On the whole, they seemed to lack knowledge of efficient organization principles, they were production-oriented autocratic,¹ and lacked interest in alternative courses of action and familiarity with research.

Lack of efficient organization implies unawareness of management techniques; autocratic tendencies cause dissatisfaction and discourage fruitful suggestions. Production-orientation sometimes results in neglect of cost considerations as well as good public relations, marketing policies and so on.²

¹The two managers of KEO and the managers of SODAP are chemists.

²When a manager was asked in an interview to discuss financial and marketing matters, he replied, "What do you want from us? We are here to produce, we have a factory."

Internal Administration Organization and Practices

In plotting the organization charts of the three firms, it should be borne in mind that the lines of authority and responsibility are not generally adhered to. In fact, no company has defined its rules and procedures.

KEO.-- The management of KEO, which is responsible to a board of 7 directors, representing the Hellenic Group of Companies¹ and the vine growers-stockholders, is split. The headquarters and the managing director, who also handles the exports, are located at Nicosia. A liaison officer links the headquarters with the two local managers at Limassol. For mainly technical reasons, these two managers control the winery and the brewery respectively but their relationships with all departments tend to duplicate themselves. The accounting and laboratory departments enjoy a partial independence because of their professional character. The organization of KEO is depicted graphically in Figure 1.

SODAP.-- Figure 2 shows the organization of SODAP. The president and the managing director, a committee of six and a supervisory council report to a general assembly consisting of 65 cooperatives and 7,501 persons.² As in other companies, SODAP's managers deal with production and marketing, probably because of their own background and because of the apparent

¹The Hellenic Group of Companies belongs to and is managed by the Greek Community in Cyprus, after the donation of many shares in 1959 by Athanassiades Bodossakis.

²As of June 30, 1964.

Fig. 1:-Organization of KEO

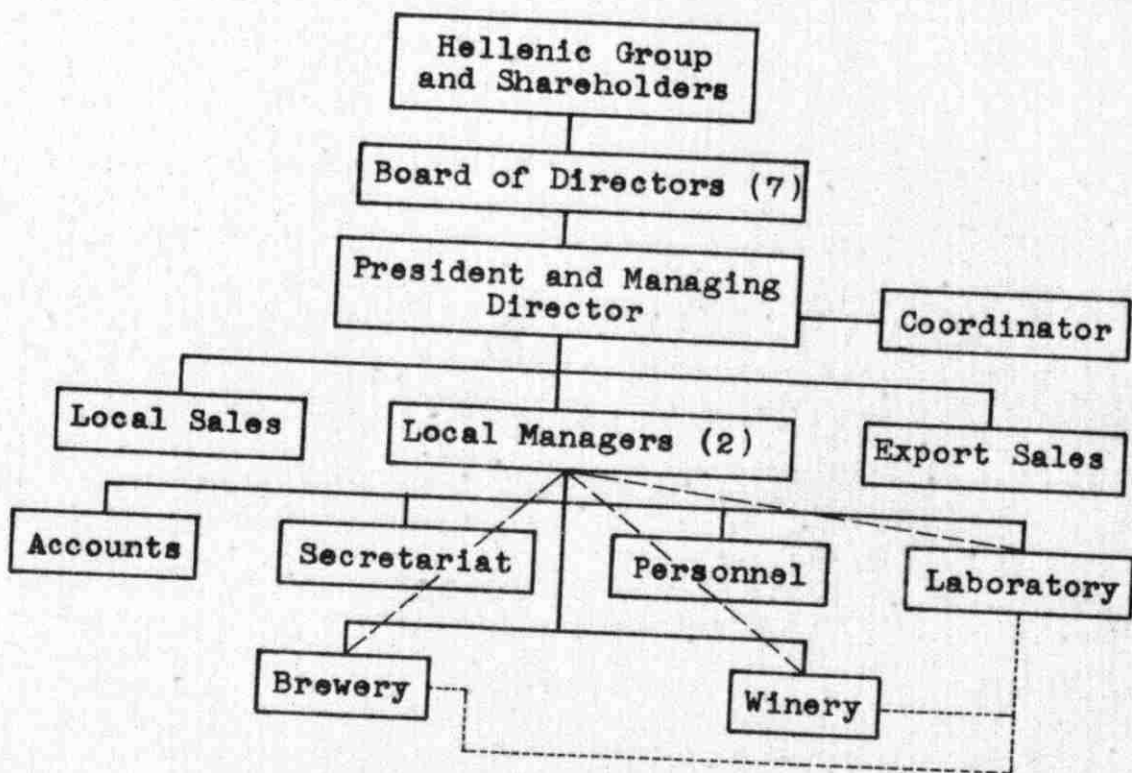


Fig. 2...Organization of SODAP

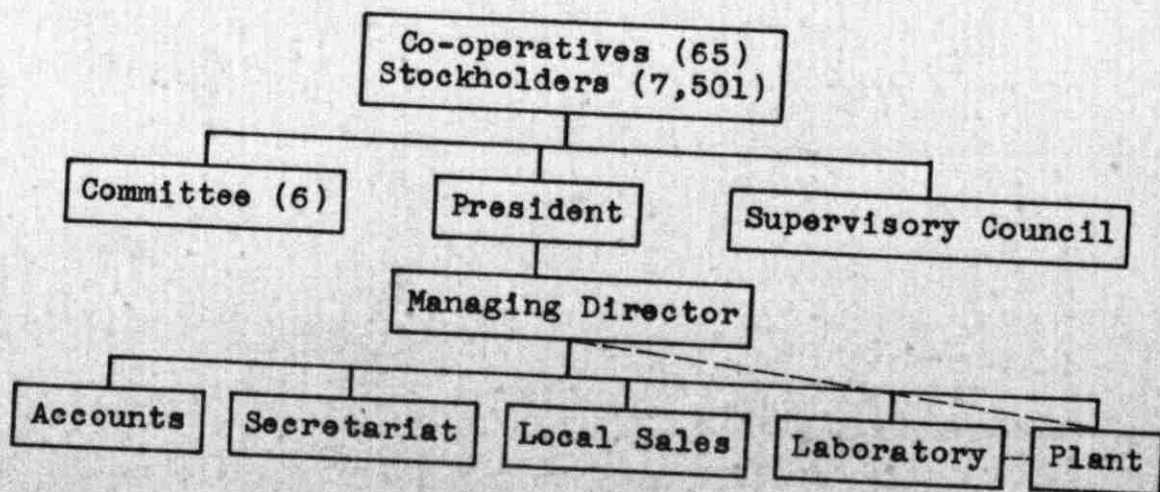
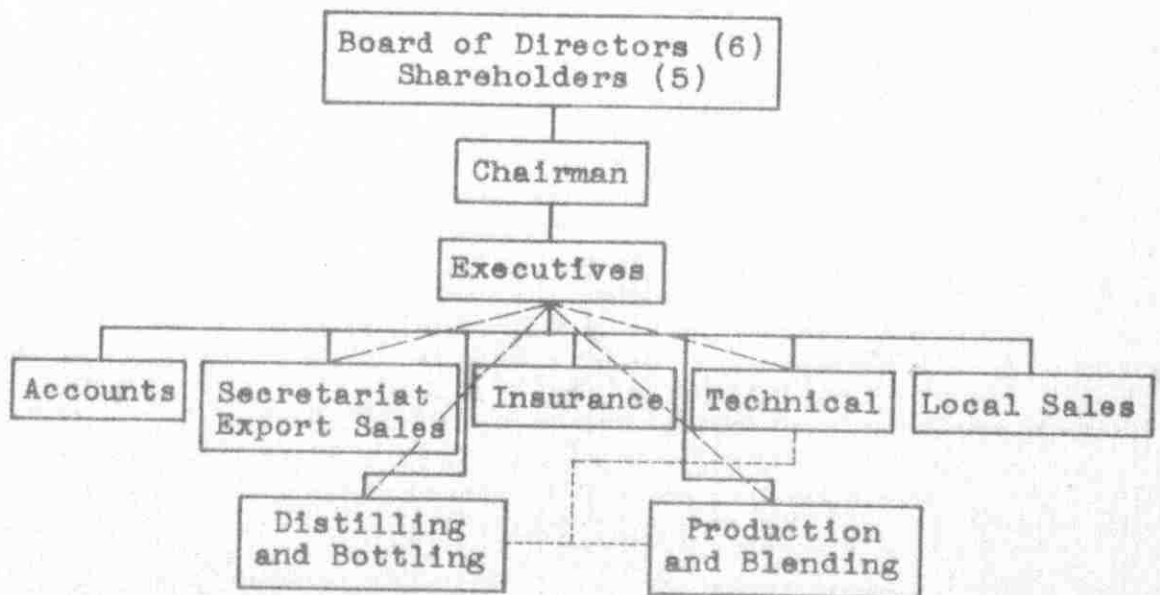


Fig. 3. Organization of the Haggipavlou Group

Christ. Haggipavlou

ETKO

Haggipavlou Distributors



importance that they attach to sales. This need not result in marketing efficiency, as is discussed later.

Haggipavlou.-- The organization of the Haggipavlou Group is shown in Figure 3. The board of directors comprises six persons, five of whom are owners. The managing director is the oldest director but most of the work is done by two others, one apparently being involved with distilling, the other with production.

Tentative Conclusions

The origin of the industry dates from the late thirties, growth occurring during the second world war. The industry is situated in Limassol and is dominated by three firms.

Comparing the organization of the three companies, one notices that: (1) organization is not fairly developed, (2) SODAP is the least organized whereas, though overstaffed,¹ KEO has the highest degree of organization, (3) Haggipavlou owing to its private ownership and control, is the most highly centralized, (4) the activities of accounting, laboratory work and technical production receive the greatest attention, (5) though the importance of sales is recognized, better marketing organization is needed.

Undeveloped organization in the industry might be due to the lack of trained management and to certain pressures. The present management, consisting of non-professional or production men, does not justify any optimism that better organization, higher morale or greater efficiency will be achieved. The industry may, however, get high caliber people with sufficient knowledge of management and wide business insight either by hiring business administration graduates or by developing the present management.²

¹See Chapter on labor relations.

²It is reported that no manager from the wine and spirits factories participated in the Management Conference and Seminar organized by the Productivity Council at Nicosia late in 1963.

CHAPTER IV

LABOR RELATIONS ENVIRONMENT

Labor-Management Cooperation

Generally.-- Labor-management relationships in Cyprus are based on voluntary arrangements derived from collective bargaining.¹ The Basic Agreement, concluded voluntarily by the Employers' Association and the four Trade Unions Federations in 1962, lays down specific procedures and time limits for the negotiation of collective agreements and the settlement of disputes and grievances.² This agreement, originally looked upon with suspicion is now realized to be the most important step ever taken towards the creation and maintenance of industrial peace.³

In the wine and spirits industry.-- The three companies signed in 1961 or 1962 collective agreements with the two major trade union federations, the Pancyprrian Federation of Labor and the Cyprus Workers Confederation.⁴ According to these agreements, which cover all employees, the company recognizes the labor unions as the sole bargaining agents for the employee-

¹Cyprus, Ministry of Labour and Social Insurance, Labour-Management, Labour Publications Series: No. 1; January 1963, 2.

²Ministry of Labour and Social Insurance, Annual Report, (1962), 30.

³Ibid., (1963), 26.

⁴An agreement for one of the companies is examined here. All arrangements are generally similar in their standard provisions.

members and undertakes to treat all employees fairly irrespective of their membership in a union. The management's right to plan production and to select, promote, demote, remove, dismiss employees (for just cause) is safeguarded. The agreements govern industrial safety and health, the recruitment and dismissal of labour, hours of work, overtime, and absences, and define the procedure for grievances, strikes and lockouts. In addition to the basic wage or salary, employees receive a cost of living adjustment, an annual salary increase, family allowance, Christmas and Easter bonuses, marriage bonus and accident compensation; they have public holidays and fully paid annual leave and benefit from a provident and medical care fund. One may attribute the sensitivity of the companies to labour demands, exemplified by these agreements and by the absence of strikes, to their institutional nature: one is a public company controlled by the Greek community; the other is a cooperative; the third follows them.

Employment and Wages

Table 10 shows that employment in the industry increased by 36 per cent between 1955 and 1962, probably as a result of increased beer and wine production and the possible existence of more employment. Table 11 shows further that the number of firms employing this labour force decreased from 27 to 17 in the same period. In 1962, two firms were employing 60 per cent of the labor and 13 firms out of 17 were employing only 23 per cent.¹

The industry employed 7.5 per cent of the labor engaged in manufacturing and more than half the force engaged in the food industries. As shown in Table 12, wages in the industry are about 62 per cent higher than the

¹It seems that for the purpose of the census, ETKO and Haggipavlou are considered as different firms.

TABLE 10

NUMBER OF PERSONS ENGAGED IN THE MANUFACTURE OF WINES, SPIRITS
AND BEER, CLASSIFIED BY SEX AND AGE

Persons Employed	1955	1962	Per Cent Change
Males:			
18 and over	439	647	47
under 18	2	2	-
Females:			
18 and over	188	207	10
under 18	2	1	-
Total Number	631	857	36

Source: Ministry of Labour and Social Insurance, Annual Report, (1959), 44., and Department of Statistics and Research, Census of Industrial Production: 1962, II, 63.

TABLE 11

NUMBER AND SIZE OF ESTABLISHMENTS IN THE
WINE AND SPIRITS INDUSTRY

Establishments employing persons	No. of Establish.		Pers. Employed	
	1955	1962	1962	%
1	4	-		
2-4	8	-		
5-9	4	4	32	3.7
10-49	7	9	161	18.8
50-over	4	4		
50-99		2	147	17.2
100-499		2	517	60.3
Total	27	17	857	100.0

Source: Cyprus, Ministry of Labour and Social Insurance, Annual Report, (1959), 44., and Department of Statistics and Research, Census of Industrial Production: 1962, II.

TABLE 12

AVERAGE WAGE OR SALARY IN THE WINE AND SPIRITS INDUSTRY,
FOOD INDUSTRIES AND MANUFACTURING SECTOR IN 1962

Employee status	W & S	Food	Manuf.
Operatives:			
Male	£485	£362	£313
Female	189	192	160
Total	397	291	262
Other Employees:			
Male	817	650	657
Female	344	292	256
Total	774	589	598
All Employees:			
Male	581	415	361
Female	202	197	165
Total	487	331	300

Source: Department of Statistics and Research, Census of Industrial Production: 1962, II, 104-105.

TABLE 13

EMPLOYMENT IN THE WINE AND SPIRITS INDUSTRY, FOOD
INDUSTRIES AND MANUFACTURING SECTOR IN 1962

Status	W & S	Food	Manuf.
Working Proprietors:			
Male	24		
Unpaid Family Workers:			
Male	1		
Female	3		
Operatives:			
Male	444 (76%)	832 (86%)	7,259 (89%)
Female	187	600	3,561
Other Employees:			
Male	180 (24%)	187 (14%)	1,182 (11%)
Female	18	37	204
	857	1,656	12,206
Ratios			
	7.5%	14%	100%
	52.0%	100%	

Source: Department of Statistics and Research, Census of Industrial Production: 1962, II, 104-105.

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salaries in manufacturing and 47 per cent higher than in the food industries. The difference may not be so great if account is taken of the occupational structure of the industry. A greater extent of bureaucracy exists in the wine and spirits industry.¹

Industrial Strikes and Disputes

Going as far as 1959, no disputes resulted in strikes or work stoppages. In 1962 and 1959 no disputes were even reported.² One dispute affecting 30 workers and two disputes affecting 28 workers were reported in 1963 and 1964 respectively. These disputes involved the application of the collective agreements' articles to specific cases. All three disputes were settled through conciliation.³ It is expected that such disputes will be eliminated through further refinement of the collective agreements. Nevertheless, the sporadic occurrence of such disputes does not necessarily deny the general stability in labor relations.

Accidents and Compensation

Mechanization in the industry, where improved automatic bottling and washing machines have been installed, has greatly reduced the danger of

¹ See Table 13.

² Ministry of Labour and Social Insurance, Annual Report, (1959), (1962-1964).

³ Ibid., (1963), 112-113., (1964), 93.

accident.¹ There were, however, six accidents in 1959 and nine accidents in 1963 three of them fatal.² The three fatal accidents took place where wine is stored.³

To prevent accidents, periodic inspections of the installations are made by government officials.⁴ Such inspections are useful in forcing management to keep the equipment in good condition but more can be done in planning production and working conditions to ensure maximum safety and in teaching employees.

The new social insurance law provides free medical treatment and compensation for all employment accidents.⁵ In addition, under the medical care fund, free treatment is provided. Companies also pay the full salary for three days and two thirds of the salary until employees return to work.⁶

Labor and Employment Patterns

Table 14 shows that ETKO has the highest salary per employee and SODAP the lowest but ETKO's figure may be misleading as owners seem to be on the payroll receiving a salary. Though labor is not as abundant as in neighbouring countries, there is little difficulty in securing unskilled labor. In addition, the supply of clerical personnel far exceeds the demand

¹Ministry of Labour and Social Insurance, Annual Report, (1964), 37.

²Ibid., (1964), 130-139, (1963), 144-153, (1962), xii, (1959), 24.

³Ibid., (1963), 50.

⁴Ibid., 42.

⁵Ibid., (1964), 50-52.

⁶This is stipulated in the collective agreements.

TABLE 14

EMPLOYMENT, WAGES AND SALARIES PAID, AND AVERAGE
WAGE-RATES IN MAJOR FIRMS IN THE WINE AND SPIRITS
INDUSTRY IN THE YEARS 1963 AND 1964^a

Company	Employment		Wage & Salaries Paid		Avg. Wage Rate		% Change
	1963	1964	1963	1964	1963	1964	
KEO Ltd.	398	405	200,000	212,000	503	523	4.0
HAGGIPAVLOU:							
CHR. HAGG.	95	98	-	-			
ETKO Ltd.	55	56	31,119	33,700	566	602	6.4
SODAP	116	127	50,891	58,786	439	463	5.5
	664	686					

^aFigures obtained from the Records of KEO, Haggipavlou Group and SODAP.

for it. Employment is generally full-time, despite some seasonal employment in August and September; it is not subject to unforeseen termination once permanent status has been attained.

Labor Relations and Administration

Only KEO has a full-time personnel manager, appointed in 1962.¹ Other companies have an employee who in addition to his regular work deals with union representatives.

Recruitment of factory workers is made through the labor unions pro rata (on an agreed ratio between the two major labor federations) and selection is made by the personnel manager and supervisor. Other personnel are hired by senior management. There is, however, no formal machinery for selection whereby ability is tested regardless of family and other background.

There is also no formal training for employees and employee development tends to be ignored.² More attention to employee development might well include the appointment of a specialized officer to deal with selection, training, motivation, morale, safety and other personnel problems.

¹It is very interesting to note that the background of this labor officer is from sales. Despite his eagerness to work, his strange background and the understaffing of his office might be obstacles to efficiency.

²The only non-financial arrangement is the grievance procedure. This procedure annexed to the collective agreements is the one included in the Basic Agreement. The stages of solving any grievance are: supervisor, senior management, labor-management committee, mediation or arbitration. See Ministry of Labour and Social Insurance, Four and a Half Years of Independence, 21.

The Survey at KEO

The survey was conducted by the writer at KEO on February 15, 1965.¹ The main objectives of the survey were: (1) to classify employees according to sex, age group, education, place of residence, kind of work, method of payment and union membership, (2) to indicate the employees' attitudes towards the company and the union, and to delineate their major problems, (3) to find significant relationships in the employee structure and to relate the employees' attitudes to different variables.

About 71 per cent of the employees are male. Forty-five per cent belong in the 18-30 age group, 37 per cent in the 31-45 age group and the remaining 18 per cent in the 46-60 age group. The fact that only 10 per cent of the employees have no education at all and about 88 per cent have either primary or secondary education reflects both the widespread compulsory education in Cyprus and the attractiveness of administrative jobs in the industry to secondary school graduates. Classified by the place of residence, 80 per cent of the employees live in the town of Limassol, 18 per cent in the Limassol suburbs and only 2 per cent in the Limassol district.

About four-fifths of the labor force are union members but membership seems quite arbitrary, dependent on personal emotions, needs and values. It is shown that lack of secondary education restricts employees to manual

¹The survey covered the Limassol plant of KEO employing 342 workers, out of which sample of 15 per cent or 51 employees was taken, at random. The purpose of the study was explained personally by the researcher and the questionnaire used was anonymous. The questionnaire, put in an envelope, was left at the Personnel Office but occasionally it was given to the researcher personally. The classification of employees and their responses are shown in the statistical appendix.

jobs. Female employees also have consistently lower education and congregate in unskilled jobs, where they constitute two-thirds of the unskilled labor force, and to a lesser extent in clerical jobs. As a result, female employees and employees with little or no education are paid on a daily weekly basis. Out of five middle management positions four are held by people with secondary schooling, whose service brought them promotion. This fact confirms that where seniority is the major basis for promotion barriers might exist for new blood to fill high administrative jobs.

When employees were asked to state the major problem now faced by them, 59 per cent indicates "salaries", 23 per cent emphasized the "behavior of boss" or the quality of supervision, 12 per cent were facing "no problem" and only 6 per cent complained about the "working conditions." Indication of problems might not reveal criticism of the company but rather express the employees' aspirations. Though not expressed formally, many employees seem to feel the lack of organization and work programming. This problem was indicated by a middle manager. Lack of organization, in addition to being a sign of waste and inefficiency, may also be a source of employee dissatisfaction by making him ignorant of his formal relationships with others and by denying him the satisfaction of performing a certain and unique function in the whole organization.

Labor's Attitudes Towards the Company and the Union

By giving weights to responses, the attitudinal index for the company came to be 3.78, very near to "good", and for the union 3.53,

halfway between "average" and "good".¹ By computing and comparing the indices for categories of employees, the following relationships have been noticed: (1) males have a better attitude towards the company and the union than females, (2) the middle age group has a significantly more favourable attitude towards the company and slightly more favourable towards the union, than any other group, (3) the higher the education one has, the better is his attitude towards the company and the union, (4) the further from the city an employee resides, the less favourable are his attitudes towards the company and the union; (5) the employees hired between 1955 and 1959 have less favourable attitudes towards the company and more favourable towards the union compared to all other employees, (6) non-union members have a better attitude towards the company but a worse attitude towards the union, (7) the method of payment does not affect attitudes, (8) supervisors and middle management have better attitudes towards the company and the union than other employees, (9) the employees, who admit no problems, have a better attitude towards the company and the union, (10) only those who indicated the problem of "boss behavior" reported a less favourable attitude towards the company, (11) a favourable attitude towards the company coincides with a favourable attitude towards the union.

The reader should be warned that the findings are true as generalizations in so far as the sample is representative of the universe. These relationships might not be true for other companies nor are they necessarily

¹The possible range of attitudinal responses from the highest (5 points) to the lowest (1 point) was: very good, good, average, bad, unbearable.

causal in nature. Any attempt to discover possible links at this stage will be mere supposition.

Labor Problems

Relatively low productivity and high wages

Managers in the industry who travelled abroad allege that French labor is more productive than Cypriot workers while labor in Spain is paid lower wages.¹ The wine industry in Cyprus, therefore, probably sustains a higher labor cost than its competitors in these two countries. Money wages on Cyprus, however, cannot be lowered; on the contrary, the strong labor unions and the existing agreements increase wages. So the solution lies in increasing productivity.

The problem is faced by many industries and is realized by the government.² A labor official suggests as an answer to low productivity "the establishment of a Productivity Center . . . investment in human resources, modernization of means of production and distribution, and improved organization."³ Such a center, sponsored by the Cyprus government and the United Nations Special Fund, was established in 1963.⁴

Training of employees might be undertaken for the development of selected skills. Though nine employees participated in a three-year night

¹Interview with Mr. Andreas Andreou and Panayiotis Psaras, Managers, KEO, Limassol, February 15, 1965.

²Ministry of Labour and Social Insurance, Monthly Bulletin, II, (Nov.-Dec. 1963), 11.

³Ministry of Labour and Social Insurance, Government Regulation of Wages and Democracy, Labour Publications Series: No. 3., October 1963, 11.

⁴Ministry of Labour and Social Insurance, Annual Report, (1964), 57-58.

technical course,¹ a proper program at the Limassol technical school might be established permanently. Furthermore, an apprenticeship scheme, introduced in 1963 for theoretical and practical training in skilled jobs, is expected to cover the wine and spirits industry soon.²

Industrial Accidents

The effect of accidents was mentioned previously. For the reduction of accidents, safety precautions ought to be developed and employees trained to use them. Sometimes, fruitful suggestions are made by employees; encouragement of such suggestions might be useful.

Organization and Efficiency

Though organization is a generic problem affecting all functions of an enterprise, it is also a personnel problem. Improved organization will usually result in higher efficiency and morale among employees.

Underdeveloped Labor Administration

To solve all these problems management ought perhaps to view labor as a resource to be developed. A better labor administration and increased emphasis on the importance of labor are most likely to increase labor efficiency as well as satisfaction.

Tentative Conclusions

More people were employed by fewer firms in the industry in 1960 than in 1954. Average salaries in the industry are higher than salaries

¹Interview with Mr. Neophitos Petrides, Personnel Manager, KEO, Limassol, April 22, 1965.

²Ministry of Labour and Social Insurance, Monthly Bulletin, II, (Nov.-Dec. 1963), 17-19.

in the food industries and manufacturing in general.

The existence of collective agreements and the absence of strikes seems to indicate a relative stability in labor relations. With further refinements of the collective agreements disputes can hopefully be reduced.

Though accidents are compensated for by money payment, a reduction in the accident rate through safety precaution and training seems necessary in order to raise morale and productivity, and to reduce the human and material loss.

The survey at KEO indicated salaries as the most important problem and working conditions as the least. Nevertheless, the employees' attitudes toward both the company and the union are favorable.

Despite the satisfactory labor relations environment, the industry faces the crucial problem of high labor costs (relatively low labor productivity and high wages), an apparent lack of organization, and an unnecessarily high rate of industrial accidents. The development of efficient labor and personnel administration departments would seem to be a worthwhile objective for most firms in this industry.

CHAPTER V

FINANCIAL ANALYSIS AND CONTROL

Financial and Legal Organization and Control

KEO.-- The Cyprus Wine and Spirits Company was incorporated in 1927 and with a capital of £25,000. The capital was increased in 1928, 1929, 1932, 1937 and 1951. In addition, stock dividends were paid on a one-to-one basis in 1944 and 1947.¹

The company was controlled in 1927 by financiers from Athens and merchants from Limassol.² Later on, Mr. Bodossakis of Greece acquired stock ownership either personally or through the Hellenic Mining Company, which he controlled.³ Thus, in 1951, the major stockholders were Lanitis, Hellenic Mining, Manglis and Bodossakis.⁴ Ownership expanded in that year through the issue of 8,000 5 per cent cumulative shares which were bought by vine growers. It was the policy of the then managing director to deploy the ownership of KEO among growers in order to advance good will and expand sales. The controlling interest was still with Bodossakis who donated all his shares to the Greek Community of Cyprus in 1959. The group is now controlled by a committee appointed by the government.

¹KEO. Annual Statements and Returns, Office of the Registrar of Companies, Nicosia. (In the files of the Office.)

²Ibid.

³Interview with Mr. Diogenis Angelides, Sales Manager, KEO, April 30, 1965.

⁴KEO. Annual Statements and Returns, op. cit.

The change of control in 1959 was followed by a change in the legal entity of the company. A new company, KEO Ltd., was established in 1959 to take over the Cyprus Wine and Spirits Company.¹ During the takeover, a revaluation surplus of £1,556,054, including a goodwill item of £200,000 was recorded in the books. The issued capital as of the end of 1964 consisted of 82,311 5 per cent preferred shares and 438,571 ordinary shares of £5 each.²

SODAP.-- SODAP was established in 1946. Its registered capital was £500,000 but as of June 30, 1963, £253,670 was subscribed for and only £153,081 was paid in. The paid-in capital has been increasing as instalments, due and in arrears, have been collected.³

The ownership of SODAP is widely dispersed. In 1963, the stockholders were 7,449 individuals and 65 cooperative companies. With 900 cooperative companies having about 185,000 members all over Cyprus, an estimate of some 21,000 people are in a certain way owners of SODAP. Despite this scattered ownership, actual control is exercised by the cooperative movement.

Haggipavlou group.-- The closed ownership of the group precludes analysis of its legal organization and control. Two of the three companies of the group are private, limited companies, established mainly for tax reasons. Though the third one, ETKO, was established as a public company it is also privately controlled. No analysis of its statements would be meaningful as its whole existence is a legal technicality.

¹KEO. Copy of the application made in the district court of Limassol, January 22, 1959.

²KEO. Annual Statements and Returns, op. cit.

³SODAP. Annual Statements and Returns, 1962-64.

Trend of Earnings and Rate of Return

The earnings of KEO and SODAP between 1961-63 are shown in Table 15. KEO has improved from a loss position of £24,256 in 1961 to a profit position of £190,022 in 1963. SODAP, on the other hand, having a rate of return to equity of 8.34 per cent in 1961, broke even in 1963 and informed sources expected a loss in 1964. Even KEO's moderate profits are mainly derived from the brewery rather than from wine operations. It is estimated that about £145,000 of the profits in 1963 came from beer production and only about £45,000 came from wine operations.¹

Thus, the low rate of return indicates that KEO and SODAP are not financially prosperous concerns. SODAP's difficulties threaten its existence. KEO's prospects may be good although it has not paid common stock dividends since 1947 and reported a loss in 1961. The financial weakness of these firms may reflect poor management, an escalating cost structure and difficulties in marketing due to increased competition and trade barriers. It seems that the prospering years for the industry, as shown by the distributed profits of KEO in Table 16, were the years 1940-1947.

¹Informed sources estimated KEO's production of beer in 1964 at about one million gallons or 95 per cent of the local beer consumption (the local beer consumption in 1964 was 1,107,000 imperial gallons; figure obtained from the Customs and Excise Office, Limassol). KEO's production in 1964 was equivalent to 4.5 million one-liter bottles yielding at the whole-sale price of 105 mils per bottle revenues of £472,000 gross or £324,000 net of excise duty. Knowing that Laziza's wage bill of £36,000 was one-quarter of total cost (See Abboud Nabil, "An Evaluation of the Beer Industry in Lebanon" unpublished Bachelor's thesis, A.U.B., 1964) and assuming that KEO's higher wage bill of £71,000 does not reflect lesser mechanization but rather higher money wages, production costs of KEO (the production of Laziza is about that of KEO) can be estimated at £179,000. Thus, profits from beer production are expected to be in the neighbourhood of £145,000.

TABLE 15

NET PROFITS (LOSS) AFTER TAX AND BOOK RATES OF RETURN OF KEO
AND SODAP, 1961-63^a

Item	1961	1962	1963
Net profit after taxes			
KEO	(24,256)	92,513	190,022
SODAP	11,374	257	18
Return on Equity			
KEO	-.96%	3.52%	6.68%
SODAP	8.34	.15	-

^aCalculated from: The Annual Final Accounts of KEO and SODAP for the Years 1961-1963.

TABLE 16

CURRENT AND CONSTANT INFLOWS AND OUTFLOWS OF KEO LTD. 1927-1963

Year	Current		Price Index	Deflated or Constant	
	Inflows	Outflows		Inflows	Outflows
1927 - 0	25,000		100	25,000	
28 - 1	25,000		98	25,510	
29 - 2	25,000		95	26,316	
32 - 5	15,000		79	18,987	
35 - 8		2,700	82		3,293
36 - 9		4,500	87		5,172
37 -10	10,000	6,300	100	10,000	6,300
38 -11		8,000	93		8,602
39 -12		8,000	95		8,421
40 -13		8,000	126		6,349
41 -14		20,000	140		14,286
42,-15		16,000	147		10,884
43 -16		32,000	150		21,333
44 -17		20,000	153		13,072
45 -18		18,889	155		12,126
46 -19		18,889	161		11,732
47 -20		22,500	176		12,784
51 -24	60,000		293	20,478	
63-36		1,914,098 ^a			487,047 ^a
		2,016,135 ^b			513,011 ^b

^aThe capitalized cash income value of the common stockholders' equity.

^bThe book value of the common stockholders' equity.

An attempt was made to use the discounted cash flow method for measuring the true rate of return earned by KEO between 1927 and 1963. The viewpoint taken was that of the common stockholders: any capital paid-in was viewed as an outflow of their pockets; all dividends received plus the value of the common equity in 1963 were considered as the inflow into their pockets. As substitute to the market value of common stock,² its rights to the company's worth was taken. The stockholders' equity was valued as £2,394,525, at 1959 revaluation costs and subsequent acquisition costs, or as £2,273,338 at capitalization value (capitalized cash earnings at 10 per cent minus liabilities). Common stockholders had a right of 84.1977 per cent of this equity of £2,016,135 and £1,914,098 respectively. Both these values were used instead of the market value of the common equity. To calculate the rate of return in real terms, the price index for the pound sterling,³ though unrealistic of the price situation in Cyprus, was used for the sake of academic exercise.

Both the inflows and outflows are shown at current and constant (1927) pounds in Table 16. Using constant figures and the capitalized value of the equity the true rate of return was found to be 6.9 per cent going up to 7.1 per cent, if the book value of the equity was used.⁴ Though the price index used was not the proper one and comparison of the rate of return with similar risk companies was not possible, the generally

¹For a full discussion of the discounted cash flow method see Joel Dean, "Measuring the Productivity of Capital", The Management of Corporate Capital, ed. Ezra Solomon, (A publication of third series, Graduate School of Business, The University of Chicago; New York: The Free Press of Glencoe, 1964), p. 33.

²No market value figures are available because no trading takes place on most shares owned by the Greek Community.

³No price index is available for the Cyprus pounds.

⁴The tables used are in Lloyd L. Lowenstein, Mathematics in Business (New York: John Wiley & Sons, Inc., 1958), 334-335.

TABLE 17

FINANCIAL RATIOS AND PERCENTAGES OF KEO AND SODAP, 1961-1963^a

Ratio or Percentage	KEO			SODAP		
	1961	1962	1963	1961	1962	1963
Percentage Composition: Assets:						
Fixed	47	43	41	54	49	51
Other	33	34	36	-	-	-
Current	<u>20</u>	<u>23</u>	<u>23</u>	<u>46</u>	<u>51</u>	<u>49</u>
	100	100	100	100	100	100
Liabilities						
Long-term	61	63	70	22	20	16
Short-term	23	23	21	60	57	52
Stockholders' Equity	<u>16</u>	<u>14</u>	<u>9</u>	<u>18</u>	<u>23</u>	<u>32</u>
	100	100	100	100	100	100
Ratios:						
Current	1.21	1.69	2.63	2.61	2.17	1.55
Acid test	.15	.31	.53	.64	.25	.19
Receivable Turnover	-	-	-	3.54	4.71	4.22
Inventory Turnover	-	-	-	.79	.38	.42
Debt to Net Worth	.65	.58	.42	3.47	3.94	5.23

^aCalculated from: The Annual Statements of KEO and SODAP for the Years 1961-1963, and the Auditors' Report of SODAP, kept at the Office of Cooperative Development, Nicosia.

held view that KEO was a very profitable concern because from a £25,000 investment in 1927, it had assets of more than 4 million in 1964 could be easily refuted.

Financial Analysis Proper

The previous exercise of measuring the profitability of KEO since 1927 was long-term financial analysis. Financial analysis in this section is limited to a short-term period.

Table 17 shows that about one-third of KEO's assets in 1964 were "other assets", namely advances to the Hellenic Mining and other related companies fixed until the end of 1966. To balance such advances, KEO had resorted to long-term borrowing repayable at the end of 1966. Such a policy might lower the rate of return to the company's assets and endanger their security. Although KEO is a member of the group controlled by the Greek community, management might prefer to promote the company rather than solve other companies' problems.

SODAP was in heavy debt in 1963 with about 80 per cent of its assets being financed from debt. The debt to net worth ratio of about 4:1 and its trend to rise are dangerous. One could question the effectiveness of government loans in removing SODAP's inefficiency if a fact was noticed. It has been shown that lower profits were reported as more debts were acquired. This needed attention focussed on other factors than mere financial stringency as responsible for SODAP's inefficiency. KEO's debt to net worth ratio had improved and was .5 in 1963, though this ratio might have been favourably affected by the 1959 revaluation. Nevertheless, KEO ought

perhaps to decrease its long-term obligations, assumed because of the advances to other companies, and resort to borrowing only after a careful financial analysis. Both the current and acid-test ratios of KEO improved whereas those of SODAP became worse. The receivable turnover of SODAP deteriorated also but the inventory turnover ratio improved probably through increasing sales at lower prices.¹

It might be concluded that SODAP is a sick company being supported by government loans. A complete evaluation of its operations by a team of consultants would help solve its problems. KEO, on the other hand, seemed to recover, and despite its weaknesses may be able to improve further if outside pressures stop.

Accounting Control of Performance

The way accounting figures are compiled, classified, and presented in the financial statements apparently conforms to the conventional rules of accounting and no criticism can be made with respect to the accuracy and validity of the annual financial statements. What requires comment, however, is the use of accounting as a management tool. General ignorance of the purpose of cost accounting reduces the usefulness of available cost data in controlling individuals and departments and segregating the efficient from the inefficient.² The limited budgets are ineffectively used in determining the avoidability of costs and distinguishing between price and quantity

¹Because of its weak financial position and pressure of inventories, SODAP is considered by other companies to be the initiator of price-cutting.

²Charles F. Schlatter, Cost Accounting (2nd ed.; New York: John Wiley & Sons, Inc., 1960), p. 3.

variations. In addition, a confused idea about the effect of direct costs and arbitrary overhead allocations on the final cost may, sometimes, lead to wrong decisions.

Capital Expenditure Program

Investment decisions in the industry are apparently made by senior management using as criteria the annual incremental profits, the extent of technical development or the degree of urgency. The first is evaluated by the company's accountant who estimates costs and revenues, considering arbitrary depreciation allocation. The second is determined by the company's technical staff and the third one by discussion between contestant personalities.

Modern capital investment analysis has developed methods of using a single index in evaluating various alternatives and choosing the optimum one. The discounted cash flow method, explained earlier, is one of the most valid methods from the standpoint of theory; it is also practical.

It would be desirable if the management of the industry realizes that analysis is needed for investment decisions. Such analysis means at first the development of various alternatives and uses the discounted cash flow method to evaluate them.

Financial Problems

The most important problem, the weak financial position of the two major firms, might be the total effect of certain limitations: the lack of good, professional management in finance; increased costs and more competitive

market structure; outside pressures; or even failure to recognize these problems. The Haggipavlou group is expected to be in a better position not because it is unaffected by these limitations but due to the better control exercised by the management, and, perhaps, their conservative policies.

CHAPTER VI

PRODUCTION MANAGEMENT

The Context of Manufacturing Sector

Table 18 shows that firms in the food industries are generally larger than those in manufacturing as a whole; firms in the wine and spirits industry are even larger than those in the food industries. It also offers a clue to the industry's efficiency. Though average employment per establishment in the industry is three times as large than in manufacturing, value added is almost eight times more.

Table 19 documents previous statements that a great part of the industry's production is generated by large size firms (100-499 employees), and Table 20 shows that more than 98 per cent of the gross output and value added by the industry is created in the town of Limassol which contributes only one-fourth of the total value created by manufacturing in Cyprus.

It is reported that the total capacity of the wineries and distilleries of Cyprus is over 60,000 tons,¹ or 48 million okes of fresh grapes. Total input of grapes as calculated in Table 6 is about 47 million okes. The industry does not seem to operate near full capacity; therefore, the reported capacity of 48 million okes is either out-of-date or wrong. The maximum capacity of KEO brewery is 3,100,000 liters annually, and the entire production is consumed locally.²

¹N.H. Rhodas, "The Vine-Growing Cyprus", p. 2.

²"A Few Facts About KEO", a mimeographed leaflet about KEO Ltd.

TABLE 18

THE WINE AND SPIRITS INDUSTRY COMPARED WITH THE FOOD INDUSTRIES AND THE MANUFACTURING SECTOR, 1962^a

	W & S	Food Ind.	Manufac.
Persons per establishment	50	22	15
Gross Output per establishment (£)	143,550	78,031	23,877
Value Added per Establishment	70,370	25,313	9,518

^aCalculated from: Department of Statistics and Research, Census of Industrial Production: 1962, II, 41-42.

TABLE 19

PERCENTAGE CONTRIBUTION OF VARIOUS SIZES FIRMS IN THE WINE AND SPIRITS INDUSTRY AND THE MANUFACTURING SECTOR, 1962^a

Size of Firm (persons)	Per Cent Gross Output		Per Cent Value Added	
	W & S	Manufac.	W & S	Manufac.
5 - 9	2.0 %	12.4 %	1.4 %	13.6 %
10 - 19	6.4	18.1	6.0	15.1
20 - 49	5.3	20.3	1.6	18.9
50 - 99	23.9	18.0	24.3	18.0
100 - 499	62.4	31.2	66.7	34.4
	100.0 %	100.0 %	100.0%	100.0 %

^aCalculated from: Department of Statistics and Research, Census of Industrial Production: 1962, II, 50-60.

TABLE 20

PERCENTAGE CONTRIBUTION OF THE WINE AND SPIRITS INDUSTRY AND
MANUFACTURING SECTOR IN VARIOUS AREAS, 1962^a

Area (District)	Per Cent Gross Output		Per Cent Value Added	
	W & S	Manufact.	W & S	Manufact.
Nicosia	1.5	56.1	1.2	56.1
Limassol	98.3	24.2	98.7	25.8
Other Towns	.2	10.4	-	9.6
Rural Areas	-	9.3	-	8.5
Total	100.0	100.0	100.0	100.0

^a Calculated from F Department of Statistics and Research, Census of Industrial Production: 1962, II, 55, 58, 60.

TABLE 21

TYPES OF MATERIALS PURCHASED IN THE WINE AND SPIRITS INDUSTRY,
FOOD INDUSTRIES AND MANUFACTURING SECTOR, 1962^a

Item	W & S	Food	Manufacturing
Total Purchases	<u>100</u>	<u>100</u>	<u>100</u>
Raw Materials	88	96	93
Fuel	2	1	2
Electricity	1	1	2
Work done by others	9	2	3

^a Calculated from: Department of Statistics and Research, Census of Industrial Production: 1962, II, 67, 109.

Materials

The purchases of the industry include raw materials, fuel and electricity, and work contracted to the outsider. Table 21 shows that raw materials constitute 88 per cent of the total purchases. This is less than in other industries but the share of the work done by others is greater, nine per cent instead of the three per cent in manufacturing.¹

The raw material input consists mainly of grapes, Zivania, sold to wineries by the vine-products scheme at a reduced price, is a supplementary input for the big wineries and the major input for the small concerns which produce mainly brandies. Commandaria, produced in some villages, is also used in winemaking.

Table 22 shows that KEO and SODAP are the major buyers of fresh grapes, each buying about 40 per cent of the grapes delivered to wineries. Despite SODAP's weak financial position, rising inventories and understaffing of operations, its policy as a cooperative marketing union may dictate the big purchases of grapes. This nevertheless, may not be conducive to effective operations.

These same firms buy also zivania. If total inputs, grapes and zivania, are considered, KEO has a slightly smaller share in the industry's total raw material input than when only grapes considered. SODAP's share drops significantly because of small zivania purchases but the share of the Haggipavlou group almost doubles because of its big stillery. Other firms, buying considerable amounts of zivania, attain a share of 13 per cent of total raw material input.²

¹The lack of interrelationship between different industries, not conducive to a multiple increase in the industrial output, is indicated as a weakness of the manufacturing sector. See A.J. Meyer with Simos Vassiliou, The Economy of Cyprus, (Cambridge: Harvard University Press, 1962), p. 53.

²See Table 23.

TABLE 22

GRAPES RECEIVED BY WINE MANUFACTURERS
(HUNDRED THOUSAND OKES)

Firm	1960		1961		1962		1963		1964	
	No	%	No	%	No	%	No	%	No	%
Keo Ltd.	114	46	119	35	110	35	88	36	112	39
Sodap Ltd.	71	29	127	38	135	43	104	42	121	42
Etoko Ltd.	21	8	36	11	20	6	17	7	31	11
Coudounaris Ltd.	28	11	35	10	33	10	25	10	16	6
Loel Ltd.	9	4	22	6	18	6	13	5	3	1
Others	5	2	1	-	-	-	-	-	4	1
	248	100%	340	100%	316	100%	247	100%	287	100%

Source: The Office of the Vine Products Controller, Limassol.

TABLE 23

TOTAL INPUTS OF GRAPES BY WINE MANUFACTURERS, 1963-64
(HUNDRED THOUSAND OKES)

Firm	Purch. Ziv.		Equiv. Grapes		Total Grapes ^a			
	63	64	63	64	63	%	64	%
Keo Ltd.	8.9	11.3	44.5	56.5	132.9	32	168.9	37
Sodap Ltd.	2.7	1.5	13.5	7.7	117.2	29	129.1	28
Haggi. Group:								
Haggi	9.0	9.4	44.8	47.0	44.8	11	47.0	10
Etoko	-	1.3	-	6.4	16.6	4	37.1	8
Total	9.0	10.7	44.8	53.4	61.4	15	84.1	18
Loel Ltd.	4.1	3.5	20.6	17.4	33.3	8	20.5	4
Others	8.0	7.9	39.8	39.6	64.7	16	59.6	13
	32.7	34.9	163.2	174.6	409.5	100	462.2	100

^aThe "Total Grapes" column is the total of the "Equivalent Grapes" and the "Fresh Grapes". Commandaria purchases were not considered in computing the total grapes input. KEO, the major buyer of commandaria, buys about £400,000 annually.

Source: Figures obtained from the Office of the Vine Products Controller, Limassol.

KEO owns four different plants, operated during the vintage time, for the delivery of grapes. More than half of the grapes received by KEO are delivered at the Limassol plant, the Paphos plant receiving only 6 per cent and the Mallia and Peraphedi plants receiving 20 per cent each.¹

Thus, KEO buys its grapes mainly from the Limassol district. SODAP, on the other hand, receives about 65 per cent of its grape purchases at its Paphos plant, a technically modern plant installed for the purpose of cutting down transportation and spoilage costs. Still, there are grapes transported from Paphos to Limassol, as all other wineries accept delivery of grapes only at Limassol.

Because of the surplus production of grapes in Cyprus and the fixed price paid by manufacturers, KEO and SODAP give their vine-grower stockholders a right to deliver grapes in proportion to their shareholdings, and a kind of trading takes place on these rights. Haggipavlou is freer to act and buys grapes from vine-growers who are his customers. Though both systems may have drawbacks, alternative delivery systems will not solve the problem of overproduction but rather change the people who benefit most.

The grape price control protects the grower and the long-term existence of the industry but might endanger its short-term viability which is related to its long-term success. It is believed by some that the present price of 18 mils per oke is high compared to prices in other grape producing countries. Though it has not been possible to prove this assertion, one reason for the industry's unsatisfactory performance might be this outside control on the price of grapes.

¹ See Table 24.

TABLE 24

VARIETIES OF GRAPES RECEIVED BY WINE MANUFACTURERS, 1963, 1964^a

Firm	Black	White	Malaga	Others	Total
Keo Ltd:					
Limassol	2,196	3,912	279	318	950
Mallia	2,304	2,130			925
Pera-Pedhi	1,904	2,019			318
Paphos	634				279
Total	7,038	8,061	593	1,911	950
					8,835
					11,240
Sodap:					
Limassol	3,656	3,677	219	146	18
Paphos	5,755	6,701	490	1,585	28
Total	9,411	10,378	709	1,731	46
					9
					10,371
					12,138
Coudoumaris	2,026	927	163	305	62
					101
					2,486
					1,629
Etko Ltd.	1,422	2,420	95	208	1
					36
					1,661
					3,071
Loel Ltd.	1,134	309	3		137
					1,274
					309
Others			39		152
					181
					372
	21,031	22,134	1,563	4,155	862
					1,193
					1,171
					1,277
					24,627
					28,759

^aCalculated from: Figures obtained from the Office of the Vine Products Controller, Limassol.

One problem concerning inputs is the costs resulting from the transportation and spoilage of grapes. Decentralized delivery might reduce spoilage and reduce costs of transportation, and allow the manufacturer to have better inputs and promote goodwill among growers. The main problem, however, is the lack of wide varieties of grapes. Though laboratory technologists have developed a wide variety of wines from the two main grape varieties, any increase in the grape varieties, as recommended by various experts, will most probably lead to improved sales as well as quality of the wines.¹

Process

Characteristics

Not described in detail, the production process consists of manufacturing, starting with the crushing of grapes, periodic cleaning of the juice and final processing and bottling, and storage.

Only KEO has special isothermic cellars² which enables the wine to mature at a controlled temperature; other wineries have normal warehouses. KEO's general storage capacity is 25,000 tons and it has two huge tanks and a pipeline (600 meters long under the sea) through which it can pump 100 tons of wine per hour.³

The need for large inventories of wine, either as semi-finished or finished, raises the problem of adequate financial resources. Financial

¹Rossi, op.cit., p. 17.

²The capacity of the cellar is around one million bottles and are used for prestige products. See "A Few Facts About KEO", p. 2.

³Ibid., p. 3. The pipeline facilitates delivery on tanker ships.

adequacy or insufficiency may determine also the marketing form of the products: quality appealing wines sold directly to the consumer with a quality image; or price-appealing wines sold to blenders who market them with their own label. The government offered long-term loans in 1962 to help increase the storage capacity and improve the quality of wines.¹ Ministry officials pointed out a reluctance on the part of the wineries to absorb a quota of £100,000 allotted for such loans.² This might indicate a lack of optimism in greater storage capacity particularly by borrowing.

Capital Use in production

For an interindustry comparison to show the degree of capital intensity in the industry two indices, namely the total installed power capacity and electricity consumption, were computed on a per employee basis. The classical index of annual depreciation charge of fixed assets employed plus the cost of energy consumed,³ was not used because of the lack of information.

The industry seems more mechanized than either manufacturing or food processing industries. The installed power capacity per employee is 3.3 hp (horsepower), compared with 2.0 hp in the food industries and 1.9 in the manufacturing sector. Electricity consumption is still higher than in manufacturing 2,800 kwt (kilowatts) per employee as compared to 2,200, but falls short of that of the food industries at 3,200 kwt. The reason for the apparent low electricity consumption might be that fuel is used together with electricity consumption.⁴

¹Rhodos, "The Vine growing Cyprus", p. 5

²The writer was asked not to disclose the names of these officials.

³Everett E. Hagen, Handbook for Industry Studies, The Center for International Studies, Massachusetts Institute of Technology, (Glencoe: The Free Press, 1958), p. 52.

⁴KEO, for example, purchased £10,000 of electricity and £14,500 of fuel during 1964. Interview with Mr. Spyros Psomas, Accountant, KEO, May 2, 1965.

Product standardization

Though the quality of wine and brandy does not vary much because of sample tests made by the company oenologists, no product standardization exists in Cyprus. Only brandies are aged under government supervision because of the excise duty but even the official certificates of age do not indicate a degree of quality.

To set standards and enforce compliance to them seems to promote goodwill among the buyers of Cyprus wines and brandies. A cellar record for both wines and brandies, including detailed data about the stocks on hand, might be kept and certificates be issued for the outgoing product.

Product development

Few products were developed in the last three or four years but the years 1954-1960 was the era of product development when many varieties of table wines were introduced and the sherry development started. The quality of the sherry was criticized in 1956 but later improvements made Cyprus sherry a success on the British market.

Production management and problems

Production management is general in application.¹ Its modern feature is the systems approach,² concerned with the design of the production process and control systems and the subsequent evaluation and replanning according to dynamic changes in technology and market structure.

¹Martin, Starr, Production Management: Systems and Synthesis (Englewood, Cliffs, N.J.: Prentice-Hall, Inc., 1964), p. 44.

²The systems approach is recent and has been publicized by Martin K. Starr, Professor at Columbia University. This approach holds that decisions must include all factors relevant to a problem and it cuts across divisional lines to achieve a realistic appraisal of all factors.

Despite the technical background of managers and their relative efficiency in production there are two strategic weaknesses of production management in the industry; firstly, an inability to realize and create alternative methods of achieving a production objective and secondly, lack of realization that production decisions should consider many factors existing in other divisions. Confusion also exists in the attitude towards automation and efficiency. Efficiency does not necessarily subsume automation and automation alone does not create efficiency which is rather the by-product of an integrated process: the synthesis of technology with proper marketing orientation, financial strength and managerial organization.

CHAPTER VII

MARKETING ASPECT

General View of Marketing

The importance and scope of marketing

Marketing is defined as "the performance of business activities that direct the flow of goods and services from producer to consumer."¹ Marketing efficiency means optimum sales consistent with minimum marketing costs. To achieve this, a producer may conduct research studies as an aid to his own creative and executive talents.² Such studies may be conducted to develop new products, to determine the characteristics and motivations of consumers, to assess the sales potential, to evaluate the sales organization and operations and to increase advertising effectiveness.³ This kind of market analysis is a technical matter beyond the scope of this thesis.

The analysis, to be made herein, is mostly statistical and economic. The analysis is complicated by the existence of a variety of products, different markets with distinct characteristics and dissimilar policies, so that one could hardly speak of an industry were it not for the high cross-elasticity of these differentiated products. What the industry faces today

¹The Committee on Definitions of the American Marketing Association, Marketing Definitions (Chicago: American Marketing Association, 1960), p. 15.

²Luck David, J., et al., Marketing Research (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1961), p. 496.

³Ibid., pp. 16-25.

above all else is a marketing problem, an inability to dispose of its products to the extent of achieving the objective of absorbing all grapes. The problem is simply what products to sell in what markets at what prices and through what channels so that a set objective be achieved.

Analysis of exports

The aggregate exports of commandaria, other wines and brandies are shown in Table 25 and depicted in Figure 3. The peak of £1,090,300 was reached in 1958 when there were substantial sales made to Europe, particularly France, after the bad season of 1957. The value index, base 1952, shows severe fluctuations ranging from as low as 73.6 in 1954 to 172.6 in 1958. Exports have in 1963 and 1964 been at a level slightly above one million pounds, approaching the peak of 1958 after recovering from the downward trend during the intervening years. Though a cycle is discernible from the graph, it is highly improbable that cyclical variations constitute the pattern of exports because of the irrational nature of the exports.

Despite such wide fluctuations, if a straight line is plotted through the figures a trend with a positive sign is obtained. The annual increase as shown by the trend equation in Table 25 is £35,540. How useful this trend equation is in forecasting sales depends on how widely actual figures deviate from the mean, as measured by the standard deviation, or from the trend line, as measured by the standard error of estimate. The standard error of estimate is £132,000. This compared to the annual trend increase of £35,540 may be considered excessive and a drawback for planning. For example, though the expected value for exports in 1965 is £956,300, yet at the 95 per cent level of confidence the actual value may be 28 per cent lower or higher. Despite the positive trend, these wide fluctuations add uncertainty to expansion

TABLE 25

EXPORTS IN VALUE, INDEX FORM AND TREND EQUATION FOR
THE YEARS 1952-64

Year	Act. Export Value (000)	Index	Exp. Export Value (000)	Actual-Expected Exp. Value (000)
1952	631.4	100.0	529.8	101.6
1953	576.0	91.2	565.3	10.7
1954	464.0	73.5	600.9	-136.9
1955	562.4	89.1	636.4	- 74.0
1956	617.8	97.8	671.9	- 54.1
1957	665.0	105.3	707.5	- 42.5
1958	1,090.3	172.6	743.0	347.3
1959	835.0	132.3	778.6	56.4
1960	672.9	106.6	814.1	-141.2
1961	816.2	129.3	849.6	- 33.4
1962	707.4	112.0	855.2	-177.8
1963	1,003.6	159.0	920.7	82.9
1964	1,017.2	161.1	956.3	60.9

Trend Equation: $Y = 494,237 + 35,540 X$ 1951 = X_0

Standard Deviation $p = 187,400$

Standard Error of Estimate $r = 132,000$

Coefficient of Determination $p^2 = .504$ or 50.4%

^aCalculated from: Department of Statistics and Research, Imports-Exports Statistics, (1952-1964).

TABLE 26

EXPECTED EXPORTS IN VALUE, QUANTITY AND PRICE INDEX FORM FOR THE
YEARS 1965-1969 WITH LIMITS AT THE 95 PER CENT LEVEL OF CONFIDENCE

Year	Value		Index	
	000	Index	Price	Quantity
1964	956.3	100.0	100.0	100.0
1965	991.8	103.7	101.6	102.4
1966	1,027.3	107.4	103.3	104.9
1967	1,062.9	111.1	104.9	107.3
1968	1,098.4	114.9	106.5	109.8
1969	1,134.0	118.6	108.2	112.2
	Range of indexes at 95 per cent Level of Confidence			
1964		100	100	100
1965		76-131	88-116	62-143

TABLE 27

EXPORTS: PRICE AND QUANTITY INDICES
FOR THE YEARS 1952-64

Year	Laspeyres		Paasche		Ideal ^a	
	P	Q	P	Q	P	Q
1952	100.0	100.0	100.0	100.0	100.0	100.0
1953	101.5	91.6	99.6	89.8	100.5	90.7
1954	101.6	76.8	95.7	72.4	98.6	74.6
1955	95.3	112.3	79.3	93.5	86.9	102.5
1956	103.6	108.1	90.5	94.4	96.8	101.0
1957	97.0	124.6	84.5	108.6	90.5	116.3
1958	83.1	202.0	85.5	207.7	84.3	204.8
1959	104.6	131.5	100.6	126.4	102.6	128.9
1960	109.2	113.2	94.2	97.6	101.4	105.1
1961	112.5	128.4	100.7	114.9	106.4	121.5
1962	108.7	104.7	107.0	103.1	107.8	103.9
1963	115.7	139.1	114.3	137.4	115.0	138.3
1964	125.6	131.0	123.0	128.3	124.3	129.6
Average:						
1952-57	99.8	102.2	91.6	93.1	95.6	97.5
1959-64	112.7	124.6	106.6	118.0	109.6	103.9
Per cent change						
	112.9	121.9	116.4	126.7	114.6	106.6
Trend Equations and Standard Errors of Estimate of "Ideal"						
Indices: (1) Price:	$Y = 88.28 + 1.84 X$		$1951 = X_0$		$r = 7.81$	
(2) Quantity:	$Y = 93.26 + 3.35 X$		$1951 = X_0$		$r = 27.72$	
Coefficient of Correlation between Price and Quantity "Ideal"						
Indices: 0 =	.1237					

^aThe "Ideal" index is the geometric mean of the Laspeyre's and Paasche's indices. It is ideal because any value variation is explained by and is equal to the product of the Ideal price and quantity indices variations.

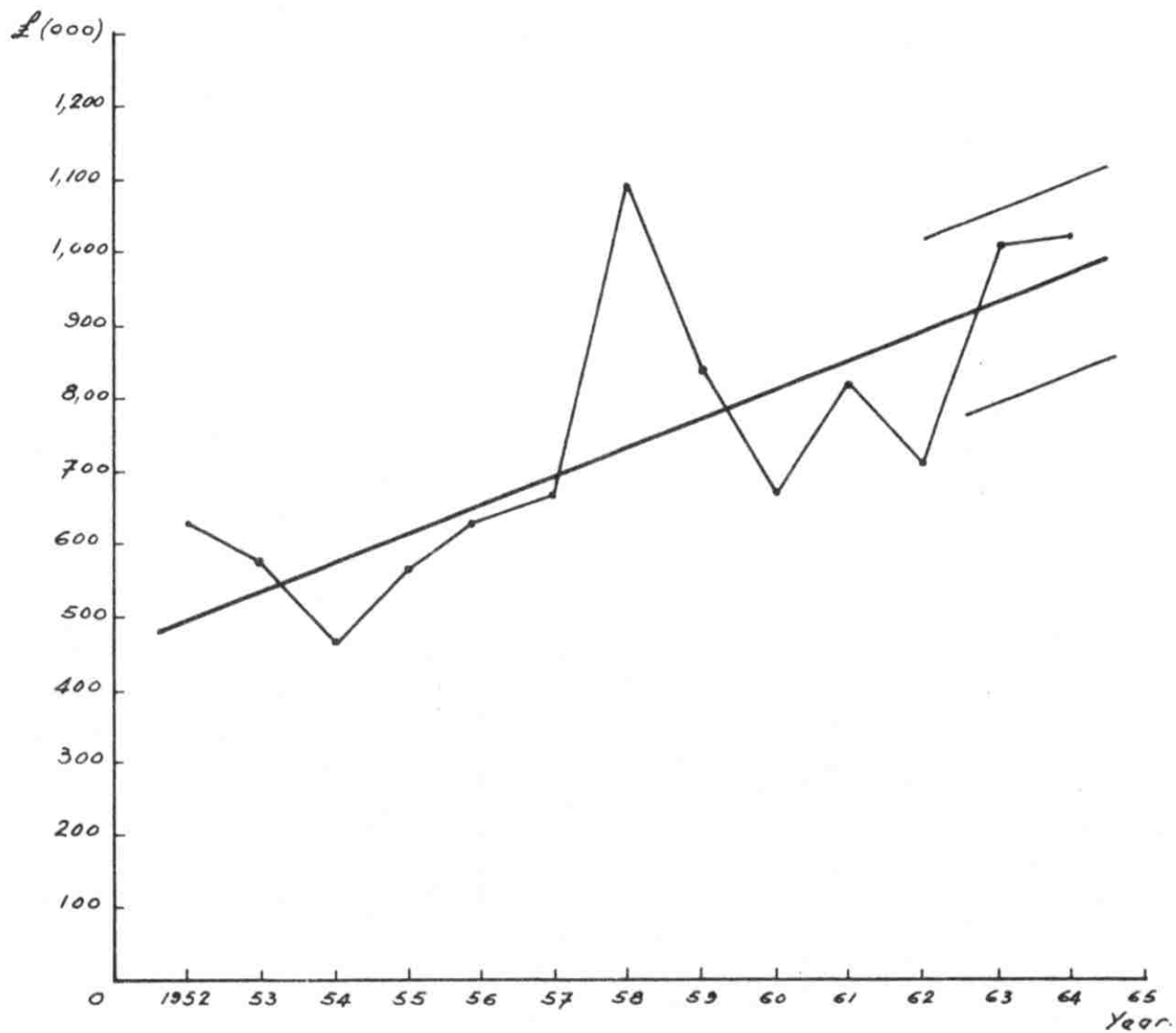


Fig. 4. -- Actual and Expected Exports by value,
1952 - 1964.

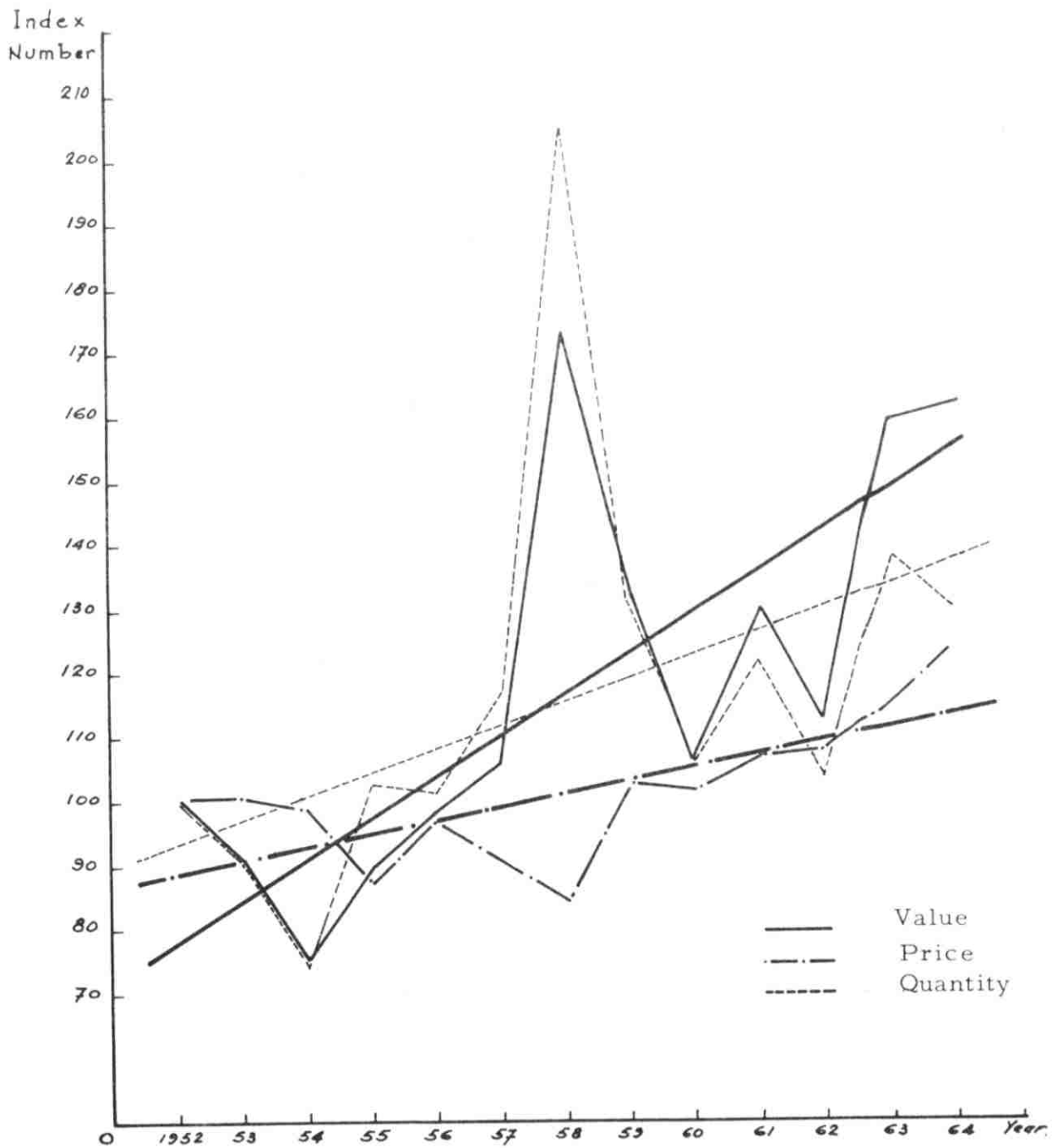


Fig. 5. --Actual and Expected Price, Quantity and Value Indices of Exports, 1952 - 1964.

because of the costs inherent to fluctuating output. A final remark about this trend equation is that, as the coefficient of determination indicates, it explains only 50 per cent of the variations. The irrational elements may be considered as important.¹

The value variations in exports were separated into price and quantity variations and are shown in Table 27 and Figure 4. The two indices move quite at random indicating no correlation between them.² On the average, the price index increased by 1.84 points annually and the quantity index by 3.35 points. The standard error of estimate is 7.81 and 27.72 for the price and quantity indices respectively. For methodological purposes, the expected value of exports in value and the various indices in points for the years 1965-69 are shown in Table 26. The ranges of the indices at the 95 per cent level of confidence are further indicated and both estimates and ranges are depicted graphically in Figure 4. How helpful can this analysis be in marketing? Assuming *ceteris paribus*, this analysis would be useful in forecasting and even throwing light on questions of growth or contraction of the industry, if cost information were available. In the absence of such information, the analysis remains incomplete.

Market structure

The market structure depends on organization on the part of both the sellers and buyers. Ignoring for the moment the buyers, the organization of sellers will be studied first. A distinction should be made between the international market and the local market. In the former, the producer is

¹The remaining 50 per cent of the variations that are not explained by the trend equation are due to other factors and constitute the irrational element.

⁴The coefficient of correlation of .12 is insignificant.

Cyprus as a country; in the latter, the producers are the individual firms. The international market is monopolistically competitive because firstly, Cyprus is one of the many wine producing and exporting countries;¹ secondly, Cyprus wines are differentiated from but generally highly substitutable for other countries' wines, and thirdly, freedom on the part of each producing country to participate in international trade is relatively easy.

The local market and the means by which foreign demand for Cyprus wines are satisfied by different producers are, however, fashioned in an oligopolistic manner. The following criteria, denoting a differentiated oligopoly, are satisfied: (1) sellers' concentration; three firms generate 91 per cent of the value added, the remaining 13 firms creating only 9 per cent;² (2) product differentiation; the products of different firms are highly substitutable, but still distinct, as to the quality; (3) conditions of entry; though no legal restrictions for entry exist, yet the relatively large capital required, the advantage of technical know-how and the lack of abnormal profits may seem to deter entry; (4) sellers' conduct; relatively similar and rigid prices of wine and spirits products in Cyprus and the mutual interdependence in the export market, as exemplified by retaliatory price-cutting, are signs of sellers' conduct in an oligopolistic market. The picture of the international market will be later modified in the case of England, where buyers are few and big, as contrasted to the rest of the world, where buyers are numerous and generally smaller.

¹Cyprus produces .2 per cent of the world production of wine and participates in world trade of wine by .6 per cent. See Food and Agriculture Organization, Production Yearbook, (1964), 246, and Trade Yearbook, (1964), 292.

²See Tables 11 and 19.

Classification of exports

Exports are made to many countries, which can be classified for analytic purposes in five categories: (1) United Kingdom, because of its dominant position as a buyer of Cyprus wines, (2) Commonwealth, which affords Cyprus exports preferential treatment, (3) Europe with its trade blocs and external tariff barriers, (4) Socialist Bloc, with bilateral trade being a distinguishable feature, and (5) others, including all countries not falling into any of the above categories.

The British market during the period 1958-1963 absorbed 50 per cent of the exports and continues to show good prospects. Commonwealth markets, which accounted for 11 per cent, are declining. Though Europe absorbed 25 per cent during this period, recent sales have dropped to a level just slightly above that of the Commonwealth. The Socialist bloc is a new market. Trade relations started after independence and though this market now accounts for only 5 per cent, it shows potential. Other countries make up the remaining 9 per cent.¹

The classification of exports by products is shown in Table 30. Bulk wines, fortified and unfortified, and "must"² are the major exports, and fluctuate in value. Commandaria constitutes only 6 per cent and brandies and "others" are the least important. The highest average increase in prices between the periods 1956-60 and 1962-64 is for grape "must" at 7.5 per cent. Prices of commandaria increased by 5 per cent, whereas for fortified and unfortified³ wines the increase were 2 and 3 per cent respectively. The annual fluctuations in the prices of these products are shown in Table 31.

¹The reader interested in more details is asked to refer to Tables 28 and 29.

²"must" is concentrated grape juice.

³Unfortified wines are low alcoholic strength wines.

TABLE 28

ANNUAL EXPORTS OF WINE AND SPIRITS BY GROUP OF MARKETS,
1958-1963^a
(THOUSANDS OF POUNDS)

Year	U.K.	C'1th	Europe	Eastern Bloc	Others	Total
1958	253	131	635	-	81	1,090
1959	282	116	314	-	123	835
1960	391	99	71	44	68	673
1961	520	86	96	37	77	816
1962	417	51	74	100	65	707
1963	675	74	112	67	76	1,004
Average	423	91	217	41	82	864
Percentage	50%	11%	25%	5%	9%	100%

^aCalculated from: Department of Statistics and Research, Imports-Exports Statistics, (1958-1963).

TABLE 29

EXPORTS OF WINE AND VINE PRODUCTS BY TYPE OF PRODUCT
AND GROUP OF MARKETS, 1958-1963^a
(THOUSANDS OF POUNDS)

Product	U.K.	C'1th	Europe	Eastern Bloc	Others	Total
Commandaria	47	2	-	-	1	50
Wine:						
Fortified	233	70	124	51(4) ^b	21	476
Other	6	3	75	20(1)	29	119
Grape Must	132	4	-	24(1)	28	171
Brandy	5	8	6	-	3	22
Others	-	4	12	-	-	16
Average	423	91	217	41	82	854
Vine Products						
Average	123	12	79	239(4)	14	467
Percentage	26%	3%	17%	51%	3%	100%

^aCalculated from: Department of Statistics and Research, Imports-Exports Statistics, (1958-1963).

^bNumbers in brackets indicate last years in which exports were made.

TABLE 30

EXPORTS OF DIFFERENT WINE PRODUCTS IN THE YEARS 1958-63
(THOUSANDS OF POUNDS)

Year	Commandaria	Wines	Brandy	Must	Others	Total
1958	54	939	11	75	11	1,090
1959	42	612	12	155	14	835
1960	43	369	18	226	16	672
1961	45	489	25	240	17	816
1962	46	479	24	131	28	708
1963	71	708	24	172	29	1,004

Source: Department of Statistics and Research, Imports-Exports Statistics, (1958-1963).

TABLE 31

INDICES OF AVERAGE PRICES OF MAJOR WINE PRODUCTS FOR THE YEARS
1958-64^a

Year	Commandaria in Casks	Wine		Grape Must
		Fortified	Unfortified	
1958				
000 gals	421.7	219.1	130.5	216.8
Index	100.0	100.0	100.0	100.0
1959	94.6	109.4	108.4	129.6
1960	98.4	116.6	100.0	127.5
1961	107.9	118.1	124.6	132.1
1962	107.1	108.7	111.1	144.4
1963	116.8	118.5	104.9	151.5
1964	128.6	125.2	130.3	167.2
Avg. 1958-60	97.7	108.7	102.8	119.0
Avg. 1962-64	117.5	117.5	115.4	154.4
Per Cent Incr.	20%	8%	12%	30%
Annual Increase	5%	2%	3%	7.5%

^aCalculated from Department of Statistics and Research, Imports-Exports Statistics, (1958-1964).

Local Market

Extent and share

The importance of the local market to the industry is due to its stability. The extent of the market and the share of each firm are hard to answer accurately. The estimated annual per capita consumption of wine in Cyprus is 5 bottles, compared to 3 for the United Kingdom and between 6 and 10 for the United States.¹ Compared to other wine producing countries, however, wine consumption in Cyprus is low. The Frenchman drinks 180-235 bottles annually, the Spaniard about 109 bottles, the Italian about 174, the South African about 29 and the Australian about 21. Whereas the per capita production of wine in Cyprus is 27 per cent of that of South Africa, wine consumption is only 17 per cent. These international comparisons suggest that the local market is relatively undeveloped.

Though not evidenced quantitatively, the picture is expected to be bright with respect to brandy consumption. Many people believe that the Cypriot is basically a "brandy-minded" man. But what is still discouraging is that brandy consumption has been falling in recent years. From a level of 363,800 proof gallons of spirits in 1954, consumption fell to 288,400 in 1964 and the trend continues downward.² This might be due to the higher excise taxation on spirits or to a shift to beer consumption.³

The relative share of each firm in the local sales of wines and spirits is not available. Table 33 shows the relative dependence of KEO, SODAP and ETKO on the local and international market, but the picture is incomplete without the sales of Haggipavlou. It is reasonable to assume that about one-third of sales are local sales. Furthermore, Haggipavlou's

¹See Table 32.

²Interview with Mr. Pambos Charalampous, Customs and Excise Office, Limassol, April 29, 1965.

³See page 79 and 80.

TABLE 32
ESTIMATED AVERAGE PER CAPITA PRODUCTION AND CONSUMPTION OF
WINE IN SELECTED COUNTRIES DURING THE PERIOD 1960-63^a
(NUMBER OF BOTTLES)

Country (1)	Production 000 metr. ton (2)	Exp-Imp. 000m.t. (3)	Consumption 000 m.t. (4)=2-3	Popul. (000) (5)	Per Capita	
					P = $\frac{2}{5}$ (6)	C = $\frac{4}{5}$ (7)
Cyprus	30	12.8	17.2	589	8	5
United Kingdom	-	-106.0	106.0	53,812	-	3
South Africa	317	16.0	311.0	17,057	29	29
Australia	150	7.5	142.5	10,916	22	21
France	6,048	-1,069.2	7,117.2	47,853	199	235
Spain	2,302	158.0	2,144.0	31,077	117	109
Italy	5,771	200.8	5,570.2	50,457	181	174
U.S.A.	1,138	46.8	1,184.8	189,375	9	10

Notes:

The production, imports, exports and population figures are averages for the four years 1960-63. The technical relationship used in transforming metric tons into bottles is the following: 1 metric ton = 10 hectoliters = 1,000 liters = 264.2 gallons = 800 oke = 1,580 bottles (1 gallon about 6 bottles). The Harper's Wine Trade Review, March 5, 1965, p. 293, confirms the figure for the United Kingdom but estimates wine consumption in France at 180 and in the U.S.A. at 6 bottles per year.

^aCalculated from: United Nations, Department of Economic Affairs, Statistical Yearbook, XVI (1964), 246., XVII (1964), 292-295.

TABLE 33

LOCAL SALES AND SALES ABROAD OF SELECTED FIRMS DURING 1963-64^a
(THOUSAND POUNDS)

Firm	Sales		Per cent of total
	Local ^b	Abroad	
	1964		
KEO	276 ^c	443	38.4%
SODAP	115	218	34.5
ETKO	43	219	16.4
	1963		
KEO	269 ^c	421	39.0
SODAP	87	213	29.0
ETKO	37	197	15.8

^aCalculated from: Figures obtained from SODAP's file at the Office of the District Inspector, Cooperative Central Bank, Limassol, from KEO and ETKO.

^bFigures for local sales are estimates of a reliable unidentified source.

TABLE 34

BEER CONSUMPTION IN CYPRUS^a
(THOUSAND IMPERIAL GALLONS)

Year	Local ^b Production	Civil Imports	Naafi Imports	Consumption	
				Total	Index
1954	492	44	72	608	100
1959	1,010	1,135	865	3,010	495
1962	1,081	99	295	1,475	242
1963	1,107	50	311	1,468	241
1964	1,125	186	486	1,797	296

^aCalculated from: Figures obtained from SODAP's file at the Office of the District Inspector, Cooperative Central Bank, Limassol, from KEO and ETKO.

^bFigures for local sales are net of indirect tax on spirits.

^cKEO's local sales are estimates of a reliable, unidentified source.

share of market is greater in the sales of brandies, where it has almost 70 per cent of the market. KEO seems to have an 90 per cent share in the sales of wines.¹ Market statistics are lacking. The government keeps for tax purposes a record of all brandy and beer issued for consumption, but the record is not sufficiently well kept to be of operational use. Market statistics are not the best and only tools of business management but, if available, they would allow a quantitative measurement of success and market planning. Data collection seems to be easy and cheap because of the few firms and the small geographical area.

Excise duties

Excise duties are indirect taxes, usually specific, imposed upon the sale of particular commodities with wide consumption and inelastic demand.² The chief incidence of the tax falls generally on the consumer depending, of course, on the elasticity of demand. The effects are a reduction in output, heavier on low-value goods and regressive on poor consumers.

Spirits and beer are taxed in Cyprus. Rates have varied depending on the needs of the treasury. The rate on spirits has been 700 mils per proof gallon since January 5, 1961, reduced from the previous level of 900 mils but still higher than the pre-1957 level of 300 mils. The duty on locally produced beer is 150 mils per gallon, three times higher than the pre-1957 rate.³ The duty on brandies represents on the average 28 per cent of the

¹This is due to the specialization of Haggipavlou's House in brandies and of KEO in wines even as late as the second world war. After the war the tacit agreement broke when KEO started developing brandies and Haggipavlou established ETKO to produce wines.

²Philip E. Taylor, The Economics of Public Finance (3d ed.; New York: The MacMillan Company, 1961), pp. 449-451.

³Interview with Mr. Pambos Charalampous, Customs and Excise Office, Limassol, April 29, 1965.

gross sales value.¹ Some people applaud such duties on the basis that funds are raised to subsidize the vine industry. This view has no economic justification. The burden of subsidies remains the same, no matter how funds are raised. The industry would welcome any decrease in the excise duties leading to expansion of output and tax relief on the producers but in view of the widely held inelasticity of demand for distilled spirits, it might not have a good chance for such tax relief.

Distribution

The distribution channel is manufacturer, manufacturer's own branches or representatives-wholesalers, retailers, consumers. SODAP and Haggipavlou have branches in Limassol and Famagusta, conveniently located to serve all the island, and representatives in other towns. KEO has in the last few years shifted from a system of branches to a system of wholesalers. It should be remembered that there is no standard form of distribution; the channel to be used depends on its efficiency and cost.

According to the new system of wholesalers-representatives, wholesalers buy from the company at the wholesale price less a discount of about 10 per cent. They subsequently sell to retailers at the wholesale price and retailers charge an arbitrary retail price. Manufacturers are enthusiastic about this system. By adopting it, KEO has reduced its sales force from 90 men in 1959 to 17 in 1964.² The system has secured, as was intended, fixed price for the manufacturer and has shifted the need for the planning of sales.

¹Interview with Mr. Spyros Psomas, Chief Accountant, KEO Limassol, May 3, 1965.

²Interview with Mr. Diogenis Angelides, Sales Manager, KEO Nicosia, April 30, 1965.

The major person in the distribution is now the wholesaler, whom the companies assume to be sufficiently motivated by the discount to maximize sales.

Despite such optimism, the system fails in some respects. Wholesalers do usually sell to consumers at the wholesale price, avoid handling slow moving merchandise and do not promote sales where it is costly to do so. This might be the result of the lack of resale price maintenance. Arguments may be forwarded against this procedure, but it is believed that for goods with a wide market, resale price maintenance promotes product goodwill and non-price competition leading to greater sales revenues, assuming of course that the maintained price is such as will not foster inefficient retailers.¹

In addition to grocery stores, other forms of retail outlets are restaurants and places of entertainment. It is believed that wine products as well as brandies are generally over priced when compared to beer. It may seem that it is to the interest of both the wine industry and the economy at large that wine products be reasonably priced to win wider acceptance.

Competition and promotion

Because of the nature of the market, there is apparently no price competition in the local market. It appears that there is a tacit agreement between the producers and if any discounts are given independently these are unimportant to produce price warfare.

¹For an interesting discussion on resale price maintenance see Fritz Machlup, "Resale Price Maintenance", in Waters, Snyder and Sweet, Readings in Marketing.

Non-price competition includes product development costs and promotional costs. The era of product development seems to have passed after the firms have developed a wide variety of products in the last ten years. Consumers today benefit from the wide variety of products, which might not exist had there been any collusion on the product policy. At present, there is a general pause in product development; though some products are under study. The same applies to promotional activities. They were high when new products were developing but are generally lower now.

The present promotion includes: (1) a 15 minute radio program sponsored by KEO. (2) The United Kingdom Scheme for Christmas presents, whereby any person in Cyprus may pay for wine products to be delivered in England. (3) The Limassol wine festival, organized first in 1961 and since then annually. During the festival free wine is offered and entertainment is provided. A suggestion to expand the festival first on a Pancyprian level and then on a Mediterranean level has not been realized because of the 1963 revolt.¹

Two things are generally noted with respect to promotional costs: firstly, the self-cancelling effect, particularly in an oligopoly and in the long-run; secondly, that it is not the volume but rather the type of promotion that counts. A market study as to who the buyers are, their motivations and their buying habits might well be the basis for a well planned campaign. Such a study may also be helpful in the setting of

¹ Interview with Mr. N.H. Rhodas, Vine Products Controller, Limassol, April 23, 1965.

pricing policies, the choosing of channels of distribution and the selection of optimum product mix.

One suggestion for the development of wine appreciation in Cyprus is that all restaurants serve every client a glass of wine free of charge.¹

While not restricting the freedom of the client not to drink wine or to drink better quality wine, the serving of free wine is expected to induce many people to taste it and develop a taste for it. In addition to developing future demand, present consumption will also increase. The burden need not be heavy on the restaurant owners since they may shift it in the form of higher prices or absorb it quite easily because the cost of each glass of wine is insignificant (less than two piastres). Furthermore, no possible promotion of alcoholism is apparent. However, an evaluation of the proposal before applying it may examine its ramifications, its effects on consumption and consumption habits.

United Kingdom Market

Extent and relative share

Total wine sales in the United Kingdom in 1964 reached a peak of 27.1 million gallons, almost 15 per cent higher than the 1963 record year of 23.8 million.² The previous record year was in 1919 with 19.2 million gallons. Wine sales fell to 11 million gallons in 1921³ but after the

¹ Interview with Mr. Dimitri Haggipavlou, Managing Director, Haggipavlou group, Limassol, February 15, 1966.

² "Wine and Spirits Imports," Harper's Wine and Spirit Gazette, February 5, 1965, p. 166.

³ "Wine Clearances," Ibid., March 12, 1965, p. 303.

war the trend was reversed and sales have been rising for the last twenty years. In recent years wines in bulk constituted more than 90 per cent of wine clearances.

Cyprus's share in United Kingdom bulk wine imports is 6.7-7 per cent quantity-wise and 3.2-3.5 per cent value-wise. This indicates that the price paid for Cyprus wines is comparatively low.¹ Though Cyprus' market share in 1964 improved slightly over that in 1963, the situation was better in 1965. Imports for the six months ended June 30, 1965 increased by 16 per cent at a time when total imports fell by 11 per cent compared to the same period in 1964.² The managing director of an importing company in England confirmed that the projected rate of increase for Cyprus wines is at present 15 per cent per annum.³

Exports to the United Kingdom, though small on the part of the importing country, are quite significant for Cyprus. Accounting on the average for 50 per cent of the wine exports from Cyprus, exports to the United Kingdom in 1964 were 162 per cent greater than in 1958. These shipments consist mainly of wines, grape "must" and small quantities of commandaria. Sherry is the favourite product; 80 per cent of the sherry and practically all of commandaria exports are directed to the United Kingdom.⁴

¹The average price per 1,000 gallons is £417 for Cyprus wines, £580 for Australian, £722 for African, £1,043 for Spanish and at the top £1,419 for French wines. Figures computed from Harper's Wine and Spirit Gazette, February 5, 1965, p. 166.

²The Wine and Spirit Trade Review, CV, September 17, 1965, p. 852.

³Interview with Mr. S. Williams, Managing Director, Edward Young & Co. Ltd., Limassol, April 26, 1965.

⁴Interview with Mr. Alecós Coupparis, Officer (ex-commercial attaché to the Cyprus High Commission in London), Ministry of Commerce and Industry, Nicosia, April 27, 1965.

On the companies' side, about 80 per cent of KEO's exports of wines are exports to U.K.: ETKO increased its exports to U.K. from 75 per cent in 1959 to 93 per cent in 1964.¹ Thus, it is manifest that the British market is still small but expansive and represents a significant opportunity for Cyprus winemakers.

Tariff Protection

Imports to the United Kingdom are made under two rates: (1) Preferential rates applicable to countries of the Commonwealth, (2) European Free Trade Association (EFTA) rates higher than the preferential, (3) Full rates applicable to all other countries. Almost 20 per cent of wine imports are made under the preferential tariff, which are enjoyed by Cyprus.² The extent of tariff protection afforded to Cyprus and generally to commonwealth wines is estimated to be about 15 per cent.³ The association of the United Kingdom with EFTA seems not to have affected Cyprus' position significantly because a very small part of wine is cleared under the EFTA rates.

Distribution system

Sales of Cyprus wines are made to a few wine agents who market them with the label of Cyprus wines and to some other traders who use them for blending with other wines. These agents do not market Cyprus wines exclusively but trade also with wines from other countries. Some

¹"Wine Clearances", Ibid., p. 330

²Ibid.

³Interview with Mr. Alecos Couparis, Officer (~~ex~~-commercial attache to the Cyprus High Commission in London), Ministry of Commerce and Industry, Nicosia, April 27, 1965.

of them own public houses¹ but they also sell to other wholesalers and retailers.

The channels of distribution in the wine and spirits trade follow the traditional pattern: shipping agent, wholesaler and retailer. The agents just described form the first part of the distribution although in some cases they also perform the functions of wholesaler. The respective profit margins based on the last twenty years are 5-10 per cent, 12-15 per cent and 17 per cent.² All wine traders face rising variable costs, such as wages and transportation and costs of keeping inventories due to the rising prices of imported wine, the wider selection available and the low turnover of some products.³

Capitalizing on this inefficiency of the wine traders, supermarkets have introduced the so called "7 shillings challenge" and sell wines at prices below the conventional ones in order to attract people into the shops to buy other goods. Supermarkets claim that they are not selling wines as loss items but are instead making a profit at the reduced price. The Chairman of the Wine and Spirits Association insists, however, that they must be making losses, and he fears that if the price comes down by

¹ Edward Young owns about 7,000 public houses.

² "Trade Costs and Efficiency", Harper's Wine and Spirit Gazette, March 5, 1965, p. 293.

³ Ibid.

4 shillings a bottle, as may happen, the small shop will be ruined.¹ Since price cutting takes place in only a small number of outlets at the moment wine traders are not inclined to cut prices below what they call "economically justifiable levels."² But supermarkets sales are likely to increase in the future.

Wine traders call for protection and a "reasonable" net margin,³ and argue that abandoning price maintenance will be detrimental to the public by restricting the variety, number of outlets and services rendered to consumers.⁴ Whatever happens, if protection is afforded it will serve only to shelter the inefficient. Price reductions may cause hardships to individual inefficient traders but for the industry it means an expanded market.

Wine manufacturers in Cyprus know little about the distribution of their wines and seem to lack interest. Distribution policies are to a large extent left to the wine agents. At the present the distribution of Cyprus wines is limited to the London area. In this area, approximately 88 per cent of retail outlets carry at least one kind of Cyprus sherry, fewer outlets carry other kinds of wines and less than one per cent carry brandy.⁵

Trends of the market

Pre-war consumption of wine was around 15½ million gallons with 76 per cent being high-strength wines. In 1949, the total dropped to 7½

¹Harper's Wine and Spirit Gazette, March 12, 1965, p. 319.

²Ibid., p. 315.

³Harper's Wine and Spirit Gazette, March 19, 1965, p. 357.

⁴Ibid.

⁵Interview with Mr. S. Williams, Managing Director, Edward Young & Co. Ltd., Limassol, April 26, 1965.

million but has since been rising to the 1964 level of 27 million gallons. This resurgence is attributed to the reduction of duties on table wines in 1949, the increased appreciation of wine due to foreign travel, the country's prosperity, and the large selection of wines at inexpensive prices.¹ The increased consumption is still low compared with that of other European countries,² but an estimate puts the sales of wine at 50 million gallons by 1970.³

Another trend is the shift from the consumption of fortified wines to table wines. From a three to one ratio between fortified and table wines before the war, table wines now exceed the consumption of fortified wines.⁴ Despite this, sherry has gained continued success. Sherry consumption in 1964 reached a level of 7 million gallons from a 2 million gallons 12 years ago, that is an increase of 350 per cent in 12 years. The success of sherry is not confined to the United Kingdom but applies also to other European countries and, potentially, to the United States. World sales of sherry are increasing.⁵

Developing the market

The analysis is not sufficiently comprehensive to propose measures for developing the British market. The same lines suggested for the local

¹"Trade Costs and Efficiency," op. cit., p. 291.

²See Table 32.

³"Trade Costs and Efficiency," op. cit., p. 293.

⁴Ibid., p. 291.

⁵Harper's Export: 1964 (London: Wine and Spirit Publications Ltd., February 1965), p. 17.

market might be followed, though the fact that manufacturers will be planning for a foreign market has to be borne in mind. There are indeed intricacies in international marketing but there is much to learn and benefit from the development of a market absorbing more than 60 per cent of the industry's exports and the only one, at the moment, showing potential.

The aggregate advertising outlay of all wineries is between £20,000-30,000 annually,¹ But there is some promotion undertaken by the agents on their own account and by the Cyprus Wine Board. The Board, consisting of government officials and an advisory committee with Mr. Rossi as a member, was established in 1956 to promote Cyprus wines.² Cooperation on sales promotion will safeguard resources. It was pointed out that the obstacle to expansion is that people do not ask for Cyprus wines.³ It seems, therefore, that cooperative promotion might better aim at establishing a good image for Cyprus wines in general rather than for particular brands. Australia and South Africa have both launched huge campaigns. Both countries have houses in London for the promotion of their products. In view of this competition, promotion may have to be centralized and intensified. A fruitful suggestion is that the government expand promotion on a broader basis for all products exported to Britain.

¹Interview with Mr. Rolandos Viraldi, Officer, Vine Products Controller's Office, Limassol, April 29, 1965.

²Interview with Mr. S. Williams, Managing Director, Edward Young & Co. Ltd., Limassol, April 26, 1965.

³Ibid.

A potentially untapped market is the Cypriot colony living in London.¹ Its importance was first stressed by F. Rossi in 1956. Mr. Rossi suggested that this colony be the "nucleus of expansion". No serious attempt has been made and the results are not encouraging. Promotion may also be encouraged among the army personnel, civilians and tourists visiting Cyprus who may continue to demand Cyprus wines on their return home. The Commercial Attaché to the Cyprus High Commission in London envisages expansion in Great Britain along the same lines, that is the sherry market, with a new type of sherry to be introduced soon. Development of cheap, reliable beverage wines and of the carafe trade in the restaurants will be another target.²

European Market

Extent

Exports to various European countries are shown in Table 30. The trend of exports is downward. In value, 1963 exports were less than one-fifth those in 1958. Exports to Europe in 1963 were 5.8 per cent of total wine exports, coming down from the 1958 level of 11 per cent. The major products traditionally exported to these markets are wine in casks, fortified and unfortified, and small quantities of eau de vie de vin.³ In the

¹S. Williams estimates that only 5 per cent of the Greek and Cypriot restaurants, quite numerous in London, carry Cyprus wine.

²Interview with Mr. Spyros Phylaktis, Commercial Attaché, Cyprus High Commission in London, London, September 9, 1965.

³See Table 29.

unfortified wine trade such markets as France, Sweden and Western Germany foundered while smaller markets, such as Switzerland and Belgium, reduced between 1958 and 1963 their imports to half. Western Germany, an important market in fortified wines, reduced imports of Cyprus wines to 10 per cent and Belgium reduced to 25 per cent the level of 1958. In eau de vie de vin, Sweden's imports were reduced by 35 per cent but small quantities have recently been exported to Norway.

Economic and custom integration

The major reason for the decrease in exports to Europe is the formation of trade blocs within Europe. The last decade witnessed the formation of the European Economic Community, frequently called the Common Market, and the European Free Trade Association, the EFTA. The Common Market came into existence by an agreement signed in Rome on March 24, 1957, whereby six European countries¹ agreed to merge their separate economies into a single economic unit. The European Free Trade Association was established by Britain and six other countries,² in 1959 and proceeded with its tariff cuts as rapidly and along the same lines of the Common Market.³

Prospects

In view of these economic units in Europe, the prospects for exploiting such markets are gloomy. The external tariff⁴ is a barrier to

¹The six include Belgium, Netherlands, Luxembourg, France, Germany and Italy.

²The members are: Denmark, Norway, Sweden, Austria, Switzerland, Portugal and the United Kingdom.

³P.T. Ellsworth, The International Economy (3rd ed.; New York: The MacMillan Co., 1964), pp. 514-516.

⁴The external tariff is the uniform tariff of the member countries in an economic bloc towards the rest of the world.

exports of Cyprus wines, in addition to which the abolition of internal duties is an encouragement for wine-producing members to sell in these areas. The Common Market includes Spain in addition to France and EFTA includes Portugal, both being producers of cheap wines. Any discussion for developing these markets would have no meaning in the light of the unfavourable institutional environment. Europe is likely to buy Cyprus wines only if its local production of grapes and wines is affected adversely by climatic conditions.

Commonwealth Countries

Extent and trend

The trend of exports to the Commonwealth is also downward. The 1963 exports were 39 per cent lower than in 1958, constituting only 7.5 per cent of total exports from the 1958 level of 11 per cent. The important loss came from the decrease of exports to Sierra Leone from £89,000 to £25,000. One characteristic of this group of markets is the large number of small countries to which exports are being made. In the period 1958-63 Ghana was lost, Aden and Canada improved slightly and Kenya, Hong Kong, Gambia, the Sychelles and Australia were gained. But the problem is that exports to these countries are small.

Prospects

It is believed that because of the preferential treatment granted to Cyprus wines, the lack of locally produced wines and the rising standard of living in these countries there might be a prospect in such markets. But Australia and South Africa are also in the Commonwealth and sometimes some

newly independent states have imposed certain restrictions either to protect a local beverage industry or to reduce a deficit in the Balance of Payments. Added to this, a difficulty arises in market planning because of the numerous countries. What manufacturers might establish is how importers in these countries contact exporters so that Cyprus wines can be more effectively publicized.

Socialist Bloc Countries

Importance and Character of Trade

Trade relations with the bloc are recent, initiated after Independence in the form of bilateral trade agreements. Cyprus has negotiated trade agreements of two types: (1) Free Trade type, signed with countries already trading with Cyprus and aimed at expanding the volume of trade.¹ (2) Clearing type, with countries where no trade took place previously. Such agreements were signed with U.S.S.R. in 1961, Bulgaria, Czechoslovakia, Hungary, Poland, Rumania, and U.A.R. in 1962 and the German Democratic Republic in 1964. These agreements operate on a clearing system² and though a list of export and import items with values is attached it has not to be followed but is only tentative.³ Wine is included in the lists of all agreements and a total of £248,000 was exported in three years 1961-63, this figure exceeding by £37,000 the exports to the Commonwealth.

¹Interview with Mr. Renos Kyprianou, Ministry of Commerce and Industry, Nicosia, April 27, 1965.

²The clearing system does not require exports for imports to be made. Only the total value should balance during specified periods.

³Interview with Mr. Renos Kyprianou, Ministry of Commerce and Industry, Nicosia, April 27, 1965.

Promotion of agreements

The agreements open up a trade possibility but do not guarantee it. Trade is carried out by individual exporters and importers, which in some countries is a governmental agency. For the moment, customs duties are levied on reciprocal imports. If duty reductions are negotiated and a sort of multilateral trade with the bloc established, trade might expand. Though exports to the bloc were only about 10 per cent in the period 1960-63, there seems to be reasonable hope for increased trade with the bloc. The government might view such agreements, encouraging trade and wine exports, as a healthier means of solving the perennial problem of grape overproduction through increased wine-making and exports rather than through applying subsidies.

Other Countries

Extent

Exports to other countries are at about the same level as exports to the Commonwealth. The major market is Sudan buying substantial amounts of fortified wines in casks and bottles, and limited grape must. Exports to Sudan fell after 1959 but a slight resurgence of trade started after 1962. A new market is Venezuela, while smaller markets are French Somaliland, the United States and Egypt.

Finding new markets

In expanding exports, management ought perhaps be on the alert to perform some kind of market research, particularly in countries where there

is a reasonable chance of success. A possibility to investigate might be the United States with its huge internal market and high prices. The passive attitude of management towards marketing requires scrutiny. Buyers do not run after sellers today but rather the contrary is true. Following the middle eastern view that "if they want to buy our products they will write to us" is not sound policy in a buyer's market.

General Analysis

The need, therefore, is for new markets. Management ought take the initiative to find new markets and to develop existing markets which show potential. If it fails, the government may have to encourage such a move, give required assistance through its departments and embassies and even use the services of an independent research firm.

The marketing problem of the industry, though magnified in the limited Cyprus environment, is neither enormous nor insurmountable. Cyprus is a smaller producer of wine and can certainly, with increased efforts and an entrepreneurial progressive spirit, dispose of all the grape production. Without this spirit, and with the European Commonwealth and other markets decreasing the importance of production in Cyprus the industry will be limited to the British market, where conditions at the static level look better.

But let us see what might happen if the industry leaves all its hopes in the British market. In a market structure of bilateral oligopoly,¹

¹Bilateral Oligopoly is when sellers and buyers are few. By virtue of their handling of Cyprus wines for a long time and their established position in the United Kingdom, the agents few in number, have come to be oligopsonists.

where the relative strength of each party determines the prices within wide limits, increased dependence of the industry on the British market plus the practice of price-cutting might move the terms of trade against the industry. The limits of the prices are set on the buyer's side by the marginal benefits of added sales and on the seller's side by the marginal cost of added production.¹ The practice of price-cutting, initiated by immature oligopolists and based on faulty reasoning, and increased dependence on the British market is likely to shift the prices nearer to the marginal cost of added production.

Accepting the fact that the British market is the most promising one, the industry would preferably endeavour: (1) to avoid the decreased prices and profits for everybody because of inefficient price-cutting through an effective and maintainable price collusion, (2) to develop other export markets to decrease dependence on one market and to increase profitability from expanded operations, (3) to develop the local market, (4) instead of price-cutting leading to no substantial increases in aggregate demand, to make more funds available for promotion and demand expansion.

But if the government and the country have objectives more general but not contradictory to profit maximization, the gradual absorption of all surplus grape production, other means might also be used. Trade agreements appear to be one promising suggestion in this direction. It is only by adopting this healthier, more dynamic attitude that the industry may be expected to recover.

¹Joe S. Bain, Pricing, Distribution and Employment (rev. ed.; New York: Henry Holt and Company, 1953), pp. 394-395.

CHAPTER VIII

EVALUATION AND CONCLUSIONS

Evaluation

Bain lists six criteria, generally accepted by economists, for evaluating the performance of an economic organization. These include the amount of goods produced, the efficiency of production, the pattern of income distribution, the allocation of resources, progressiveness and stability.¹

Amount of goods produced.-- It was shown previously that viticulture's contribution to the gross domestic product in agriculture was about 12 per cent. The wine industry's contribution is also significant. The industry produces 27 per cent of the food industries' gross output and 8.5 per cent of manufacturing's output.² In terms of value added, the industry generates 69 per cent of the food industries' value added and 10.5 per cent of manufacturing's total value added.³

The contribution of the industry is greater if firms employing more than 5 persons are considered. In this case, the wine industry produces 39 and 11 per cent of the food industries and manufacturing's gross

¹Bain, *op. cit.*, p. 2.

²The wine industry is not included in the food industries.

³Department of Statistics and Research, Census of Industrial Production: 1962, II, 56, 71, 77.

output and generates 92 and 14 per cent of their respective value added. Furthermore, if firms employing more than 50 persons are considered, the industry's value added is 3 times larger than that of the food industries and about one-quarter that of manufacturing.¹

Statistics between 1954 and 1962 indicate that the increase in the industry's gross output far exceeded that of the food industries and the manufacturing sector.² The 13 per cent increase, however, between 1960 and 1962 was lower than the 36 per cent increase in the respective industries and sector.³ This may be attributed to the relative fall in exports in that period.⁴ In view of the resurgence of wine exports since 1963, the industry's volume of production may be considered significant.

Efficiency of production.-- It was mentioned earlier that despite the phenomenal⁵ increase in the yield, Cyprus viticulture is relatively inefficient compared to other vine growing countries. The same situation prevails in the wine industry. Though comparative data are lacking, the industry seems to be inefficient with respect to organization and management, financial performance and marketing orientation. Previous analysis in this

¹Ibid.

²Between 1954 and 1960 the increase in the value of gross output of the wine industry was 91 per cent, of the food industries 67 per cent and of the manufacturing sector 83 per cent. See Ibid., p. 69.

³Department of Statistics and Research, Census of Industrial Production: 1962, II, 47, 48.

⁴See Table 25.

⁵Phenomenal because the increase in the yield might be due to the cultivation of vines on the plains.

study suggested various points of inefficiency when the industry was compared to alternative, presumably more efficient, industries.

Nevertheless, the industry may look efficient within the limited Cyprus environment. In 1962, gross output per employee was 76 per cent higher and value added 116 per cent higher than that in manufacturing. Compared with the food industries, gross output per employee was 15 per cent lower but value added was 12 per cent higher. In addition, the 102 per cent increase in gross output per employee between 1954 and 1962 was only two-thirds the value of increase in the food industries but almost double that of manufacturing.¹

This narrow view of efficiency within Cyprus manufacturing might be misleading in so far as the higher value added per employee is the result of the sheer size of operations. It may also be inappropriate because it compares dissimilar and non-competing industries. A comparison with similar industries in other wine producing countries would be desirable but lack of data does not permit this. Alleged evidence, however, suggests that the Cyprus wine industry is relatively inefficient compared to similar industries in more developed countries.

Pattern of income distribution.-- The absence of big profits, the high share of labor's earnings and the payment for grape purchases in rural areas may suggest that the industry contributes towards a more even income distribution. The income effect of subsidies on vine products and

¹ Department of Statistics and Research, Census of Industrial Production: 1962, II, 47, 48.

excise taxation on spirits in ambiguous.¹

Allocation of resources.-- The Cyprus treasury collects about £430,000 annually in the form of excise duty on spirits and beer and other taxes.² It also pays an estimated £475,000 for subsidies and limited wine publicity.³ Furthermore, public money finances four-fifths of SODAP's assets.

Taxes would presumably be allocated by the government in an optimum manner for the economy as a whole. Does the actual allocation approximate an optimum situation? On monetary considerations, public investment in SODAP is unjustified; indirect or non-monetary considerations possibly raising the "social" rate of return are apparent but not measurable. Furthermore, subsidies do maintain agricultural incomes in the short-run but it is doubtful whether any long-term objective is achieved.

Public policy ought to incorporate a sustained increase in productivity as a long-term objective of the subsidy scheme; achievement of this

¹On the general question of agricultural subsidies, Mr. W. Thorp writes, "The subsidy programme has grown haphazardly . . . to produce situations upon which claims for increased subsidies are based. (Furthermore) it becomes increasingly difficult to raise funds outside the agricultural sector . . . in order to pay subsidies to a part of the agricultural sector. (Finally) the government's subsidy policy should be reexamined. It may be causing developments that are contrary to the best interests of Cyprus." See United Nations, Programme of Technical Assistance, Cyprus - Suggestions for a Development Programme, prepared by William L. Thorp, (New York: United Nations, 1961), pp. 34-35.

²In 1964, excise taxation on spirits was £201,054 and on beer £118,509. Interview with Mr. Pambos Charalampous, Customs and Excise Office, Limassol, April 29, 1965.

³The cost of administering the scheme is about £25,000. Interview with Mr. Yiannakis Agrotis, Officer, Office of the Vine Products Controller, Limassol, April 27, 1965.

objective will eventually reduce the need for subsidies. It may also emphasize the wine industry whose future prosperity affects that of viticulture. Finally, the government's involvement in SODAP ought perhaps to be evaluated.

Progressiveness.-- Data on current growth indicate that exports grew between 1952 and 1964 at an annual rate of 4 per cent compound; a similar increase may be expected for the local sales. Such data may not be sufficient to give a clear view of progressiveness.

In terms of future growth, capital formation is important. In this respect, the industry does not seem to be progressive. Capital formation as a percentage of value added was 15 per cent in 1962 as compared with 16 per cent for the manufacturing sector and 20 per cent for the food industries.¹ The value of fixed assets is also decreasing.²

Progressiveness resulting from innovation is apparent in product development but not in other areas. On the contrary, the inability and unwillingness of management to develop new alternatives was stressed throughout the study.

Stability.-- Employment and local sales are stable. Exports, however, are unstable. This causes fluctuations in inventories, grape purchases and probably in profits. Therefore, relative stability as well as instability prevails in the industry.

¹Department of Statistics and Research, Census of Industrial Production: 1962, II, 41, 42.

²See Table 17.

Conclusions

The analysis confirms the hypothesis that though the industry is relatively inefficient, it plays a vital role in the Cyprus economy by providing employment and income as well as foreign exchange earnings. The primary task for the industry should be the development of more efficient operations.

Viticulture faces the problems of farm fragmentation, uneconomic use of production and low yields. The wine industry lacks efficient management and organization, has a poor financial performance, faces high labor costs and accident rate, and has marketing difficulties.

To increase efficiency, public policy on viticulture should reorient the subsidy scheme and use other means to achieve the long-term objectives of increased agricultural income through raised productivity and more economic use of grape production. The first objective may be pursued by the government but the second objective requires cooperation with the wine factories' management.

A more economic use of grape production implies a more efficient wine and spirits industry. The industry's efficiency will be increased by upgrading the level of management and removing all outside pressures fostering inefficiency. Higher level management is needed to improve organization, develop employees, increase profitability, and provide the proper insight into marketing policies and production decisions.

The process of developing management is difficult and slow. In the meantime, the government may induce such improvements and afford any

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The process of developing management is difficult and slow. In the meantime, the government may induce such improvements and afford any

possible help, particularly in production and marketing, through its departments, embassies and foreign experts. At the same time, bilateral agreements may provide a worthwhile alternative for an advantageous disposition of vine products.

PART III. BIBLIOGRAPHY AND APPENDIX

BIBLIOGRAPHY

Public Documents

- Cyprus. Ministry of Agriculture and Natural Resources. Cyprus Agricultural Research Institute. Annual Report. (1962-1963).
- Cyprus. Ministry of Agriculture and Natural Resources. Department of Agriculture. Annual Report. (1962). (1963). (1964).
- Cyprus. Ministry of Agriculture and Natural Resources. Department of Agriculture. Statistics Section. Agricultural Statistics. (1959-1961). (1962). (1963). (1964).
- Cyprus. Ministry of Agriculture and Natural Resources. Viticulture and Oenology Section. Annual Report. (1958). (1960). (1961). (1963).
- Cyprus. Ministry of Commerce and Industry. Cyprus Industry: 1959 Classified List of Industries. Nicosia: Public Information Office, 1959.
- Cyprus. Ministry of Finance. Department of Statistics and Research. Census of Industrial Production: 1962. Vol. II.
- _____. Census of Population and Agriculture: 1960. Vol. VI.
- _____. Economic Report. (1963).
- _____. Imports-Exports Statistics. Annual. (1952-1964).
- _____. Statistical Abstract. (1962).
- Cyprus. Ministry of Labour and Social Insurance. Annual Report. (1959). (1962). (1963). (1964).
- _____. Four and a Half Years of Independence. Labour Publications Series, No. 6., October, 1964.
- _____. Government Regulation of Wages and Democracy. Labour Publications Series, No. 3., October, 1963.

- _____. Labour-Management. Labour Publications Series, No. 1., January 1963.
- _____. Monthly Bulletin. Vol. II (Nov.-Dec., 1963).
- Cyprus. Office of Cooperative Development. Annual Report. (1963).
- United Nations. Department of Economic Affairs. Statistical Yearbook. Vol. XVI (1964).
- United Nations. Food and Agriculture Organization. Expanded Technical Assistance Program. Improvement of Grape and Wine Production: Report to the Government of Cyprus. Report No. 1024. Prepared by P. Marcout. Rome: Food and Agriculture Organization, 1959.
- United Nations. Food and Agriculture Organization. Mediterranean Development Project. Rome: Food and Agriculture Organization, 1959.
- _____. Production Yearbook. Vol. XVII (1963).
- _____. Trade Yearbook. Vol. XVII (1964).
- United Nations. Programme of Technical Assistance. Cyprus-Suggestions for a Development Programme. Prepared by William L. Thorp. New York: United Nations, 1961.

Books

- Bain, Joe S. Pricing, Distribution and Employment. rev. ed. New York: Henry Holt & Co., 1953.
- Committee on Definitions. American Marketing Association. Marketing Definitions. Chicago: American Marketing Association, 1960.
- Ellsworth, P.T. The International Economy. 3rd ed. New York: The Macmillan Co., 1964.
- Hagen, Everett E. Handbook for Industry Studies. The Center for International Studies, Massachusetts Institute of Technology. Glencoe: The Free Press, 1958.
- Lowenstein, Lloyd. Mathematics in Business. New York: John Wiley & Sons, Inc., 1958.
- Luck, David J., et al. Marketing Research. Englewood, Cliffs, N.J.: Prentice-Hall, Inc., 1961.

- Marrison, L.W. Wines and Spirits. London: Penguin Books Ltd., 1958.
- Meyer A.J., and Vassiliou Simos. The Economy of Cyprus. Cambridge: Harvard University Press, 1962.
- Schlatter, Charles F. Cost Accounting. 2nd ed. New York: John Wiley & Sons, Inc., 1960.
- Starr, Martin. Production Management: Systems and Synthesis. Englewood, Cliffs, N.J.: Prentice-Hall, Inc., 1964.
- Taylor, Philip E. The Economics of Public Finance. 3d ed. New York: The Macmillan Co., 1961.

Articles and Periodicals

- Dean Joel. "Measuring the Productivity of Capital," The Management of Corporate Capital. ed. Ezra Solomon. A publication of third series, Graduate School of Business, The University of Chicago. New York: The Free Press of Glencoe, 1964.
- Eleftheria. (Nicosia), July 9, 1965.
- Harper's Export: 1964. London: Wine and Spirits Publications Ltd., February, 1965.
- The Wine and Spirit Trade Review. Vol. CV (September 17, 1965).
- "Trade Costs and Efficiency," Harper's Wine and Spirit Gazette. (March 5, 1965).
- "Wine and Spirits Imports," Harper's Wine and Spirit Gazette. (February 5, 1965). 166-168.
- "Wine Clearances," Harper's Wine and Spirit Gazette. (March 12, 1965).

Reports

- Bates, A.F. et al. Report on Marketing of Vine Products. Report Submitted to the Cyprus Government in 1956. (Mimeographed.)
- Branas, J. Concerning Some Problems in Viticulture on the Island of Cyprus. Trans. Ruth Parker. Nicosia: Department of Agriculture, November, 1957. (Mimeographed.)

- Korallis, K. The Cyprus Viticultural Problem: Suggested Solution and Expected Results. Limassol: By the author, December, 1960. (Mimeographed, in Greek.)
- Rossi, Fred J. An Investigation into the Vine Industry of Cyprus. Nicosia: Cyprus Government Printing Office, 1956.

Unpublished Material

- Abboud, Nabil. "An Evaluation of the Beer Industry in Lebanon." Unpublished Bachelor's thesis, Department of Business Administration, American University of Beirut, 1964.
- Agreement between the Cyprus Republic and the Union of Soviet Socialist Republics. Limassol section, Ministry of Commerce and Industry. (copy).
- A Law to make provision for the Regulation and Control of the Vine Industry for the Purpose of its protection, advancement and improvement and for the protection of the public and for matters connected therewith and incidental thereto. (Copy, typewritten.)
- Collective Agreement for one of the companies. (Copy, Mimeographed.)
- KEO. "A Few Facts about KEO." (Typewritten.)
- _____. Annual Statements and Returns. Office of the Registrar of Companies, Nicosia. (In the files of the Office.)
- _____. Application made in the district court of Limassol, January 22, 1959. (Copy.)
- Rhodas, N.H. "The Vine growing Cyprus." An article prepared for publication in the Encyclopedia of the Wines and Spirits of the World, May 5, 1962. (Typewritten.)
- _____. "The Vine Products Scheme and the Vine Industry in Cyprus." Unpublished study, Limassol, January 18, 1958.
- SODAP. Annual Statements and Returns. Office of Cooperative Development, Nicosia-Limassol. (In the files of the Office.)
- Vryonides, Phocas. "Notes on the Vine Industry in Cyprus." Unpublished study, Limassol, May 1962.

Other Sources

- Customs and Excise Office, Limassol. Personal interviews with selected officers. April, 1965.

- Cyprus Agricultural Research Institute, Athalassa, Nicosia. Personal interview with the Director. April 24, 1965.
- Cyprus High Commission, London. Personal Interview with the Commercial Attaché. September 9, 1965.
- Edward Young & Co. Ltd., London. Personal interview with the Managing Director, Limassol. April 26, 1965.
- Haggipavlou Group. Personal interviews with the Managing Director and selected heads of Departments. February, March, April, 1965; April, 1966.
- KEO. Personal interviews with the Managers and heads of Departments. February, March, April, 1965.
- Ministry of Commerce and Industry, Nicosia. Personal interviews with selected officers. February, March, April, 1965.
- SODAP. Personal interviews with the Manager and accountant. February, March, April, 1965.
- Vine Products Controller's Office, Limassol. Personal interviews with the Controller and selected officers. February, March, April 1965; September 1966.
- Viticulture and Oenology Section, Limassol. Personal interview with the Government Viticulturist and Oenologist.

APPENDIX

Classification of Employees By:

<u>Sex:</u>		
Male	36	71%
Female	<u>15</u>	29%
	51	
<u>Age:</u>		
Less than 18	-	
18 - 30	23	45%
31 - 45	19	37%
46 - 60	9	18%
60 and above	<u>0</u>	
	51	
<u>Education:</u>		
None	5	10%
Elementary	25	49%
Secondary	20	39%
College	<u>1</u>	2%
	51	
<u>Place of Residence</u>		
Limassol town	41	80%
" suburbs	9	18%
" district	<u>1</u>	2%
	51	
<u>Date of Hiring</u>		
1965-1964	6	12%
1963-1960	10	20%
1959-1955	19	37%
1954-1945	11	21%
1944 and before	<u>5</u>	10%
	51	
<u>Union Membership</u>		
Members	41	82%
Non-members	<u>9</u>	18%
	50	

<u>Way of Payment</u>		
Daily/Weekly	25	50%
Monthly	<u>25</u>	50%
	50	

<u>Kind of Job:</u>		
Unskilled	19	37%
Skilled	12	24%
Supervisory	2	4%
Clerical	13	25%
Middle Management	5	10%
Top Management	<u>-</u>	
	51	

<u>Major Problems Indicated</u>		
Salaries	29	59%
Working Conditions	3	6%
Behaviour of Boss	11	23%
None	<u>6</u>	12%
	49	

<u>Employees' Attitude Toward the Co.</u>		
Unbearable	-	
Bad	1	2%
Average	15	30%
Good	28	56%
Excellent	<u>6</u>	12%
	50	

<u>Employees' Attitude toward the Union</u>		
Unions help the worker:		
Too much	6	12%
Much	15	31%
To a small extent	27	55%
Not at all	1	2%
Do harm	<u>-</u>	
	49	

WEIGHTED VALUE OF WORKERS' ATTITUDE TOWARDS TRADE UNIONS,
CLASSIFIED BY DIFFERENT FACTORS^a

(greater than average) - smaller than average

<u>SEX:</u>		<u>UNION MEMBERSHIP:</u>	
Male	(3.59)	Member	(3.59)
Female	3.40	Non-member	3.00
<u>AGE GROUP:</u>		<u>WAY OF PAYMENT:</u>	
18 - 30	3.52	Daily/Weekly	(3.57)
31 - 45	(3.59)	Monthly	3.48
46 - 60	3.44		
<u>EDUCATION:</u>		<u>KIND OF JOB:</u>	
None	3.40	Unskilled	3.47
Elementary	3.48	Skilled	3.50
Secondary	(3.60)	Supervisory	(4.00)
College	(4.00)	Clerical	3.52
		Middle Management	(3.60)
<u>PLACE OF RESIDENCE:</u>		<u>MAJOR PROBLEM:</u>	
Limassol T.	(3.58)	Salaries	(3.59)
" S.	3.38	Working Conditions	(3.67)
" D.	3.00	Boss Behaviour	3.18
		None	(3.83)
<u>YEAR OF HIRING:</u>		<u>ATTITUDE TOWARD THE CO:</u>	
65 - 64	3.14	Very good	(4.17)
63 - 60	3.30	Good	(3.59)
59 - 55	(3.68)	Average	3.20
54 - 45	3.44	Bad	3.00
44 - bef.	3.40	Unbearable	-

^aThe weights given and the average weighted response are as follows:

<u>Labor Unions Help the Worker:</u>		<u>Weight</u>	
Too much	6	5	
Much	15	4	
Little	27	3	
Not at all	1	2	
Do harm	-	1	
			Average Weighted Response
			3.53

WEIGHTED VALUE OF WORKERS' ATTITUDE TOWARDS THE COMPANY, CLASSIFIED BY DIFFERENT FACTORS

(greater than average) - smaller than average

<u>SEX:</u>		<u>UNION MEMBERSHIP:</u>	
Male	(3.86)	Member	(3.72)
Female	3.60	Non-member	(3.89)
<u>AGE GROUP:</u>		<u>WAY OF PAYMENT:</u>	
18 - 30	3.61	Daily/Weekly	(3.79)
31 - 45	(4.06)	Monthly	3.76
46 - 60	3.67		
<u>EDUCATION:</u>		<u>KIND OF JOB:</u>	
None	3.60	Unskilled	3.74
Elementary	(3.79)	Skilled	3.73
Secondary	(3.90)	Supervisory	(4.50)
College	(5.00)	Clerical	3.54
		Middle Management	(4.40)
<u>PLACE OF RESIDENCE:</u>		<u>MAJOR PROBLEM:</u>	
Limassol T.	(3.80)	Salaries	3.17
" S.	(3.78)	Working Conditions	3.67
" D.	3.00	Boss Behaviour	3.55
		None	(4.16)
<u>YEAR OF HIRING:</u>		<u>ATTITUDE TOWARDS THE UNION:</u>	
65 - 64	(3.83)	Too much	(4.00)
63 - 60	(3.90)	Much	(4.26)
59 - 55	3.58	Somewhat	3.44
54 - 45	(3.80)	Not at all	3.00
44 - bef.	(4.20)	Do harm	-

^aThe weights given and the average weighted response are as follows:

Workers' Attitude Toward the Co.

		<u>Weight</u>	
Unbearable	-	1	
Bad	1	2	Average
Average	15	3	Weighted
Good	27	4	Response
Excellent	6	5	3.78
	<u>49</u>		

