

THE LEBANESE ECONOMY
WITH SPECIAL REFERENCE TO THE IMPACT ON IT
OF EXISTING DEVELOPMENT PROGRAMS

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THE LEBANESE ECONOMY
&
THE DEVELOPMENT PROGRAMS

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PREFACE

"The acuteness of a problem coupled with a realization that insufficient knowledge exists either of its magnitude or of the factors that determine it is a sharp spur to human enquiry and a powerful magnet that attracts efforts in one direction rather than another".

Simon Kuznets, Suggestions For An Enquiry Into The Economic Growth Of Nations.

Since the abolition of the customs' union between Lebanon and Syria in March 1950, many studies have been undertaken of the Lebanese economy, mainly with a view of advocating the adoption of specified economic policies. Most of these studies, however, have proved unsatisfactory, as they were not based on scientific enquiries into the basic components of the economy or into the sectorial interplay of factors that have been responsible for the present comparatively high standard of living in Lebanon.

This dissertation starts with a factual analysis of the structure of the Lebanese economy. It later endeavours to describe the major public development programs and projects that are being carried out or being planned, and estimate their cost, and indicate their current status; an attempt is also made to determine the adequacy of the various envisaged sources of financing such public capital works. Finally the analysis moves to assess the impact of such programs on the general economy through its effect

on levels of investment, balance of payment and the standard of living.

In the belief that a brief survey of the socio-political structure of Lebanon is necessary for a better understanding of certain major economic issues, the introductory chapter is devoted to this end. The discussion then develops as follows: -

First, a close survey of the various sectors of the economy is attempted, designed to bring to light their relative importance and the possibility of development in each sector.

Second, an inventory of major present and proposed public development projects and plans is drawn up, and envisaged methods of financing is determined.

Third, the effects of public development programs are assessed.

It is believed that in viewing the issue in the light of past experience and existing possibilities, the analysis is apt to be indicative of what appears to be a better economic development policy for the future within the framework of continuous growth of national income and its fair distribution among the people.

A proper understanding of the various sectors of the economy, and of the factors that make for growth in these sectors, is an essential prerequisite for the formulation of a well balanced development program. It is

hoped that this dissertation will help in this understanding. The effort of producing would then have been worthwhile.

The author wishes to express his deep gratitude to Professor Paul J. Klat, who has taken a real interest in this work. The soundness of his criticisms and the weight of his comments have given the present work the punch it needed. The author also wishes to thank his fiancée, Miss Helen Khairallah, who by her understanding and devotion has given him the encouragement and will to produce this work.

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ABSTRACT

In recent years the prosperity of the Lebanese economy has been impressive. Economic growth has been vigorous and the country presently boasts a distinct lead over its neighbours and earns, by its own efforts, an income higher per person than anywhere in Asia or Africa.

The evidenced highly satisfactory economic performance has been conditioned by two sets of factors; one exogenous in the sense of being outside the direct control of the economy and composed of items making up income from abroad and the other indigenous consisting mainly of a high level of net capital formation.

To the query that certain exogenous and indigenous factors cannot, by themselves, be conducive to a level of growth of such magnitude, especially when viewed against a background of paucity in physical resources, the answer lay in the peculiar sectorial set up of the Lebanese economy; generalized, this is the preponderance of the production of goods in the national product. This leads to the conclusion that growth has been greatly stepped up by the ingenuity of the country's human resources rather than by the physical ones.

If on the overall level the exogenous and indigenous elements outlined above have been conducive to an impressive

overall rate of growth, it must however be conceded that as a result of the same two factors, the sectorial pattern of growth has been distorted. Thus the emphasis on the trade and services sectors has had corresponding limitations to the growth of the industrial sector; besides the tremendous investment in real estate and in the stocks of imported goods has acted as a deterrent to investment in the productive sectors.

What, it may be asked, is wrong with the pattern of present growth and investment? The answer to this query is the following: Although in the short run the present pattern has not proved harmful, nevertheless it has helped confirm certain structural weaknesses of the economy. These weaknesses are: (a) The sensitivity of the economy to international fluctuations in business activity; (b) the sensitivity of the economy to the rate of inflow of foreign capital. Both these factors are unduly dependent on political developments which are outside the scope of Lebanon's influence; and (c) the accentuation of the inequalities in income distribution.

Given the above considerations and the undeniable fact that Lebanon is politically wedded to the principles of free trade, the only solution to the problem seems to impose itself, namely: a public development of the retarded sectors.

The role that public development will have to play must be complementary in the sense that it should correct those structural weaknesses and elements of instability by directing public investment to those sectors which, either because of their technical nature or because of their unattractiveness to entrepreneurs, have so far been neglected by the private sector. Thus, industrial, power and water projects which add to the national welfare as well as to stability of the economy may not always show profits that would attract private entrepreneurs under the present profit structure.

Opinions may differ as to the future trend of international economic conditions in general and more specifically about the inflow of capital from the Middle East region into Lebanon. However, Lebanon cannot risk facing changed conditions on the international scene; it must utilize the present day prosperity to infuse a greater element of stability into its basic economic structures.

Therefore, the natural role of economic development expenditures, both as to size as well as to pattern, is to utilize this natural prosperity in increasing the productive capacity of the economy. This will be conducive to a greater stability of income at the highest possible level, and will contribute to the isolation, in as far as possible, of Lebanese domestic production from external fluctuations.

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INTRODUCTION

SOCIAL AND POLITICAL STRUCTURE

"Thither came Phoenicians, men famed for
their ships, greedy knaves, bringing
countless trinkets in their black ship".

HOMER, The Odyssey, Book XII.

In the context of a rapid survey, it is only possible to give a cursory account of important factors which exert a profound influence on current social and political life in Lebanon. These factors are the net outcome over the ages of two main and closely related factors, namely: (a) the geographical location; and, (b) the physical configuration of the country.

The geographical location of the country, falling at the crossroads of three continents and acting as a "façade" to the Middle Eastern hinterland, has compensated for the country's paucity in natural resources. This factor has conditioned economic and social life in Lebanon ever since the early ages and has left its distinct and indelible impression on the character and traits of its inhabitants. The country has acted from times immemorial as a commercial outlet for a very wide region, a transit zone for goods moving to and from three continents, and a barter or trading post.

Consequently, the ingenuity, business acumen and opportunism of its merchant class have grown to be proverbial.

While wide disparities in living standards between various groups of the population should cause no surprise in a Middle Eastern country, they appear more striking in Lebanon due to the country's small size and to the extensive co-existence of penury and abundance. This situation can be traced back and the original cause imputed to both the geographical location and physical configuration factors.

The role played by the first factor in impressing on the area the mercantile character has already been discussed; this, together with the rugged nature of the mountain terrain were amongst the main contributing factors in the precocious growth of coastal Lebanese cities.¹ Town life has definitely exercised a predominant influence in the country; and this predominance, amounting to a marked disproportion, has been particularly characteristic of Lebanon. Here from the dawn of history down to the present day, the coastal towns have stood out as islands of relative wealth, a meeting place of peoples, ideas, cultures and progress in

1. Byblos is undoubtedly the oldest port in the world which, from its trade in papyrus, gave us the name Bible. Euro-
pa Publications Limited; The Middle East
1953 (London: Staples Printers Limited,
1953), p. 5.

a background of a poor countryside. City wealth has in the past acted as a lure to foreign conquerors who found it easier to conduct their operations against a compact and prosperous community and who, once subdued, could easily be taxed. Trade, on the one hand, and conquests, on the other, built in the cities a population, polyglot in origin and in constant touch with the outside; thus they were more amenable to accept a new idea, more disposed to accept a new language and easier induced to adopt a new religion.

Another feature of the prosperity of the cities is reflected in their economic dominance, amounting almost to a stranglehold, in the life of the country. Town merchants are in touch with world markets and are in the main consumption centres. They can thus "corner" or control the¹ production of the rural areas.

A natural development of this situation is the disproportionate accumulation of wealth which has led to the rise of an important community of wealthy absentee landlords, urban residing but rural owning. With the passage of time, this community has grown powerful both financially and

1. The strength of the merchant class is clearly but indirectly brought up by the small proportion of taxes levied via direct sources.

politically and culminated in what may be termed "economic and political feudalism". The ills of this condition have proved a heavy weight on social, economic and political progress. A vicious circle is created; the economic dependence of the share-tenants on the landowner plays its role in freezing the status quo of social classes and drives the tenants to owe their "master" or his chosen allies unquestioned political support at times of elections. The end result has been most aptly described by a Middle Eastern economist:

"Needless to say, this limited form of paternalism assures neither the election of the best men, nor the optimum allocation of public funds over the country. It creates an unhealthy dependence of the villagers on the landlords and an unwarranted domination of those over their men; it represses the promise of oncoming qualified politicians who do not have the same electoral trump cards; and it slows down the process of legislation for reform when it does not agree with the landlords' personal interests". 1

The physical configuration of the country has also played a parallel and dual role in the life of the country. This role has, paradoxically enough, been constructive and destructive at one and the same time. For centuries groups fleeing religious persecution have found refuge in the valleys and mountains of Lebanon. The resultant composite small Lebanese population is made up of a host of splinter

1. Yusuf A. Sayigh, Economic Development of Lebanon, Its Prospects and Problems, mimeographed paper presented to a seminar at the John Hopkins University, (Baltimore: October, 1955), p. 5.

denominations of Christianity and Islam with a precarious¹ balance tipping slightly in favour of the former. Fragmentation of the population is tangible in many forms. For many persons sectarian fidelity supersedes and even sometimes replaces national allegiance particularly at moments of crisis when the intensity of that loyalty surprises even its holder by the strength of its exclusiveness. This unfortunate situation is by no means the outcome of some spontaneous undercurrents; it is the cumulative expression of various factors that are superimposed on the traditional and classic mutual hostility of minority and majority groups. Both factions have alienated themselves at one time or another by association with foreign powers of their respective creeds, vying with each other

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1. In 1956, the population of Lebanon numbering 1,411,416 persons was composed of the following denominations:

<u>Christians</u>		<u>Moslems</u>	<u>Others</u> ^{Jews}
Maronites	423,708	Sunnis 286,238	Christians 6,692
Greek Ortho.	148,927	Shi'is 250,655	Others 7,193
Greek Catho.	90,788	Druzes 88,131	
Armenian Ortho.	63,679		
Armenian Catho.	14,631		
Protestants	14,365		
Syrian Catho.	5,699		
Syrian Ortho.	4,798		
Latins	4,446		
Chaldeans	1,466		

Source: Al-Nahar, April 26, 1956.

first as individuals and later as groups for power and benefits. The justification for such a course of action is to be found in the community of interests that bind indigenous confessional groups to exogenous elements. Such interests were in harmony as to means but divergent as to ends - the Christians seeking protection, the Moslems ascendancy and overlords~~hip~~, the foreign powers influence and markets.

Foreign intervention whether or not intentionally sowing the seeds of discord and dissention, has been greatly successful in accentuating fragmentation among the population. Some of the pronounced means of intervention were, inter-alia: (a) religious and educational missions. French, American and British missions found the Christian elements receptive to the assimilation of Western culture. They lost no time advocating the idea of the direct association of religion and state; unfortunately western secularism was a commodity for internal consumption only and not for export. These institutions, however, must be given due credit and commended for their educational work, printing presses, schools and universities and on the whole the Western outlook of the country; (b) the Ottoman "Millet" system. Under the Moslem Turkish regime, the Moslem courts had jurisdiction in all matters of personal status over the popu-

lations of the various countries under their power.¹ In order to meet the objections of some Christian minority groups, Turkey recognized, under the "Millet" system, the jurisdiction of religious courts in matters of personal status - marriage, divorce, inheritance, widows' and orphans' maintenance, etc. - affecting their own adherents. This has helped increase fragmentation first among each of the Christian and Moslem communities as well as between them; (c) the principle of divide-et-impera meticulously and unscrupulously implemented by both Turks and French and indirectly by British (who, for example, championed the Druze cause in the 1860 massacres)² was, and still is, an added reason for continued delays in cohesion.

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1. The Islamic relation of religion and state is well defined in the Qur'an: "Knowest thou not that God unto whom belongeth the "sovereignty" of the heavens and earth.....?" Qur'an II, 110; "In the case of the Islamic state there seems to be no difference between the apostolic state of Muhammad and the Caliphial state of his successors; both it is true, regarded Allah as the supreme though not the direct ruler of the state. Under Muhammad not only the executive, but also the legislative and judicial functions of Allah were united. In more precise terms we may argue that only the possession of sovereignty resided with Allah; while its exercise was delegated to Muhammad who, as vicegerent of Allah, was the titular head of the state and its source of governing authority; Muhammad was its head of Government." Majid Khadduri, War and Peace In The Law Of Islam, (Baltimore: The Johns Hopkins Press, 1953), pp. 9-10.
 2. During these massacres, 11,000 Christians met their fate, while 4,000 perished by destitution.

The prevailing sectarian pattern is not merely established by custom and convention; it is formalized by: (a) its incorporation (article 95) in the constitution: "Temporarily and for the furtherance of justice and harmony, the equitable representation of the denominational groups in public employment and in the cabinet must be safeguarded provided it is not prejudicial to the interests of public authority";¹ (b) allotment of parliamentary seats according to a set pattern to the various religious communities; and, (c) by precedent and implicit acquiescence, the President of the Republic is a Maronite, the Speaker of the House a Shi'i, the latter's deputy a Greek Orthodox, the Premier a Sunni and his deputy a Greek Orthodox. Lower in the echelons too, executive offices are more or less earmarked for men of the same faith as their predecessors.

"The combined implications of political feudalism and political confessionism have been to divide the community; to push the unqualified man forward if he is of the right sect and has the necessary backing; to produce inefficiency and superfluity in the civil service; and to give the laws of the land less authority and effectiveness- in short, to retard far-reaching reform in all aspects of society's life. Although the public is aware of the necessity of, and is eager for, reform and development, it is generally kept so busy with its community rivalries that it has left the field free for narrow vested interests. It is mainly because of such preoccupation with sectarian interests and of the self-containment of political feudalism that the party system, in the Western sense, makes little headway in Lebanon". 2.

1. Vide: "The Constitution of the Republic of Lebanon" Lebanese Ministry of Justice, Majmu'at-al-Qawanine, (Beirut: New Republic Press, 1947), Vol. V.

2. Sayigh, op.cit., p. 7.

With its ascendancy to full sovereignty, Lebanon has discovered that in the last few generations of its political history, certain new factors have arisen to add their weight to that of tradition. Such were: (a) the rapid advance which the Lebanese have made in the assimilation of Western culture. Western schools were established earlier in Lebanon than in the hinterland; emigration to the New World has kept them abreast and in constant ideological intercourse with it; its christian majority has proved more eager and able to understand the West than their fellow Moslems; in many ways, although not perhaps in all, the Lebanese are the most westernized of the Arabic-speaking peoples; and, (b) the growth of Arab nationalism has affected the Lebanese political thought considerably. There were indiscriminately Lebanese Christians, Moslems and Druzes among the founders of the Arab nationalist movement, and they still are amongst its most enthusiastic supporters.

In addition, a host of problems arose after the termination of the French mandate: political pressure from the East and financial pressure from the West; the Palestine conflict and the Syro-Lebanese financial and economic relationship have accentuated the country's uncomfortable position over the past ten years. That Lebanon is the only Arab country with a Christian majority further does not, of

course, contribute to easing the situation, although both Presidents Khouri and Chamoun and other responsible officials have constantly emphasized by words and deeds that Lebanon is an Arab country and not just an enclave of Western influence.

Lebanon's ruling majority is confronted with the following dilemma: Should it side with the West even at the cost of deep enstrangement from a section of the population and the other members of the Arab League? Or, should it throw in its lot with fellow countrymen and abandon categorically its connections with the West? Or, can a middle way be found between these two difficult paths? There are evidences that Lebanon tries to find that middle of the road solution. The neutral or sympathetic attitude it adopts with regard to the West, on the one hand, and the championing of the Arab cause on various occasions, on the other, shows that the country will not wilfully alienate itself from the West while proving earnestly that the government strives to persuade the Arab countries that Lebanon is an integral part of the Arab World. On the whole Lebanon does not seem to have found its way out of the dilemma confronting it.

During the past ten years of its sovereign existence, independent Lebanon has established a reputation through its active role in international organizations. Internal condi-

tions have been fairly stable, especially if measured by Middle Eastern standards, thanks to the well-balanced relations between the Christian and Moslem parts of the population. Criticism of the government is voiced freely in both parliament and press. The lack of an experienced and reliable administration, as well as the highly individualistic attitude of the population have, however, often made it difficult to carry out decisions and to secure full respect for the law.

The country has however continued its distinguished and long established tradition of tolerance and liberalism; the ancient tradition of political and religious asylum is still staunchly preserved; groups that have fled religious or political persecution over the past half century and found refuge in Lebanon bear testimony that this tradition lives on.

CHAPTER I

THE LAND AND THE PEOPLE

A. The Land

1. The Geographical Setting

The Republic of Lebanon covers an area of 10,400 sq. kms. It is situated on the eastern shore of the Mediterranean and runs between 33° and 34.5° north latitude and between 35° and 36.5° east longitude. The distance from north to south is about 190 kms; the country's maximum width is 75 kms.

Lebanon has 278 kms. and 72 kms. of joint boundaries with Syria and Palestine respectively; ¹ these boundaries are either conventional or political, drawn at the end of World War I and modified a few times to suit the interests and ends of mandatory policy.

2. Physiography

Topography: Structurally, the Lebanon consists of an enormous simple upfold of rocks that runs parallel to the coast.

The flat coastal strip, hardly a true plain, is generally very narrow. Its widest segments are in the

1. Conseil Supérieur des Intérêts Communs, Service d'Études Économiques et de Statistique, Recueil de Statistiques de la Syrie et du Liban, 1944, (Beirut: 1946), Vol. II.

vicinity of Tyre and Sidon in the south, below Shuwaifat and north of Beirut in the center, in the vicinity of Tripoli farther north, and in Akkar in the extreme north where it opens up into the rather extensive Akkar plain, which is partly in Syria.

The narrow coastal strip is backed by the imposing Lebanon mountain range; the range stretches parallel to the coast in a continuous formation, with several majestic crests and ridges, from Palestine in the south to Syria in the north; the highest crest of all is 'Ornet-el-Sauda (the black corner), just under 3,100 meters high lying south-east of Tripoli; Mount Sannine, north-east of Beirut is just over 2,600 meters.¹ All along its length there is an abrupt and precipitous drop toward the Mediterranean to the west, and in a similar manner to the east it slopes towards a broad and flat troughlike valley known as the Bekaa. On both sides the Lebanon range is cut by deep ravines and gorges through many of which run perennial streams.

The Bekaa is a plateau produced by faulting; most of it (72.3%) is 1,000 meters above sea-level. Its width ranges between 10 and 12 kms.; it extends from approximately the northern frontier to the vicinity of Karaoun village,

1. Ibid.

a distance of approximately 130 kms.¹ The plateau is distinguished by a low, flat divide near Baalbeck; the northern segment is drained by the Al-'Assi river (Orontes) which flows northward across the frontier through the Ghab depression in Syria and empties into the Mediterranean in Turkey. The southern segment drained by the Litani river (Leontes) which flows in a southwesterly direction past the Karaoun after which it is confined to a deep, narrow and tortuous gorge before it converges sharply just below Beaufort castle in a westwardly direction to empty into the sea 8 kms. north of Tyre.

The eastern side of the Bekaa plateau is formed by the Anti-Lebanon range, running parallel to and as imposing and almost as extensive as the Lebanon range; it rises at its northernmost tip at Talaat Moussa to a maximum elevation of just over 2,600 meters; its southern crests are around 750 meters high; its southern continuation is Jebel Houran (Hermon range). The water divide along the crest of this range is the boundary line between Syria and Lebanon, with the eastern slopes belonging to Syria and the western slopes to Lebanon.

In addition to the western coastal strip and the Bekaa plateau on the east, there are several fertile

1. Ibid.

valleys of various sizes higher up on the mountain slopes, the most important of these are in the neighbourhood of Marj'youn in the south, in the Koura south-east of Tripoli, and above the Akkar plain in the north. Numerous small valleys also exist on the higher slopes all along the mountain range.

Geology: Geologically the Lebanon and the Anti-Lebanon mountains and the intervening Bekaa section represent long, narrow crustal blocks, separated by faulting. These blocks have been uplifted differentially by great tectonic movements. The faults along which these tectonic movements occurred are the northward continuation of major crustal breaks which form the African and Palestinian rifts. They extend from the north of Lebanon along the sides of the Bekaa southward from Lebanon through Jordan along the Dead Sea and on southward into Africa. The major fault along the west side of the Bekaa is the Yamouneh fault along which great massifs of Jurassic limestone have been uplifted. Along the east side there are several large faults such as the Hasbaya, the Rachaya and the Serrhaya. Associated with the major faulting which produced the present physiography of Lebanon there was much flexing and minor faulting of formations. The result is seen in complicated structural conditions in many localized areas. The exposed rock formations represent the geologic

age sequence from Jurassic up through Cretaceous, Tertiary and Quaternary.¹

There exists in Lebanon an unusual feature of geological structure which is non-existent in either of the adjacent regions of Syria and Palestine. This is the occurrence of a layer of non-porous rocks within the upfold forming the Lebanon mountain range; because of this geological phenomenon water is forced to the surface in considerable quantities, producing relatively large springs at the unusually high elevations of 1200 meters and 1500 meters making cultivation possible at such levels.²

3. Climate

"The influence of climate and weather on all forms of human activity is great, and their influence on a country whose economy is primarily "agricultural" may be decisive. It is clear, therefore, that it is of importance to study them carefully in order to make the best of those effects which are beneficial to the agricultural life and other activities of the community, and be able to counteract those which are unfavourable".³

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1. United States Department of the Interior, Bureau of Reclamation, Development Plan for the Litani River Basin, Republic of Lebanon, (Denver: 1954), Vol. I, p. II-4.
 2. Europa Publications Limited, op.cit., p. 203.
 3. Sir Alexander Gibb and Partners, The Economic Development of Lebanon, (London: Knapp, Drewett & Sons Ltd., 1948), p. 34.

The Mediterranean sea and the topographical relief of the country are the primary influence in shaping the climate of Lebanon. The climate is in general of the Mediterranean type, that is moderately cold, windy and wet in winter and warm and dry in summer and part of the fall.

The climatic regions approximate very closely to the geographical regions. The coastal lowlands area is semi-tropical, enjoying a heavy winter rainfall and a hot rainless summer; however, the air is humid and permits the cultivation of sub-tropical plants such as oranges and bananas. In the upper and coastal ranges of the Lebanon there are modifications imposed by altitude; the heavy rainfall is still concentrated in the winter months and precipitations often take the form of snow, giving the unusual vista for the Middle East of snow clad mountain peaks; summers, though, are temperate and mild but rainless.

East and inland of the coastal range the central valley lies in the rain shadow of the Lebanon; the climate is continental with a moderately cold and rainy winter and a distinctly hot summer, as it is shut off from the tempering effect of the sea.

The anti-Lebanon follows the same pattern as far as rainy and dry seasons are concerned, however, it receives less rain and is definitely drier than the Lebanon.

1. From this the name Lebanon, said to be derived from "Laban" the aramaic word for white - is said to be derived.

Rainfall

The Lebanon range lying across the course of the prevailing moisture bearing westerly winds condenses most of the moisture as a result of orographic lifting; the lifting is such that the heaviest precipitation occurs on the western side of the Lebanon mountains and along the coastal regions. Once the crest is passed the amount of moisture in the air drops considerably and therefore the lifting effect of the Anti-Lebanon does little to produce precipitations either on its western slopes or in the Bekaa, where precipitation is lowest in the north being in the shadow of the highest peaks of the Lebanon. Table 1 indicates this climatic phenomenon clearly by comparing monthly precipitations recorded at the Ksara observatory in the Bekaa with those recorded at the American University observatory in Beirut.

The following table brings out three of the marked characteristics of rainfall in Lebanon, namely: (a) The stretch of the rainy season from November to March; (b) the considerable variations in total rainfall in a maximum, minimum or average year. The last two characteristics when taken in conjunction indicate (a) The underlying hazards involved in the cultivation of rain-fed crops; (b) the difficulty of long range forecasting; and, (c) the complicated problem of water supplies for irrigation and other purposes.

TABLE 1

COMPARISON OF MONTHLY PRECIPITATION

1921-1951 AVERAGE

In Millimeters

<u>Month</u>	<u>KSARA</u>			<u>BEIRUT</u>		
	<u>Max.</u>	<u>Min.</u>	<u>Avg.</u>	<u>Max.</u>	<u>Min.</u>	<u>Avg.</u>
January	311	29	159.3	416	88	194.6
February	421	42	144.8	381	43	174.1
March	133	5	61.4	200	15	81.2
April	109	3	41.2	132	traces	46.6
May	92	0	14.8	88	0	17.0
June	12	0	1.3	24	0	2.6
July	3	0	0.1	3	0	0.1
August	9	0	0.3	1	0	0.1
September	5	0	1.0	26	0	6.3
October	73	0	17.3	201	traces	41.4
November	184	2	64.2	330	8	120.1
December	252	2	114.3	333	12	173.6
Full Year	960	322	640.8	1198	393	857.7

Source: Adapted from the Report of the
U.S. Department of the Interior,
op. cit., p. 3-5.

Another important characteristic of Lebanon's rainfall is that it occurs in sporadic and heavy but short spells of stormy weather alternating with fine periods. Table 2 brings out this characteristic.

Humidity

Again the influence of the sea on the climate of Lebanon is clearly indicated by comparison of relative humidity data for the coastal regions and the eastern part of the country. Comparable 15-year data (1938-52) of relative humidity shows a yearly mean of 71.3% and 58.5% in Beirut and Ksara respectively. Again the data indicates that while variations in Beirut are very slight (67.9%-74.9%) they are rather pronounced at Ksara (43.0%-77.0%).¹ The high degree of relative humidity in the coastal regions in summer is of particular significance in the beneficial effect it exercises upon vegetation.

Winds

The prevailing winds of the coast are southwesterly, those of the interior westerly. Other winds are rare except in the autumn when a north-easterly wind occasionally springs up. Calm days are common throughout the year, though gales occur along the whole coast; "Khamsin" spouts

1. Gibb, op.cit., p. 36.

TABLE 2

NUMBER OF RAIN - DAYS AND PRECIPITATION IN 1953

	Jan.		Feb.		March		April		May		June		July		August		Sept.		Oct.		Nov.		Dec.		
	D	Mm	D	Mm	D	Mm	D	Mm	D	Mm	D	Mm	D	Mm	D	Mm	D	Mm	D	Mm	D	Mm	D	Mm	
Beirut	12	120	10	81	6	65	2	30	1	2	-	-	-	-	-	-	-	1	T	-	-	9	137	13	82
Cedars	11	95	6	79	7	51
Marjayoun	11	134	11	168	6	49	4	42	2	8	-	-	-	-	-	-	-	1	T	1	11	157	11	109	
Rayak	12	105	11	103	7	37	6	16	2	1	-	-	-	-	-	-	-	1	T	1	10	128	..	139	

Note: T stands for traces of rain
 .. stands for not available
 - stands for zero

Source: Bulletin Statistique Trimestriel, Vol. III

occur fairly frequently in the Bekaa.¹

B. The People

There undoubtedly exists a close interrelation between social and economic problems on the one hand and population size, composition and growth on the other.² If maximum success were to be achieved in any economic and/or social program, the objectives have to be related to the future size of the population, its composition and other relevant characteristics pertaining to it.

In spite of the shortcomings and limitations of available demographic data in Lebanon, this section is meant as an attempt at a factual analysis of the Lebanese population problem.

Sources of Census Information:

Demographic data in Lebanon is inadequate. The last official census for the country was taken in 1932. In December 1942, for purposes of issuing ration cards, the Office des Céréales Panifiables (OCP) made a general estimate of the population based on house to house counting.

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1. U.S. Department of the Interior, op.cit., Vol. I Table III-2, p. III-4.
 2. U.N. Department of Social Affairs, "Population and Consumption", "Effects of Population Growth on Per Capita Output", "Implications of Population Trends in Highly Industrialized Countries" and "Implications of Population Trends in Underdeveloped Countries", The Determinants and Consequences of Population Trends, document ST/SOA/Ser.A/117, (New York: 1953), chapters XII - XV.

In both these censuses the information demanded was scanty. In the 1932 census, the list of questions was not a very detailed one, and the results gave an incomplete picture of the population analysed by religion, sex and locality. Although the information demanded asked for profession and state of literacy, nothing of the sort appeared in the final results. In the O.C.P. census of 1942, a light was thrown on the civil status, age distribution and nationality of the persons enumerated.

The 1932 census was a de jure one; the persons enumerated, including those abroad, were allotted to their usual place of residence. The O.C.P. census was a de facto one; it tabulated the persons enumerated according to where they were actually found at the time of the enumeration - with the exception that absent members of a family not permanently resident elsewhere were referred back to the family residence.

There are thus, in summary, three sources for population information in Lebanon, namely: (a) the 1932 census; (b) the O.C.P. estimates of 1942 as corrected in 1944; and (c) the present "Etat Civil" census, which has maintained a running figure for the population based on the ons and offs of the intervening years since 1932.

For purposes of this dissertation the "Etat Civil" census figures will be adopted, mainly because: (a) they are

the accepted official figures; (b) they are united in source and are therefore rather consistent within themselves; and, (c) they are being - whether accurately or not - currently brought up to date.

Population Growth

Table 3 brings out three factors which if taken in conjunction would point out to the physical impossibility of undertaking a scientific and comprehensive study of population growth in Lebanon. These factors are: (a) the inadequacy of demographic data. Only rough estimates of population changes have been made since 1932 to bring the census figure up to date, with the result that the present population cannot be estimated except with a possible margin of error of around one hundred thousand;¹ (b) the unreliability of vital statistics.² The existing registration of births and deaths suffer from a large measure of incompleteness; thus, in Table 3, the reported number of births for the years 1936, 1942, 1943 and 1944 represent such a divergence from immediately previous and/or subsequent years as to cast strong suspicion as to the accuracy and completeness of such registration. The reported number of annual deaths present a consistent series through

1. The last official estimate is 1,304,000 in 1951 Ministry of National Economy, Bulletin Statistique Trimestriel, (Beirut: 1951),

TABLE 3

POPULATION, VITAL and EMIGRATION STATISTICS

Year	Population (a)		Births (b)		Deaths (b)		Natural Increase		Migration (c)		Net Increase	
	Number	Rate/Th.	Number	Rate/Th.	Number	Rate/Th.	Number	Rate/Th.	Number	Rate/Th.	Number	Rate/Th.
1932	859,693	-	n.a.	-	n.a.	-	-	-	1,171	-	-	-
1935	n.a.	-	13,955	-	6,453	-	n.a.	-	1,992	-	-	-
1936	n.a.	-	22,526	-	6,887	-	15,639	-	2,277	-	-	-
1937	n.a.	-	19,202	-	6,797	-	12,405	-	3,315	-	-	-
1938	n.a.	-	17,154	-	6,236	-	10,908	-	1,439	-	-	-
1939-1941	n.a.	-	n.a.	-	n.a.	-	n.a.	-	n.a.	-	-	-
1942	1,086,824	34.32	37,298	3.43	8,042	7.40	29,256	26.92	n.a.	-	17,845	16.42
1943	1,104,669	16.96	18,737	1.69	8,660	7.84	10,077	9.12	n.a.	-	21,932	19.85
1944	1,126,601	26.04	29,347	2.60	8,198	7.27	21,149	18.77	n.a.	-	20,192	17.92
1945	1,146,793	24.45	28,043	2.44	8,281	7.21	19,762	17.24	n.a.	-	18,415	16.05
1946	1,165,208	21.76	24,765	2.17	7,089	6.08	17,676	15.18	n.a.	-	20,937	17.96
1947	1,186,145	21.47	25,462	2.14	6,554	5.53	18,908	15.94	n.a.	-	43,400	36.58
1948	1,229,545	26.08	32,281	2.60	7,450	6.06	24,831	20.02	n.a.	-	17,035	13.85
1949	1,246,580	18.13	22,613	1.81	6,711	5.38	15,902	12.75	n.a.	-	20,999	16.84
1950	1,267,579	22.83	28,953	2.28	9,714	7.66	19,239	15.17	n.a.	-	36,361	28.68
1951	1,303,940	23.43	30,553	2.34	6,202	4.76	24,351	18.67	4,077	3.13	20,274	15.54
1952	1,324,214	24.03	31,821	2.40	7,712	5.82	24,104	18.21	2,725	2.06	21,384	16.15
1953	1,345,598	25.32	34,070	2.53	7,257	5.39	26,813	19.93	3,315	2.46	23,498	17.47
1954	1,369,096	28.90	39,571	2.89	7,408	5.41	32,163	23.49	4,026	2.94	28,137	20.55
1955	1,397,233	-	n.a.	-	n.a.	-	n.a.	-	n.a.	-	n.a.	-

Source: (a) - 1932: Jewish Agency for Palestine, Statistical Handbook of Middle East Countries, Jerusalem: 1945.
 1942-51: Bulletin Statistique Trimestriel, Vol. II, No. 4.
 1952-56: Computed on the basis of the 1951 statistics.

(b) -1935-38: Jewish Agency for Palestine, op.cit.
 1942-43: Furnished by Ministry of Health and Public Assistance, Lebanon.
 1944-45: Bulletin Statistique Trimestriel, op.cit., Vol. VII.

(c) -1935-38: Jewish Agency for Palestine, op.cit.
 1951-55: Bulletin Statistique Trimestriel, op.cit., Vols. II, III, IV, V.

the years covered, however, the resulting natural increase annual figures can hardly explain the reported annual increase of total population for the years for which such figures are available; and, (c) the absence of comparable emigration data and complete inexistence of immigration data that might explain the difference in population increase.

With the above limitations in mind, only rough and general interpretations are possible to shed some light on certain demographic characteristics of the country.

The 1955 estimate of 1.4 million (excluding registered refugees) gives Lebanon a population density of 135 persons per sq. km. (cf. Table 3), the highest of any country in the Arab World except Egypt if the Nile Valley only were considered. The population is unevenly distributed over the five districts. In 1951, density per sq. km. was 1170 persons in Beirut, 195 persons in Mt. Lebanon, 144 persons in North Lebanon, 118 persons in South Lebanon, and 43 persons in the Bekaa.

Table 3 reveals that Lebanon's population is rising at a very rapid pace. Total population is estimated at

Vol. II, No.4). Taking account of the net increase in 1951 and 1952, the estimate for 1953 would be at 1,345,000. Preliminary results of the village survey conducted by Point Four and Lebanese Department of Statistics in 1953, indicate that this estimate is on the low side and that a more probable figure is 1,400,000 to 1,450,000.

1. Bulletin Statistique Trimestriel, op. cit., Vol. II - Nos. 1 and 4.

approximately 1.4 million in 1955 or slightly over 1.6 times the census figure of 1932 of approximately 850 thousand; this gives an annual average rate of increase of 21.0 per thousand. If net migratory movements had not been unfavourable to Lebanon during this period, the increase would have probably been at a higher annual rate; with the exception of Palestine, such a rate of growth approximates the highest ones prevailing in other Middle Eastern countries for which estimates are available, and is by far higher than evidenced rates in any one European and North American country. (cf. Table 4). (1)

TABLE 4

RATES OF POPULATION GROWTH IN SELECTED COUNTRIES

<u>Country</u>	<u>Average Annual per thousand increase x</u>	<u>Period Covered</u>
Lebanon	21.0	1932-1955
Syria (a)	25.0	1938-1942
Iraq	22.5	1942-1954
Egypt	18.1	1937-1947
Greece	13.7	1928-1940
Cyprus	16.7	1931-1946
Palestine (b)	31.0	1925-1926
Italy	7.3	1936-1951
Switzerland	11.0	1941-1951
France	- 0.2	1936-1946
Belgium	3.0	1930-1941
U.K.	4.4	1911-1941
U.S.	13.6	1940-1950
Canada	17.2	1941-1951

Source: Lebanon: Table 3, Supra; Syria UNRWA estimates; all other countries: UN, Demographic Yearbook 1955, op.cit.

(a) excluding nomads and semi-nomads.

(b) only moslem population.

x rates calculated by the compound interest formula
viz: $A = A(1+r)^n$

1. It is very doubtful that population figures for Syria and Iraq are correct, as there never was a population census in these countries.

Age Structure:

Whatever the case may be, the population of Lebanon is characterized by very high fertility and low mortality rates.¹ The very high birthrate causes the age structure to be more heavily weighted with young dependants, as shown in table 5:

Although statistics about the age structure of Lebanon's population is available only for 1944, there is no reason to believe that the average age of the population has increased in recent years; on the contrary, in all probability the high birthrate evidenced over the past decade must have created a still "heavier bottom" in the age structure of the population. Lebanon in this respect follows the general pattern of age distribution characteristic of underdeveloped countries (cf. Table 6) that have set themselves on the path of development, namely, a high birth-rate among the lower income groups and a high death rate at an early age owing to malnutrition and bad sanitary conditions. As improvements in health, sanitary and social services take place, there is a reduction in the rate of infantile mortality rather than an increase in longevity, while the birth rate continues to rise. It may be assumed therefore that this trend has continued since

1. The death rate in Lebanon is the lowest among Middle Eastern countries.

TABLE 5

*
DISTRIBUTION OF THE POPULATION BY AGE-GROUPS IN 1944

AGE-GROUP	Males		Females		Total	
	Number	Percent	Number	Percent	Number	Percent
Under 5	69,835	12.9	61,821	11.9	131,656	12.4
5 & under 12	105,692	19.4	92,000	17.7	197,692	18.6
12 & under 21	120,236	22.1	109,325	21.0	229,561	21.6
21 & under 35	92,943	17.1	96,385	18.5	189,328	17.8
35 & under 51	87,306	16.1	93,016	17.8	180,322	16.9
51 & over	67,137	12.4	68,490	13.1	135,627	12.7
Total	543,149	100.0	521,037	100.0	1,064,186	100.0

* Figures obtained from the O.C.P. census.

Source: Recueil de Statistiques Generales, (Beirut: 1944); p. 31.

1944 and that it will do so for some time to come. The reduction of the death rate, it is true, would tend to lengthen the economically active life of each generation, yet, without a corresponding reduction of birth rates, longer survival will not improve the balance between the productive and the dependent elements of the population, for it is primarily the birth rate, and not the death rate which determines the age structure. In fact the ratio of dependents to producers is likely to increase somewhat in the future in the country in consequence of continued urbanization, for it is typical of urban communities that the proportion of children and of old men engaged in economic activities is lower than in rural communities. The result of this heavy load of dependency would be to take away a sizeable part of the gain resulting from increased production per worker. This seems inevitable in the long run and therefore calls forth for bold development projects in the country.¹

Table 6 brings out this fact, by comparing Lebanon with the under-developed and developed countries.

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1. It would be a mistake to dismiss the age structure as a factor of only minor importance hindering the economic development of the country. For a detailed analysis of the subject in the context of development, vide: J.D. Durant, "Population Structure as a Factor in Manpower and Dependency Problems of Under-Developed Countries", UN, Population

TABLE 6

DISTRIBUTION OF THE POPULATION BY AGE - GROUPS

IN VARIOUS COUNTRIES

Country	Lebanon (1)	Turkey (2)	India (3)	Argentina (4)	U.S.A. (5)	U.K. (6)	Switzerland(7)	France (8)
Age-group	Pop. : 1,000	Pop. : 1,000	Pop. : 1,000	Pop. : 1,000	Pop. : 1,000	Pop. : 1,000	Pop. : 1,000	Pop. : 1,000
	%	%	%	%	%	%	%	%
Under 12	329.4	6,542.4	109,928.1	3,971.1	34,024.8	7,985.2	927.6	6,796.8
12 - 50	599.2	12,303.7	206,583.1	9,695.7	82,484.5	24,199.4	2,640.4	22,623.3
51 & over	135.6	2,101.1	40,287.5	2,227.0	33,706.8	11,573.3	1,147.0	10,428.1
Total	1,064.2	20,947.2	356,798.7	15,893.8	150,216.1	43,757.9	4,715.0	39,848.2

(1) December 1944
 (2) October 1950
 (3) March 1951
 (4) May 1947

(5) April 1950
 (6) April 1951
 (7) December 1950
 (8) March 1946

Source: Lebanon: Conseil Supérieur des Interets Communs, Recueil de Statistiques de la Syrie et du Liban, 1944, Beyrouth:1946.

Others: Compiled from U.N., Statistical Office, Demographic Yearbook 1955, New York; 1955.

Emigration

Emigration has taken place from Lebanon for many generations and seems to reflect at once the expeditionary spirit of the old Phoenicians. More recently, since the 1860 massacres and the ensuing political disorders, many of those who wished to live peacefully were constrained to seek a calling overseas. It is estimated that between 1860 and 1900, some 120,000 persons emigrated from Lebanon and Syria - an average of 3,000 a year, of whom over half were from Lebanon; in 1900-1914, the yearly average rose to 15,000, and reached 16,000 in 1923.¹ However, since then restrictions in the receiving countries have multiplied and the number fell to an annual average of 2,000 in the 1930's.² After World War II, the movement rose again after a temporary stop, and averaged 3,000 persons

Bulletin of the UN, document ST/SOA/Ser.N/3, (N.Y. 1953); and, UN, "Implication of Population Trends in Under-Developed Countries", document ST/SOA/Ser.A/117, op.cit., Chapter XV.

1. S. B. Himadeh, The Economic Organization of Syria, (Beirut: American Press, 1936), p. 16.
2. UN, Department of Economic and Social Council, Economic Developments in the Middle East, 1945 to 1954, document E/2740,ST/ECA/32, (New York: 1955), p. 150.

per annum.¹ Emigration has been mostly from the rural areas where the paucity of resources strengthened the people's resolution to leave. In the past decade the movement has been mostly to Brazil, Venezuela, Australia, the Persian Gulf area, and Saudi Arabia.² It is to be noted that there are still at present some 300,000 Lebanese emigrants who have retained their Lebanese citizenship, "presumably" with the intention of returning sometime to their home country.³

Emigration from Lebanon has always been higher than from other countries in the area. Emigration statistics are incomplete, for up to 1952, registration took into account those travelling by sea only.⁴ From 1953 onwards those emigrating via Beirut International Airport have been incorporated into emigration statistics; still, however, such statistics are incomplete as emigrants by land routes

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1. Le Commerce du Levant, Beirut, 9 October, 1954.
 2. Ibid.
 3. Mr. Fouad Bridi, Director of the Section concerned with Lebanese Overseas, Ministry of Foreign Affairs.
 4. Mr. Raymond Heneine, Section concerned with Lebanese Overseas, Ministry of Foreign Affairs.

are unaccounted for. Emigration for the period 1951-1955 totalled 18,698. The figure assumes greater importance when one bears in mind that 73.6¹ per cent of the emigrants were between 15 and 44 years old.

Immigration

In the reverse direction, some immigration takes place mainly of foreign nationals who intend eventually to return to the mother country and are concerned mainly with commercial, missionary and philanthropic enterprises. In January 1954, the number of foreign nationals was 18,429 persons,² 80% of whom were living in the Beirut district. The bulk (58%) of the residents were classified either as under 15 years of age or as persons without any specific profession. The largest single nationality was the French (3,006 persons), followed by the British (2,328 persons),¹ and the Americans (1,901 persons). In addition, there probably is some 50,000 naturalized armenians in the country.⁴

1. Bulletin Statistique Trimestriel, op.cit., Vols: II - IV; No. 4.

2. Figure includes 941 students.

3. Bulletin Statistique Trimestriel, op.cit., Vol. V - No. 2, pp. 60-65.

4. The Armenians in Lebanon present a rather interesting problem. The majority entered the country following the Armenian massacres by the Turks during and after the war of 1914-1918, and mainly lived in

Since 1948, the country has experienced a sudden increase of the population of some 10% due to the influx of some 130,000 Palestinian refugees. UNRWA death and birth statistics show that between July 1955 and June 1956, 1,249 deaths and 4,105 births were registered among ration recipient refugees, the net rate of natural increase being as high as 27.5 per thousand.¹ Compared with the local population, the age structure of the registered refugee population is more heavily weighted with young dependents as 48.34 per cent of the ration recipients were below fifteen in June 1956.² The

miserable conditions in camps until as late as 1926. In 1939, after the cession by France to Turkey of the Sanjak of Alexandretta, some 3,000 refugees chiefly Armenians, also entered the Lebanon. In 1944, there were 51,242 naturalized armenians in the country (Recueil de Statistiques Générales, 1946, op.cit.) These refugees tended to remain in the cities, which in times of depression aggravated appreciably the unemployment problem as a considerable number became highly skilled labourers. Some Armenians have now been repatriated to Armenia under a scheme conducted by the U.S.S.R., the total number repatriated is 8,548 in 1946 and 4,350 in 1947. (Suret  Générale records). At the average natural rate of increase for the country of 21 per thousand there must be at present around 50,000, who are included in the census figures.

1. UNRWA, ~~op.cit.~~ Monthly Registration Statistics, July 1955-
June 1956
2. Ibid.

refugee population at the end of June 1956 was officially reported at 23,392 families totalling 102,625 persons, 41 per cent of whom were living in camps. By districts, the refugee population was distributed as shown in Table 7.

TABLE 7

DISTRIBUTION OF RATION RECIPIENT PALESTINE
REFUGEE POPULATION, SINCE 1956 1

<u>District</u>	<u>Number</u>	<u>Of whom in Camps</u>	
		<u>Number</u>	<u>Families</u>
Beirut	15,286	249	59
Bekaa	7,410	5,241	1,141
Mountain	20,396	9,180	2,123
Saida	24,013	11,577	2,495
Tripoli	11,686	7,085	1,630
Tyre	23,834	9,162	1,978
TOTAL	102,625	42,494	9,426
	=====	=====	=====

Source: UNRWA, Monthly Registration Statistics,
July 1955 - June 1956.

Urban and Rural Population

The majority of the population depends, whether directly or indirectly, upon agriculture for its living. In attempting to obtain a reliable figure for rural population two main difficulties are encountered: (a) no definite official figure has as yet been published; and

(b) in the different estimates given,¹ no account has been taken of either the important population movements towards urban districts or of seasonal movements of the rural population to town for work. However, it is generally accepted that 60% of the total population depends

1. i. Gibb, op.cit., p. 30, put it at 66.5% in 1944.
- ii. A.Y. Badre, National Income of Lebanon (Beirut - 1951, Monograph No. 1, p. 8, puts it at 50%.
- iii. Sir Herbert Steward, Notes on Agriculture in Lebanon, (monographed report, Beirut, 1948?) p. 5, estimates rural population at 2/3 of the total.
- iv. Ministry of Agriculture, Central Office of Agricultural Statistics, (A typed report, Beirut, Nov. 8, 1950). p. 2, puts it at 61%.
- v. Sayigh, op.cit., p. 12, estimates that a little more than half are rural in the sense that they live in rural areas.
- vi. U.S.A.A., Office of Foreign Agricultural Relations, Report of the US/Leb. Agricultural Mission, IAC series, No. 7, puts it at around 70%.
- vii. USOM, Lebanon, 1955, (Beirut: June 1955), p. 6, puts it at 50% directly engaged in agriculture.
- viii. Farid Moukheiber, "L'Agriculture Conditionne la Vie de la Moitié de la Population", Le Soir of 30 August 1951, puts it at 50%. "La moitié de la population cherche à vivre de l'agriculture, le 1/3 en vit entièrement mais en vit mal, tandis que le 1/5 en tire un revenu d'appoint".
- ix. UN Conciliation Commission for Palestine, Final Report of the UN Economic Survey Mission for the Middle East, (Lake Success: 1949) Part II p. 27, estimates it at about 2/3 of the population as a whole.

upon agriculture.¹

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1. Estimate made by the Central Office of Statistics gives rural population as 60% of total population in Lebanon, 47% of whom are directly engaged in agriculture. Conference on Agricultural Credit, Report on Agricultural Credit in Lebanon; (Beirut: October 1953), p. 2, footnote 3. The figure of 60% checks very favourably with an arbitrary estimate based upon population figures by districts published in the Bulletin Statistique Trimestriel, op.cit., Vol. II, No. 4.

CHAPTER II
NATIONAL INCOME ECONOMIC GROWTH
& INCOME DISTRIBUTION

The traditional purpose of national income research is to provide information on the outcome of economic activity through comprehensive measures of the size, composition, and use of national output. With the growing realization that national income data can furnish a statistical picture of the economic structure and process, national income statistics have recently been used also to an increasing extent to facilitate an understanding of the factors which determine the outcome of economic activity. Much more fully and systematically than in the past, national income statistics have thus been designed with the dual objective of measuring the national output and placing it against the background of the transactions which underlie its production and distribution.¹

Sources of National Income Estimates

There are no official national income statistics for Lebanon. Past efforts have been based on a very thin statistical material and some guess work; some total

1. US Department of Commerce, National Income, (Washington: US Government Printing Office, 1951), p. 19.

estimates have appeared in print without indicating the bases upon which they had been built.¹ Recently, noteworthy efforts have been made to fill this gap. A pioneering study, initially sponsored by UNRWA, has by now approached completion by Dr. A.Y. Badre and his associates at the Economic Research Institute of the American University of Beirut. Although at no one stage has the study been undertaken by a government agency, yet the estimates appear to have been conferred some sort of de facto official recognition and have come to be accepted as such.

Estimates have been published in seven monographs² covering (a) the agricultural, (b) construction, (c) industrial, (d) services, (e) government, (f) transportation and communication, and (g) real estate sectors; but no monographs have yet appeared on the trade, finance, and the rest of the world sectors. However, information on all sectors has been published in UN Documents;³ and

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1. UN Conciliation Commission for Palestine, op.cit., Vol. I p. 34, gives a table on estimated per capita income in the region and places that in Lebanon at \$125; the table however is undocumented as to source.
 2. A.Y. Badre, The National Income of Lebanon, (Beirut: 1948-1955), Monographs 1-7.
 3. i. UN; Statistics on National Income and Expenditure UN Statistical papers series "H" No. 9, (New York: 1951).

although in the original monographs the estimates cover the period 1948-1954,¹ the UN documents bring them up to 1954.

It seems that the study can be safely relied upon to bring out some of the salient points that are peculiar to the Lebanese economy. It may be useful therefore first to define the coverage of each sector and the method of approach used, and then to highlight, on the one hand, certain important unavoidable drawbacks and deficiencies in the computation of income by individual sectors, and on the other, the points of interest that have been discovered (thanks to the sectorial study) in the respective sectors.

"For purposes of this study, national income was defined as the net product accruing to residents in Lebanon... The statistical approach adopted aimed, as far as possible, at determining the net production value at factor cost. It was realized, however, that in some

ii. UN; Economic and Social Council, Implementation of Full Employment and Balance of Payments Policies, document E/2726/Add.5, (New York: June 1951).

iii. UN, Monthly Bulletin of Statistics, (New York: August 1956).

1. Except for the agriculture sector which covers 1948-49.

sectors it was not possible to follow the product approach consistently. Particularly for services including financial, recreational and transportation services, it was found more practical to follow the distributive shares approach".¹

The Agricultural Sector²

The monograph concerned with the agricultural sector covers the period 1948-49, and attempts an assessment of national income arising in it. It defines this income as the aggregation of the net added value of agricultural crops, forestry, silk, animal products and fisheries. Income is given as net and at market prices.

In the course of the study, data on agricultural produce and on agricultural prices have either been found inadequate or completely lacking. A good deal of the basic data had to be supplemented by private interviews of large landowners. The deficiencies inherent in such a method are obvious.³

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1. A.Y. Badre, "The National Income of Lebanon", Middle East Economic Papers, (Beirut: Dar-el-Kitab, 1957), p. 2.
 2. A.Y. Badre and A.G. Altounian, Income Arising in the Agricultural Sector, (Beirut: April 1953), Monograph No. 1.
 3. Ibid., pp. 2-3 and 6.

The main contribution of the study, in addition to its determining the relative importance of the agricultural sector is in pointing out the relative importance of each kind of product, thus perhaps indicating the probable line of future agricultural development in the country.¹

The agricultural sector ranked second in 1950 with LL 206 million, or 19.8 per cent of total income arising in the country. Fruit products and agricultural crops made the highest contribution (approximately 85%), while forestry, animal products and fishing accounted for the balance. Within the first category, the most important single item is fruits, with cereals, leguminous and industrial crops a distant second, third and fourth respectively.

The Construction Sector²

The monograph dealing with the construction sector covers the period 1948-50; the study is confined to private construction of residential and non-residential buildings. Public construction is included in the government sector.

1. Ibid., p. 8.

2. A.Y. Badre and A.G. Altounian, Income Arising in the Construction Sector, (Beirut: November 1951), Monograph No. 2.

Income is given as net and at factor cost.

On the assumption that unlicensed construction in rural areas accounts for a "very small volume in relation to the total, such volume has been entirely ignored in the study"¹. As available data was far from sufficient, it had to be supplemented by additional estimates for determining total area constructed and the gross and net value of such construction; here again therefore, the judgement of the working team carries its own weight in reaching a final estimate.² The cost items entering into the construction were based on the modal average of the estimates - which in turn is based on judgement - of twelve haphazardly chosen engineers.³ Expenditures on transportation does not appear as a separate item but is included in the engineer's estimates of the cost of materials⁴ and is thus not to be included in the total income arising in the transportation sector.

The main contribution of this study is that it offers a safe indication of the magnitude of private investment in building and contracting. In the absence

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1. Ibid., p. 2.
 2. Ibid., pp. 3-4.
 3. Ibid., pp. 4 and 9.
 4. Ibid., p. 9.

of an organized capital market in the Lebanese economy, the construction sector is likely to be more important as an indicator of the trend and magnitude of the aggregate private investment than in the case of more advanced economies. From the standpoint of aggregate investment the relevant figure to consider is that relating to gross expenditure on construction. Net investment in this sector can be arrived at by deducting from the gross figures the value of depreciation that is given in the Real Estate Sector.¹

Income-wise, the construction sector is the least important contributor to the overall income; however, this situation is reversed in as far as private physical investment is concerned. In 1950 this sector was responsible for around LL 42 million or slightly over 4 per cent of total income as against LL 74 million or 57 per cent of the total net private physical investment. Of the total income arising in this sector, Beirut alone contributed as much as 42 per cent, as against 34 per cent by the "Mountain" and 22 per cent in all the "Other cities" combined.

As can be expected in a practically non-mechanized sector, this sector is that in which wages absorb the

1. Ibid., pp. 11 and 12.

highest proportion of income - namely around 58% - in any one sector of the economy.

1

The Industrial Sector

Assessment of income arising in the industrial sector (including handicrafts), covers the period 1948-1950. Income is considered as net and is given at factor cost.

On the whole the study is fairly realistic and the results are quite adequate - although the coverage of the data upon which estimates were based was about 20 per cent short of complete coverage and said data did not represent more than two thirds of total output value.²

The monograph reveals some very interesting results, particularly with regard to employment, capital investments and output in the respective industries; it also corrects the previously generally held contention regarding the relative importance of the agricultural sector vis-à-vis the industrial one. The study also gives enough data on capital investments and depreciation to indicate the level of net investment in this sector.

1. A.Y. Badre, Income Arising in the Industrial Sector, (Beirut: May 1953), Monograph No. 3.

2. Ibid., pp. 2-3.

The study reveals that as far as the sectorial set-up is concerned, industry ranked third in importance in 1950 with 13.3 per cent (11.6 percent in mechanized industries and 1.7 per cent in handicrafts) of total income arising in it. It comprised (excluding handicrafts) 1,285 industrial establishments, capitalized at LL 147.4 million and giving employment to 22,000 persons or slightly over 6% of the total active population. According to recent estimates - covering 1951-54 inclusive - income at current prices from this sector increased slightly (LL 2 million per year), however, it decreased in importance as it was responsible for only 12% of total income in 1954.

1

The Services Sector

The study covers the period 1948-1950 and assesses income arising from professional and other services. The definition of "services" conforms to that of the International Standard Classification of the United Nations' Statistical Office² except for: (a) government services

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1. A.Y. Badre, Income Arising in the Services Sector, (Beirut: July 1953), Monograph No. 4.
 2. Statistical Office of the United Nations, International Standard Industrial Classification of all Economic Activities, Statistical papers, series M, No. 4 (Lake Success: 1949), pp. 28-31.

which are assessed in a separate monograph;¹ (b) the services of engineers and architects which are included in the construction sector;² and, (c) domestic services which are totally excluded from the national income figures. Income is given as net and at factor cost.

The study is of particular importance in defining the lines along which development in this sector should be followed and in throwing some definite light on social conditions in the country through the figures on cultural and medical services.³

Some 17,000 persons earn a living in this sector and about 10% of the national income originates from it. In 1950 it ranked fourth in importance with LL 100.5 million. Of the total income in the services sector, 38 per cent went to wages, 14 per cent were absorbed by rent and the remaining 48 per cent were taken up by profits.

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1. A.Y. Badre, Income Arising in the Government Sector, (Beirut: November 1953) Monograph No. 5, 30 pages.
 2. Badre, Monograph No. 2, op.cit.
 3. Badre, Monograph No. 4, op.cit., p. 27.

The study highlights the two most important services, namely schools and hospitals. Together they generated 53 per cent of total income at factor cost and accounted for 71 per cent of wages paid, 53 per cent of rent, 38 per cent of profits and employed 63 per cent of the persons in this sector.

The average Lebanese spent in 1950 about 7 per cent - a ratio as high as that in the US, the Netherlands and Denmark - of his income on educational, recreational and medical services. The country then boasted 1,045 schools, 373 hotels, 622 restaurants and cafés, 64 cinemas and 23 night clubs, 65 hospitals, 1435 doctors and dentists and 274 midwives, 581 lawyers, and 98 trade associations.

1

The Government Sector

The monograph covers the period 1948-1950. The sector is so defined as to include all services rendered both to final consumers and to business establishments by all government and municipal agencies; it is therefore treated as an intermediary agent dispensing with part of the national income on behalf of consumers. Income is assessed by aggregating the different types of national expenditures; it is given as net and at factor cost.

1. A.Y. Badre, National Income Arising in the Government Sector, (Beirut: November 1953), Monograph No. 5.

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1. A.Y. Badre, National Income Arising in the Government Sector, (Beirut: November 1953), Monograph No. 5.

All major obstacles in the course of the study seem to have been adequately overcome and the results are quite plausible.

By giving reliable data on the number and income earned in this sector by civil servants, the study fills an important gap in showing the way for administrative reforms;¹ in addition, a major contribution of the study is that it affords understanding of the economy through the figures it furnishes on the level of public investment by the three public agencies adding to the government sector.²

In 1950 total expenditures by the central government, municipalities and autonomous administrations or departments added up to LL 126.4 million. Income originating in the government sector stood at LL 72 million in 1950 - virtually all in salaries and other employees emoluments - thereby attributing to itself 7 per cent of total income and assigning to it the sixth place among the sectors.

In the same period 82.3 per cent of the income originated in the central government as against 11.5 per cent in the municipalities and 6.2 per cent in the autonomous administrations and departments.

1. Ibid., pp. 12-14.

2. Ibid., p. 15.

Of the 9,931 civil servants in the central government in 1950, 6,015 persons or 60 per cent were employed in the Ministries of Interior and Education. This is quite understandable as the former includes the security forces (gendarmerie and police) and the latter includes public school teachers.

1

Transportation and Communications Sector

The period covered extends from 1948 to 1950. The study assesses income arising from transportation services of persons or materials rendered directly to the consumers. Income from the transportation of materials has been excluded from this sector and added to the sectors using these materials. Income is given gross and at factor cost.

Published data on this sector was found on the whole adequate; when found missing or short of the necessary information it was supplemented with questionnaires. The results appear fairly adequate.

Total income arising in the transportation and communications sector amounted to LL 44 million in 1950 or slightly over 4 per cent of total income. The sector stands in seventh place. Out of the total income arising in this sector, 47 per cent represent wages, 2 per cent rent, and 57 per cent profit and interest.

1. A.Y. Badre, Income Arising in the Transportation and Communications Sector, (Beirut, February 1954) Monograph No. 6.

In 1950, this sector engaged some 20,000 persons, the bulk of whom (8700 persons) were in activities relating to motor transport.

¹
Real Estate Sector

The monograph covers the period 1948-50. It assesses income arising in the real estate sector; income is defined as the sum total of net rents received by the owners of residential buildings including imputed rent for owner occupied dwellings. The product approach has been followed all through and the result is given as net and at factor cost.

The results are of particular importance in giving data on depreciation in this sector. This data when taken in conjunction with gross investment in the construction sector gives an idea on the trend and magnitude of net investment in construction; the latter usually accounting in underdeveloped areas for more than 50 per cent of total private investment.²

The income from this sector totalled LL 96 million in 1950 or 9 per cent of national income and was predominantly

1. A.Y. Badre; Income Arising in the Real Estate Sector, (Beirut: July 1954), Monograph No. 7.

2. Badre, Monograph No. 2, op.cit., pp.10-12.

in rent, since labour requirements in earning this income are negligible. A substantial portion of this income arose in Beirut (35%); municipal and small villages accounted for 41 per cent, other cities for 15 per cent, and summer resorts for 9 per cent.

1

Finance and Insurance

Income arising in this sector is defined as net and derives from all transactions of credit, foreign exchange and insurance institutions.² Income was assessed from the standpoint of its appropriation by the different factors of production.

In 1950, total income at factor cost arising in this sector was estimated at LL 47.4 million or slightly less than 5 per cent of total income. Banking contributed

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1. Income arising in the Finance and Insurance Sector and in the Trade Sector has been assessed, but has not been published to date in separate monographs. Due to the paramount importance of the trade sector we shall defer its extensive analysis to a later chapter. Here we rely solely on Badre's lectures, "The National Income of Lebanon", op. cit., pp. 5-7, and 20-23 and "Le Revenu National au Liban", in L'Economie Libanaise et le Progrès Social, (Beirut: 1955), pp. 23-24.
 2. Establishments included in this sector cover groups 62 and 63 of the UN International Standard Industrial Classification of all Economic Activities, op. cit.

almost half (LL 23.0 million), exchange deals and similar operations less than half (LL 21.5 million) and the balance (LL 2.9 million) was contributed by insurance transactions.

¹
Trade Sector

The trade sector occupies the first place among the sectors. Trade transactions have been grouped into two broad categories, namely: (a) internal trade, including marketing of domestic agricultural production and domestic industrial production; and, (b) external trade, covering imports, exports, transit and entrepot trades.

The income originating from the trade sector was estimated at LL 300 million or nearly 30% of total income. Recent estimates place it at LL 350 million in 1954.² Such estimates are, however, downwardly biased in as far as the triangular transactions are concerned; the assessment of such income was found impractical and had to be left out of the present study.

The distribution of the income arising in this sector by factor was as follows: wages 10%, rent 5%, and profit and interest 85%. The disproportionately large

1. Vide footnote 1 Page 52.

2. UN Sources, op.cit.

share of profits and interest is actually smaller than it looks, since part of what has been considered profits operators and of operators' families who work in the shop should in fact be counted as wages accruable to them. However, this wages share is, very probably, not such as to invalidate the argument and remains very small as compared with profits or with wages in industry and construction.

1

Rest of the World Sector

Income arising in this sector represents net earnings of residents from the ownership of factors of production located outside of Lebanon less total earnings of non-residents arising from the ownership of factors of production located in Lebanon. The term "resident" includes both legal and real persons, who are permanently living in Lebanon.

The net adjustment to income from foreign operations was estimated at LL 3.6 million in 1950; this was a composite of + LL 2.5 million from missions, - LL 1.8 from business, and + LL 2.9 million from stocks, shares and real estate.

1951-1954 Income Data

As has already been mentioned, national income

1. Information based on Badre's article "The National Income of Lebanon", 6p.cit., pp. 11-12, and 30-31.

data are available up to 1954. Although it is intended to make extensive use of this data, it would seem wise to realize its shortcomings. Without passing judgement on the results, it may well be to note that the data is but an interpolation of the figures for 1948-50; this period is too short to ensure appropriate and relatively conclusive results.

Growth of the Economy

A host of political and social considerations which through their combined impact on society and government have worked in conjunction to hamper progress and delay development have already been pointed out; other salutary factors have also been mentioned such as the freer contact with the West, the relative autonomy under the disruptive Ottoman rule, the mercantile character, etc., which through their allied social and economic impacts have given Lebanon a distinct lead over its neighbours. The economic level, in fact, has enabled Lebanon, out of its own effort, to earn an income higher¹ per person than anywhere else in either Asia or Africa,

1. i. Sayigh, op.cit., p. 13; and, Badre, "Le Revenu National Au Liban" op. cit., p. 28.

ii. Cf. Table 17.

with the exception of Israel.¹

The purpose of this section is to review in broad outline the growth that has taken place in Lebanon in the period 1948-1954, with a view to appraising the extent to which the experience over the said period might be indicative of future growth in the individual sectors and the economy as a whole. The choice of the period is by no means whimsical; it is the only period for which a series of aggregate income data is available and, besides, roughly speaking, it was a period of normal expansion rather than one of restoration. The principal conclusion is that even after allowance is made for the inconclusiveness of available data and for the extent to which actual growth during this period has been influenced by special circumstances, such as the economic readjustments after the economic break with Syria in March 1950 and the Korean boom - there remains an overall impression of highly satisfactory economic performance. Economic

1. Perhaps the gap between Israeli and Lebanese levels is significant prima facie only. The gap seems to be an artificial one. Considering the volume of foreign aid, reparations and foreign investments flowing into Israel for sentimental, racial and political motives rather than for economic ones, it would seem understandable that Israel has been able to raise its income to levels that it would have been impossible to attain "out of its own effort" U.S. private and public aid alone amounted

expansion has been vigorous, and the basis for continued growth into the foreseeable future appears to have been laid.

As can be seen from Table 8, the economy has continued to expand at a strikingly noticeable rate. Net National Product at current prices shows an increase from LL 919 million in 1948 to LL 1,167 million in 1954, or an increase of 27 per cent. In real terms, however, the increase has been much more impressive since both the wholesale and retail price indices fell by 28 per cent and 16 per cent respectively. By deflating the aggregate figures by the respective indices and adopting 1948 as the base year, real income shows an absolute increase in 1954 over 1948 of 76 per cent and 51 per cent respectively, the annual compound rate of growth being¹ as high as 9.9 per cent and 7.13 per cent respectively.

to \$1.211 billion in the period 1948-1955 (Israel Economic Forum, November 1955 p. 43) an amount which is several fold the aid to all the Arab countries combined.

1. In this context, the cost of living index is probably the more appropriate index to adopt for calculation; the reason for this lay in the nature and relevance of the cost of living index which is based on 75 family budget investigations carried out in 1950.

TABLE 8

NET NATIONAL PRODUCT & RATE OF GROWTH 1948-1954
(All Million)

SECTOR (1)	1948	1949	1950	1951	1952	1953	1954
1. Trade	261	278	300	337	333	344	350
2. Agriculture	169	159	206	211	216	221	226
3. Industry	134	136	137	135	137	139	141
4. Services	91	93	101	103	106	109	113
5. Real Estate	91	93	96	97	98	101	104
6. Government	63	65	72	64	64	71	73
7. Transportation	40	41	44	46	50	62	63
8. Finance and Insurance	35	35	40	43	46	50	56
9. Construction	35	32	42	35	40	40	41
10. TOTAL	919	932	1,038	1,071	1,090	1,137	1,167
a. Wholesale Price Index (2)	100	82	76	96	87	78	72
b. Retail Price Index (3)	100	94	87	94	94	88	84
10/a. Real Net National Product	919	1,136	1,365	1,115	1,252	1,457	1,620
10/b. Real Net National Product	919	991	1,193	1,139	1,159	1,292	1,389
c. Population (4)	1,230	1,247	1,268	1,304	1,324	1,346	1,369
10/a/c. Real per Capita Income	747	911	1,076	855	946	1,082	1,183
10/b/c. Real per Capita Income	747	795	941	873	875	960	1,015
10/a. Percentage Rate of Growth				9.91			
10/b. Percentage Rate of Growth				7.13			
10/a/c. Percentage Rate of Growth per Capita				7.95			
10/b/c. Percentage Rate of Growth per Capita				5.24			

Source: (1) 1948-50: Badre, Monographs Nos. 1-7, op.cit.; and "Le Revenu National au Liban", op.cit.
1951-54: UN, Statistics of National Income & Expenditure, Statistical Papers, Series H, No. 9 (N.Y.: May 1956).

Note: Figures confirmed privately to the author by Dr. A.Y. Badre.
(2) Lebanese Ministry of National Economy, Bulletin Mensuel.

(3) Ibid.

(4) Table 3, *Supra*. Note: Rates of growth determined by the compound interest formula, namely: $A_1 = A(1+r)^n$.

Even after accounting for the unusually high rate of increase in population of 21 per thousand the results are still very striking. The increase in real per capita income between 1948 and 1954 being of an order of magnitude of 58 per cent and 36 per cent respectively and fits into an annual compound rate of growth of 7.95 per cent and 5.24 per cent respectively.

Table 9 gives the index of absolute and per capita real growth in the period 1948-1954.

In an effort to check the conclusiveness of these findings, it would have normally been appropriate to make use of other indicators of growth, such as manufacturing and food output. "In the world as a whole, manufacturing grows substantially quicker than agriculture; it is also a general phenomenon that it grows a little quicker than all services taken together. (Both generalities do not appear true of Lebanon), The result is that the growth in gross national product for individual countries is in general between two thirds and four fifths¹ of the growth in manufacturing industries". However, in the case of Lebanon such a task seems both inadequate and impossible for two main reasons, namely, (a) the unavailability of a reliable comparative series of indices

1. Except where bracketed, the quotation is from an address made by Leonard B. Rist, Chief of I.B.R.D. economic staff, on World Economic Growth - A Forward Outlook, (Washington D.C.: February 15, 1956).

TABLE 9

INDEX OF REAL GROWTH IN LEBANON

1948 = 100

	1948	1949	1950	1951	1952	1953	1954
1. Real Net National Product (Deflated by wholesale price index).	100	124	148	121	136	158	176
2. Real Net National Product (Deflated by cost of living index).	100	108	130	124	126	140	151
3. Population	100	101	103	106	108	109	111
4. Real Per Capita Income (1/3).	100	122	144	114	127	145	158
5. Real Per Capita Income (2/3).	100	106	126	117	117	128	136

Source: Table 8, Supra.

for both food and manufacturing; and, (b) even if available, they could not be used as Lebanon is relatively unique in as far as the ratio of goods production to that of services is concerned.¹

An apposite indicator is that of growth in electricity production. This is because power is a greater determining factor in the development of the economy as a whole than would be imagined a priori. It has been proved that major variation cannot take place in the national product, without total power consumption, undergoing substantially proportional variations.² The correlation between the two variables is true of all countries irrespective of their degree of development. This is evident from a simple examination of the ratios of electricity growth to income growth in Table 10, where data for twenty eight countries covering relatively long periods of time are presented.

In the twenty eight countries considered in Table 10, 75 per cent of the values lie between 1.5 and 2.9 with the arithmetic average at 2.3 and the median at 2.1,

1. Cf. Table 15, Infra.

2. For a detailed analysis of the concomitant variations in power consumption and the national product, vide, E.C.E., Study on Local Consumption Trends in France, document COAL/ETP/56/ADD.3, (New York: August 1951).

TABLE 10

ANNUAL AVERAGE RATES OF GROWTH OF INCOME & ELECTRICITY
PRODUCTION IN 28 COUNTRIES

Country	Year	Rates of Growth		Ratio of Electricity Growth to Income Growth
		Electricity Production(a)	Real Income(b)	
Canada	1938-53	6.0	5.7	1.0
Mexico	1939-53	6.5	5.5	1.2
Puerto Rico	1939-49	13.0	7.0	1.9
U.S.A.	1937-53	8.0	4.4	1.8
Argentina	1939-52	5.0	2.6	1.9
Brazil	1939-53	9.2	4.6	2.0
Chile	1939-52	5.3	2.5	2.1
Columbia	1939-52	11.5	5.3	2.2
Venezuela	1938-51	14.5	7.4	2.4
Austria	1937-54	7.5	3.9 (1)	1.9
Belgium	1938-53	4.3	1.9	2.3
Denmark	1938-54	6.7	2.0	3.4
Finland	1938-53	3.8	2.0	1.9
France	1937-53	4.7	1.3	3.6
Greece	1938-54	9.0	3.8 (1)	2.4
Ireland	1938-53	8.8	4.3 (1)	2.1
Italy	1938-53	5.0	1.8	2.8
Luxembourg	1937-54	3.4	0.8 (1)	4.3
Holland	1939-54	6.5	2.3	2.8
Norway	1938-54	5.1	4.0 (1)	1.3
Sweden	1939-54	6.5	2.5	2.6
Switzerland	1938-53	4.4	2.5	1.8
U.K.	1938-53	6.6	1.8 (1)	3.7
Yugoslavia	1947-54	13.1	8.2 (1)	1.6
India	1948-53	7.8	2.8	2.8
Japan	1938-53	3.6	1.3	2.8
Turkey	1938-53	9.3	3.7	2.5
New Zealand	1938-53	7.2	4.4 (1)	1.6

(1) Index of Industrial Production.

Source:(a): (i) U.N., Statistical Yearbook 1955, op.cit.
(ii) World Power Conference, Statistical Yearbooks, 1951-1954.

(b): (i) I.B.R.D., Economic Staff, Statistical Tables on Economic Growth, March 1956.
(ii) U.N., E.C.L.A., Survey of Latin America.
(iii) I.B.R.D., Brazil-Economic Study and Country Bulletin.
(iv) I.B.R.D., Mexico Report, W.H. 29.
(v) U.N. Statistics of National Income & Expenditure, Series "H", op.cit.

The coefficient of correlation being as high as 0.85.

Having established the fact that a change in one variable namely, growth in income (X), entails a positive change in the other, namely, electricity production (Y), the magnitude of the change can be assessed by the regression equation, namely:

$$\begin{aligned} \text{I} \quad - \quad \Sigma Y &= Na + b\Sigma X \\ \text{II} \quad - \quad \Sigma XY &= a\Sigma X + b\Sigma X^2 \end{aligned}$$

and substituting the available values from table 10, namely:

$$\begin{aligned} 1. \quad \Sigma Y &= 202.3 \\ 2. \quad \Sigma X &= 100.3 \\ 3. \quad \Sigma XY &= 855.7 \\ 4. \quad \Sigma X^2 &= 460.3 \\ 5. \quad N &= 28.0 \end{aligned}$$

and solving for (a) and (b), the results are: (a) = 2.58 and (b) = 1.30.

Therefore the linear correlation to be applied to test the findings in Lebanon is:

Rate of Electricity Growth = 2.58 + 1.30 Rate of Real Income Growth. Electricity production in Lebanon has grown at a rate of 12.9% per annum in the period 1948-54. Solving for the rate of income growth by the above equation, a rate of real income growth appears to be equal to 7.93 per

cent. However, I.B.R.D. experts have estimated the growth in power production in Lebanon at 12.0% per annum; in such an event then, the rate of real growth in income in Lebanon would stand at 7.25 per cent per annum, a rate approximately equal to the one reached above, namely, 7.13 per cent from available income data after deflating it by the cost of living index (cf. Table 8).

Supply and Use of Resources

What, it may be asked are the factors that have been responsible for such an unusually high sustained rate of growth?

To answer this question properly, Table 11 on the "Supply and Use of Resources" has been prepared. It does not pretend to be anything more than a rough approximation of orders of magnitude; however, it is interesting in as far as it seems to bring out a trend.

Supply of Resources

On the "Supply Side" (cf., Table 11), the increase in the total disposable income is considered to be a composite of the increase in the net national product, on the one hand, and the net income from abroad on the other. In the period under review, total disposable income thus increased by 18.4 per cent, but, whereas the net domestic product was only 9 per cent higher than the 1948 level, the parallel increase in income from abroad was of the

order of 227 per cent. In 1954, income from abroad was responsible for 15 per cent of the total disposable income as against 8 per cent in 1951; in other words of the total increase in disposable income of LL 214 million, income from abroad alone accounted for LL 118 million or 55 per cent of the total.

From the ^{above} ~~following~~ the first conclusive evidence seems to be that part of the growth has been conditioned by certain factors from outside the economy. These factors although beyond the country's control have proved over the years to be a constant and relatively reliable source of foreign exchange and revenue; they include: (a) emigrants' remittances due to the existence of a large Lebanese community overseas; (b) charitable and cultural donations to missionary institutions that have been drawn to Lebanon and willfully accepted by it for other than economic considerations; and, (c) capital movements that are attracted by the friendly, safe and tolerant commercial, financial and political climates in the country. It is true that at least part of the last item can be labelled as "hot money" and in many instances is simply "in transit" through Lebanon; however, this tendency seems to be losing strength year after year, and a good deal of the imported capital is being invested in the country mainly in the form of buildings or bank deposits; the latter contributes to financing foreign ^{trade} and other foreign exchange transactions.

TABLE 11

SUPPLY AND USE OF RESOURCES - 1951-1954

(LL Millions)

	1951	1952	1953	1954
<u>S U P P L Y</u>				
Total Disposable Income	<u>1,164</u>	<u>1,226</u>	<u>1,295</u>	<u>1,378</u>
A. Net National Product, (1) total	<u>1,071</u>	<u>1,090</u>	<u>1,137</u>	<u>1,167</u>
B. Net Income from Abroad, (2) total	93	136	158	211
1. Investment Income	(4)	(7)	(18)	(33)
2. Emigrants' Remittances	(54)	(69)	(76)	(82)
3. Donations	(20)	(16)	(15)	(33)
4. Net Capital Movements (3)	(15)	(44)	(49)	(63)
<u>U S E</u>				
Total Consumption & Investment Expenditures	<u>1,164</u>	<u>1,226</u>	<u>1,295</u>	<u>1,378</u>
A. Current Consumption Expenditures, total	<u>1,027</u>	<u>1,039</u>	<u>1,048</u>	<u>1,155</u>
1. Consumers' Exp. (4)	(940)	(921)	(939)	(1,046)
2. Public Current Exp. (3)	(87)	(118)	(109)	(109)
B. Net Investment, total	137	187	247	223
1. Private, total	100	151	186	127
i. Net Private Physical Investment total, (5)	113	128	132	140
(a). Building and Contracting	(56)	(69)	(69)	(71)
(b) Industry	(15)	(15)	(15)	(15)
(c) Agriculture	(14)	(15)	(17)	(20)
(d) Services, Finance and Trade	(14)	(14)	(15)	(16)
(e) Transportation	(14)	(15)	(16)	(18)
ii. Private Gold and Foreign Exchange (6)	-13	23	53	-13
2. Public, total	37	36	61	96
i. Public Physical Inv., total (5)	(18)	(22)	(23)	(25)
ii. Public Gold and Foreign Exchange Inv. total (7)	(19)	(14)	(38)	(71)
<u>S A V I N G S</u>				
Total Net Investment (+) or (-) B/P Surplus of Deficit on Current Account (8)	<u>137</u>	<u>187</u>	<u>247</u>	<u>223</u>
Net Savings	<u>71</u>	<u>89</u>	<u>158</u>	<u>99</u>
Rate Of Savings	<u>6.1%</u>	<u>7.2%</u>	<u>12.2%</u>	<u>7.2%</u>

Source : (Table 11)

- (1) : Table 8, Supra.
- (2) : 1951: E. Fei & P.J.Klat, et al, The Balance Of Payments Of Lebanon 1951-1952, (Beirut: Dar-el-Kitab, 1954).
1952-53: Ministry Of National Economy, Lebanon. Figures made available to the I.B.R.D. Mission to Lebanon in September, 1956, and based on P.J.Klat's private estimates.
- (3): Ministry of Finance, Closed Accounts 1951-1954, for Ordinary Budget figures; and, U.N.R.W.A., Government Budgets of Middle East Countries, (Beirut: April 1956), Q.B.E.D. No 13, for Special and Municipal Bugets.
- (4): Taken as a balancing item.
- (5): I.B.R.D., The Current Economic Position & Prospects Of Lebanon, (Washington: August 1956), Report No.A.S. 35-a, p.3.
Note: The figures had been supplied to the I.B.R.D. by Dr A.Y.Badre, who later confirmed them to the author.
- (6) i- Figures for gold computed from B/P figures (cf., footnote 2 above) by deducting from the net non-monetary gold movement the value at the current prices of 1.5 tons of gold estimated to be consumed annually for domestic pruposes. (Vide: Fei & Klat, op.cit.,pp.17-20).
ii- Figures on foreign exchange holdings have been computed from: International Monetary Fund, International Financial Statistics, (Washington, D.C.: June 1956), pp.144-145, by adding the change in dollars as reported by the U.S., and the change in French franss (which two currendies are believed to constitute over 95% of holdings) listed under official holdings; the French francs have been considered as private for they are known to belong to the Banque de Syrie et du Liban.
- (7) I.M.F., Ibid.
- (8) Vide footnote 2 above; as account has already been taken of the non-monetary gold movements and donations, a corresponding adjustment need ~~be~~ not be made in the computation of the surplus or deficit on current account.

The government - very possibly through the commanding influence within it of trade and financial circles - has to be credited with thriving to maintain a policy of economic liberalism; said liberalism has created the necessary climate for capital inflows. In this context several basic measures have been adopted, namely: (a) the extension of official recognition to a free currency market late in 1948,² and the withdrawal of the last restriction³ on foreign exchange dealings in the course of 1952; (b) the lifting of all restrictions on the movements of gold into or out of the country; (c) the government's policy relative to the note cover that has stepped up confidence in the country's currency, and also the policy of maintaining a relative stability of the Lebanese pound rate vis-à-vis the US dollar; (d) the recent "Bank Secrecy Act"⁴ constraining banking institutions not to divulge any information pertaining to holders of deposits and exempting such deposits from legal confiscation or freezing by way of lien. This last measure is meant to

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1. Such measures will again be brought up and analysed more fully in a later chapter on Balance of Payments and Foreign Trade.
 2. Decree Law No. 13532 of November 6, 1948.
 3. Whereby control stipulations pertaining to concessionary companies was abolished.
 4. Law of September 3, 1956; published in the Official Gazette No. 36 of September 5, 1956, pp. 799-800.

induce "in transit" capital to settle and be invested in the country; and, (e) the government's policy of keeping aloof and non-committal to either of the two Arab camps on the one hand or to either of the world blocks on the other; this has helped to assure "nervous capital" that Lebanon is "par excellence" a sheltered nook of refuge in a troubled area and in troubled times.

It is true that one can advance a strong contention against indefinitely hedging upon such insecure items of income; however, for this work's purpose, namely that of reviewing factors that have contributed to present day growth, such an argument can be immediately dismissed. As to the future however, it may well be at this point to caution against indefinite hedging.

Table 12 below gives the percentage contribution of the various items to the net income from abroad.

TABLE 12
PERCENTAGE BREAKDOWN OF NET INCOME FROM ABROAD
1951-1954

ITEM	1951	1952	1953	1954
1. Investment Income	4.3	5.2	11.4	15.6
2. Emigrants' Remittances	58.0	50.7	48.0	38.8
3. Donations	21.5	11.8	9.6	15.6
4. Net Capital Movements	16.2	32.3	31.0	30.0
TOTAL	100.0	100.0	100.0	100.0

Source: Table 10, Supra.

Use of Resources

When delving into a critical scanning of the channels through which resources are expended, the primary interest of the analyst is concentrated on the capital investment expenditures as differentiated from the current consumption expenditures.

It is not possible to estimate precisely what the effect on national income will be of any particular level of investment expenditures. Fairly precise estimates can be made for individual items of investment, but any attempt to estimate an investment income ratio for the economy as a whole, will lead into a field where both the conceptual problems and the shortage of relevant statistics defy precision. Nevertheless, various statisticians have made such an attempt.¹ Their conclusion can be summed up by saying that a one per cent per annum increase of national income seems to be associated with somewhere between three percent and five per cent net annual capital formation. This conclusion is in line with estimates of the stock of capital goods in various countries, which put the value of national wealth usually

1. For example: (i) E.H. Stern, "Capital Requirements in the Progressive Economies", Economica, (August 1945); (ii) Colin Clark, The Conditions of Economic Progress, (2nd ed. London: Macmillan & Co. 1951); (iii) Ch. W. Fellner "The Capital Output Ratio in Dynamic Economics", Money, Trade and Economic Growth, (New York: Macmillan & Co. 1951) pp. 105-134.

at between three and five times the value of annual national income.¹

To test the experience in Lebanon, Table 13 has been prepared to show the annual rate of increase in the net national product together with the corresponding rates of net capital formation.

It follows (cf. Table 13) that the rates of increase in the net national product fall within the "normal" rates conforming to the experienced rates of net capital formation in three out of six years, approaches and nearly touches the lower limit in two years, and is way above the upper limit in one year; however, the average falls within the range with a pronounced tendency towards the upper limit. From this it may be concluded that in the case of Lebanon a One per cent increase in income seems to be associated with around a Three And A Half percent net annual capital formation.²

The figures on capital formation used in the preceding discussion relate to physical investment in both the public and private sectors. It is hard to say what is the appropriate division of capital formation between these

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1. UN, Economic Bulletin For Asia and the Far East, (Bangkok: November, 1952) Vol. III, Nos. 1 and 2, p. 1.
 2. The above conclusion is more or less true of Lebanon's experience in the period 1948-1954, (Cf. Table 13).

TABLE 13

ANNUAL RATES OF INCREASE IN NET NATIONAL PRODUCT
AND ANNUAL RATES OF CAPITAL FORMATION, 1948-1954

Year	N.N.P. at Current Prices in L.L. Mil (a)	Rate of Increase in N.N.P. Per Cent	Net Capital Formation in (b) L.L. Mil	Rate of Net Capital Formation Per Cent	Expected Range of Increase in N.N.P. Per Cent
1948	919	...	122	13.3	...
1949	950	3.3	115	12.1	4.0 - 2.4
1950	1,034	8.8	160	15.5	5.2 - 3.1
1951	1,071	3.2	131	12.2	4.1 - 2.4
1952	1,090	2.0	150	13.7	4.6 - 2.7
1953	1,137	4.3	155	13.6	4.5 - 2.7
1954	1,167	2.6	165	14.1	4.7 - 2.8
Average		4.0		13.5	4.5 - 2.7

(1) Based on above mentioned conclusions that a 1% increase in national income seems to be associated with anywhere between 3% and 5% rates of capital formation; the range parameters are arrived at by dividing the rate of capital formation by 5 (for the minimum) and 3 (for the maximum) respectively and then multiplying the quotient by 1.

Source: Net National Product: Table 8, Supra.
Capital Formation: Table 11, Supra

two spheres. In 1954 gross capital formation in France was 1.9 per cent of national income in the public sector and 15.0 per cent in the private sector; similar figures for other countries were Australia 8.5 and 17.2; Austria 3.4 and 15.8;¹ Belgium 5.8 and 10.1;² Canada 6.0 and 16.2; Denmark 5.3 and 17.8; Finland 5.0 and 25.0; Japan 7.6 and 11.8; Norway 6.5 and 23.5;³ and the United Kingdom 7.5 and 6.0.⁴ In four under-developed economies for which comprehensive data is available corresponding figures were for the Belgian Congo 12.5 and 14.4;⁵ Burma 9.0 and 8.8;⁶ Ceylon 6.0 and 4.0; and Malaya 4.0 and 5.8. These figures classify investment in public enterprises in some cases in the public and others in the private sectors, so they are not strictly comparable. Nevertheless, the data permits two very interesting observations that will be used later as tools of analysis with respect to Lebanon.

-
1. 1952
 2. 1953
 3. 1951
 4. In 1938, (the only prewar year for which data is available) before the access of the Labour Party to power and the ensuing wave of nationalization measures, the rates were 3.6 for public and 8.2 for private.
 5. In the case of the Belgian Congo, the high rate of gross private capital formation is biased due to the volume of private investments of Belgian concerns.
 6. U.N. Department of Economic and Social Affairs, Statistics of National Income and Expenditure, ST/STAT/SER.H/9 (New York: May, 1956).

The data gives some idea on: (a) the difference in the level of overall investment between advanced and retarded economies; in most countries where rapid economic progress is occurring, net capital formation^{at} home is at least 10% of the national income, and in some it is substantially higher (foregoing statement is true of Lebanon); by contrast, in most under-developed countries net capital formation is not as high as 5% of the national income, even when foreign investment is included;¹ and (b) the importance of private investment expenditures in fairly advanced economies.

Lebanon seems to follow the pattern of investment of the fairly advanced economies. In 1954, net capital formation stood at the unusually high rate of 14.1 per cent (probably over 25% gross) of net national product; said rate was a composite of 2.1% in the public sector and 12.0% in the private sector. It can therefore be argued in this context that one of the reasons for the high rate of growth over the past decade has been the unusually high level of the overall physical investment and the fact that the predominant bulk of such investment arises in

1. U.N., Department of Economic Affairs, Measures for the Economic Development of Under-Developed Countries, E/1986, ST/ECA/10 (New York; May 1951), p. 35.

the private sector. This is nothing more than a corollary X
to: (a) the established fact that economic progress is
a function, among other things, of the rate of new
capital formation,¹ and (b) the general principle that
whereas public funds seeking investment outlets are
guided by the welfare motive and consequently are placed
in enterprises where the direct and tangible rate of
return is either nil or very slim, private investment is
guided by the rate of return. This is nowhere more true
than in the case of Lebanon where in addition to an
excessive rate of return - the marginal efficiency of
capital has to exceed the already high rate of interest
to induce a person to invest - the rate of capital turn-
over is frightfully quick. This argument probably partly
explains the previous conclusion, namely, that a 3.5 per
cent rate of net capital formation is usually conducive to
a 1 per cent increase in national income.

The Multiplier and Accelerator Effects

It may be worthwhile at this point to make a slight
digression. In capitalist economies rapid economic
development usually takes place against a background of

1. Ibid.

rising prices.¹ Said price movement is logically expected to be much more pronounced in a country like Lebanon where at the inception of a development cycle, existing unemployment means the existence of surplus labour without the other resources to go with it, whereas unemployment in the Keynesian sense, which occurs in a developed economy during a depression, means not merely unemployed labour but also appropriate surplus capacity in equipment and other complementary resources to go with it. Thus the so-called multiplier in the former generally works in purely monetary terms, resulting in rising prices rather than an increase in physical output which in the Keynesian sense occurs pari passu with the increase in money incomes.

Lebanon's experience in this context, over the past decade, has, however, been in the reverse direction as evidenced by the fall in both the cost of living and wholesale price indices. (cf. Table 8) At first glance this should seem controversial to the previous statement and paradoxical to theoretical expectations especially when taken in conjunction with the high rate of capital formation and the constant high level stream of income from abroad.

1. The classical case of this is the British Industrial Revolution (1750-1820) which took place on the background of the French Wars of rising prices and of inflationary profits.

The explanation to the foregoing anomaly lay in the fact that the effect of both the multiplier and the relation seem to be negligible in the case of Lebanon. This is because the magnitude of the multiplier is equal to the reciprocal of the summation of the leakages from the marginal increase in the flow of income, namely the marginal propensity to import and the marginal propensity to save. The marginal propensity to import is believed (as can be concluded from import data) to be very high; the marginal propensity to save is also high as evidenced by the rate of savings and the amount that goes annually to swell foreign exchange and gold balance (cf. Table 11); in addition it must be noted that except for one year, namely 1950, the ordinary budget had since 1945 shown a surplus. Thus, all the foregoing factors point out to a large amount of leakage of purchasing power into imports, savings and taxes, thereby reducing the internal multiplier to probably somewhere slightly over unity.

The above two statements, namely (a) a high leakage in the flow of income, and (b) the deficiency of reserve capacity, are complementary, because a high propensity to import may be interpreted to mean that the economy has no reserve output capacity so that an increase in money incomes would either have to be met by an increase in imports -

which is the actual experience of trade-liberal Lebanon - or by rising prices of the relatively inelastic supply of domestic output - as is the case in countries where local industry enjoys a high or prohibitive protectionist measures.

The "relation" (or "acceleration" or "induced" investment) is the amount of secondary rounds of investment which the entrepreneurs undertake to produce the extra output called for by the increase in incomes and effective demand. If, as has been concluded above, the increase in demand leaks out of the country due to a high propensity to import and/or the entrepreneurs cannot lay their hands on extra labour with appropriate complementary resources to go with it, then it can be argued that in the case of Lebanon a small multiplier would seem to imply a smaller "relation" or "induced" investment.

Thus in summary there have been two main factors that have been directly responsible for present day growth in Lebanon, (a) the constant rising level of income from abroad, and (b) the high level of net capital formation. Both factors have been encouraged by the liberal governmental policy that has (a) prepared the necessary climate for the first, and (b) encouraged the private element in the second.

Sectoral Setup

A logical argument that is invariably expected to come up at this point is the following: Assuming that the factors advanced in the previous section are conducive to growth, can they by themselves justify a level of growth of such magnitude especially when viewed against a background of paucity in "physical resources" ?

It is here believed that the answer to this "paradox of plenty in the midst of poverty" lay in the peculiar sectorial setup of the Lebanese economy. For this purpose Table 14 has been prepared, to bring out the relative importance of the individual sectors through their respective contribution to the net national product.

The breakdown demonstrates clearly that all sectors of the economy have shared in the postwar expansion by the mere fact that each one has more or less maintained its relative position.

It was shown in a previous section that occupation-wise, the country falls under the agricultural category as 60% of the population derive their income directly or otherwise from agriculture; however, as can be seen from Table 14, income arising from agriculture does not, on the one hand, stand out very distinctively by itself when compared to the other sectors and on the other, it does not account for a major part in the overall income, much as in

TABLE 14

PERCENTAGE CONTRIBUTION OF THE VARIOUS SECTORS
TO THE NET NATIONAL PRODUCT, 1948-1954

SECTOR	1948	1949	1950	1951	1952	1953	1954
1. Trade	28.4	29.8	28.9	31.5	30.5	30.2	30.0
2. Agriculture	18.3	17.0	19.8	19.7	19.8	19.5	19.3
3. Industry	14.6	14.6	13.2	12.6	12.6	12.2	12.1
4. Services	9.9	10.6	9.8	9.6	9.7	9.6	9.7
5. Real Estate	9.9	10.0	9.2	9.0	9.0	8.9	8.9
6. Government	6.9	7.0	7.0	6.0	5.9	6.2	6.3
7. Transportation	4.4	4.4	4.3	4.3	4.6	5.5	5.4
8. Finance	3.8	3.8	3.8	4.0	4.2	4.4	4.8
9. Construction	3.8	3.4	4.0	3.3	3.7	3.5	3.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Table 8, *Supra*.

industry biased economies.¹ However, too small a share arises in the industrial sector for the country to be classified as industrial. Nor is Lebanese agriculture as income producing as agriculture is in countries where agriculture is industrialized;² and it is by far less income producing than in predominantly agricultural countries.³

Table 15 brings out the most manifest and unique peculiarity of the Lebanese economy, a peculiarity that is not shared by any other country in the world - at least for which data is available⁴ with the exception of Israel, Puerto Rico (if the government sector is included in the services sector)⁵ and Mexico. Specifically, this

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1. Cf., Table 15, Type III.
 2. Ibid., Type II
 3. Ibid., Type I
 4. In this context, the author has checked the available data relative to the industrial origin of the net national product for sixty countries as furnished in the Statistical Yearbook, 1955, op.cit., Table 158.
 5. In the case of Israel and Puerto Rico, the high proportion of income arising from the production of services is due to the unusually high contribution of the government sector which in the case of Israel is inflated by defense expenditures and in the case of Puerto Rico, comprises the income of business enterprises owned and operated by the government.

is the exceptionally high proportion of income earned in the trade sector, namely 30 per cent; this is higher than anywhere else in the world with the exception of Mexico. In most other countries (cf., Table 15) this proportion ranges between 10 and 20 per cent. Generalized, this peculiarity is the preponderance of the production of services over the production of goods in the national product; for whereas it was found that in the sixty countries surveyed only eight countries - including Lebanon - showed this preponderance in various degrees of magnitude - with the major tendency towards the upper limit - the rest showed a ratio of over 1:1 with a number having a ratio as high as 2:1; in the case of Lebanon the pattern is reversed with a ratio of 0.5:1. (cf. Table 15)

This eminently outstanding proportion of income arising from the production of services - trade, transport, finance and insurance - is a pure reflection on the character of the economy and is directly associated with Lebanon's role as an intermediary, trading, finance and tourist center. This situation should not be regarded as peculiar, it has simply developed as a result of "carving out" Lebanon of the hinterland. This seems to give us the clue to our "paradox" namely that growth has been greatly stepped up by the ingenuity of the country's human resources rather than the physical ones, and by the fact that the

TABLE 15

PERCENTAGE DISTRIBUTION OF NATIONAL INCOME BY SECTORS
1954

Type of Economy	Production of Goods				Production of Services					Ratio		
	Agriculture	Industry & Mining	Construction	Total (a)	Transport & Com.	Trade	Real Estate	Govt. (including Defense)	Other Services	Total (b)	a/(b-Govt.)	Percent
I. Predominantly Agricultural												
Nigeria (6)	66.0	3.0	7.0	76.0	(4)	15.0	(2)	5.0	4.0	24.0	4.0:1	80:20
Pakistan (1)	59.4	7.7	(2)	67.1	2.8	10.3	5.6	5.4	8.8	32.9	2.8:1	74:26
Indonesia (6)	56.0	10.0	1.0	67.0	3.0	14.0	(2)	7.0	9.0	33.0	2.6:1	72:28
Honduras (6)	54.0	11.0	1.0	66.0	7.0	9.0	(2)	3.0	15.0	34.0	2.1:1	68:32
Korea	52.5	12.3	1.6	66.4	2.6	8.5	(2)	9.2	7.2	35.6	2.4:1	71:29
India (1)	51.0	17.0	(3)	68.0	-	16.0	(2)	5.0	11.0	32.0	2.4:1	71:29
Thailand (1)	45.0	13.4	6.0	64.4	4.7	14.5	(2)	9.2	7.2	35.6	2.4:1	71:29
Paraguay	43.9	17.4	(3)	61.3	1.0	17.6	6.2	3.9	10.0	38.7	1.8:1	64:36
Turkey	41.5	13.8	5.8	61.1	7.8	11.0	3.2	10.1	6.8	38.9	2.1:1	68:32
Colombia												
II. Industrialized Agricult.												
New Zealand	26.0	25.8	5.6	57.4	10.5	(2)	(2)	3.7	28.4	42.6	1.5:1	60:40
Finland	24.6	34.2	5.7	64.5	9.2	12.7	(2)	10.0	3.6	35.5	2.5:1	71:29
Italy	24.2	32.4	9.5	66.1	6.7	12.0	(2)	9.2	6.0	33.9	2.7:1	73:27
Israel (1)	12.3	21.0	5.9	39.2	9.6	11.4	(2)	21.1	18.7	60.8	1.0:1	50:50
Denmark	19.0	29.0	7.0	55.0	11.0	17.0	(2)	9.0	8.0	45.0	1.5:1	60:40
III. Industry-Biased												
W. Germany	10.9	48.8	6.8	66.5	7.7	9.5	1.5	9.0	5.8	33.5	2.7:	73:27
Austria	16.0	43.0	7.0	66.0	8.0	9.0	(2)	7.0	10.0	34.0	2.4:	71:29
Luxembourg (1)	10.0	40.0	7.0	57.0	8.0	11.0	(2)	13.0	11.0	43.0	1.9:	66:34
U.K.	4.9	41.4	6.1	52.4	9.8	12.5	3.5	6.3	15.5	47.6	1.3:	57:43
Holland	12.7	38.5	6.0	57.2	(4)	19.4	5.0	7.0	11.4	42.8	1.6:	62:38
Belgium	7.7	36.0	5.4	49.1	9.1	11.2	7.7	9.3	13.6	50.9	1.2:	55:45
Norway	14.2	33.2	9.1	56.5	12.6	13.2	2.0	4.1	11.6	43.5	1.4:	58:42
Union of S. Africa	15.0	36.0	(3)	51.0	8.7	13.1	2.6	9.7	14.9	49.0	1.3:	57:43
Canada	9.0	32.0	7.0	48.0	11.0	13.0	(2)	8.0	20.0	52.0	1.1:	52:48
U.S. (1)	5.6	32.0	5.3	42.9	8.5	17.4	(2)	11.8	19.4	57.6	0.9:	47:53
IV. Others (Mainly Service Biased)												
Egypt	31.5	8.3	2.3	42.1	6.6	15.0	6.7	12.8	16.8	57.9	0.9:1	47:53
Puerto Rico (1)	17.0	15.0	3.0	35.0	5.0	19.0	(2)	27.0	14.0	65.0	0.9:1	47:53
Mexico (5)	20.0	22.0	2.0	44.0	5.0	31.0	(2)	5.0	15.0	56.0	0.9:1	47:53
Lebanon	19.3	12.1	3.5	34.9	4.5	30.0	8.9	6.2	15.1	65.1	0.6:1	37:63

- (1) 1953.
 (2) Included under "other services"
 (3) Included under "Industry"
 (4) Included under "Trade"
 (5) 1950.
 (6) 1952

Source: Nigeria, Indonesia, Honduras, India, Denmark, Austria, Luxembourg, Canada, Mexico, Egypt and Puerto Rico: UN, Statistical Yearbook 1955 (N.Y., 1955), Table 158

All other countries: UN, Statistics of National Income and Expenditure, document ST/STAT/SER.H/9, (N.Y.: May 1956), Table 3.

country has, because of political considerations, been carved out of its hinterland.

Income Distribution

In the development of the discussion on national income, attention has been mainly centered on the measurement of national totals - on how much is produced by various sectors of the economy, how much is paid to and received from the rest of the world, and how much accrues to the entire resident population at current prices and in real terms. No consideration has so far been given to the question of how the total income is distributed among the various groups of the population.

Certain points should be made clear from the start. The dearth of information here is very striking since (a) no up-to-date information is available on the active population, (b) no reliable data relating to the economic status of the various socio-economic groups of the country's population is available, (c) Dr. Badre's income study has not given the breakdown of income accruing to the various factors of production - wages, profit and rent - in all the sectors surveyed, and (d) no information is available on the distribution of income from abroad to the various socio-economic groups.

The material presented in the following pages therefore brings together what limited information is available. The results are limited not only in scope but also, it must be emphasized, in the reliability of many of the estimates shown. These must be considered merely as approximate figures, roughly illustrative of the type of information needed in further research in this neglected area of national income statistics.

The above difficulties leave no other alternative but to attempt an analysis of the distribution of the net national product, exclusive of the effect of the income from abroad on the level of per capita incomes. The method of approach to this problem will be (a) an attempt at determining the present total active population and its distribution by major branches of industry; (b) the assessment of the per capita income for the country as a whole with comparative figures for a number of the underdeveloped countries and for several of the more industrialized nations; and (c) an attempt at assessing the per capita income of the active population by the major industries;

Active Population

Active population is assessed from available data on the population's age structure. In this context, the

O.C.P. figures for 1944 are the only available ones; the percentage distribution of population for that year must, therefore, be applied to the 1950 demographic estimates.¹ As pointed out earlier² there is no reason to believe that the average age of the population has increased in recent years.

In assessing the active population, one is impelled by the dearth of available information to rule out from the active population the following: (a) all females, namely 49 per cent of the total population, (b) all males under the age of 12 and over the age of 51, namely 45 per cent of the male population. This may be justified by the fact, that the number of employed females is probably offset by the number of active males over the age of 51 and below the age of 12, and males that are unemployed, of school age, in the service, prisons and lunatic asylums.

The estimate of the 1950 population stood at 1,267,000³ of whom 49% were females; males were therefore 646,000; from the latter figure must be deducted 45 per cent as being unproductive - i.e. 32.3% under 12 and 12.4% over 51 years of age - there is therefore left an active population of around 355,000 in 1950.

1. Table 5, Supra.

2. Supra.

3. Table 3, Supra.

TABLE 16

BREAKDOWN OF THE ACTIVE POPULATION BY
MAJOR BRANCHES OF INDUSTRY, IN 1 9 5 0

(in thousands)

<u>Industry</u>		<u>In Thousands</u>	<u>Per Cent</u>
<u>I - Production of Goods</u>			
1. Agriculture:			
Owner-Cultivators	115	(1)	
Hired-Hand	<u>70</u>	185	52
2. Industry			
Mechanized Ind.	33.3	(2)	
Handicrafts	<u>10.0</u>	33.3	9
3. Construction			
Engineers & Cont.	1	(3)	
Wage Earners	<u>9</u>	<u>10</u>	<u>3</u>
TOTAL I		<u>228.3</u>	<u>64</u>
<u>II - Production of Services</u>			
1. Trade, Finance & Ins.			
Independents or Emp.	30	(4)	
Employees	<u>35</u>	65	18
2. Services			
Establishments & Ind.	2.3	(5)	
Salaried	<u>16.7</u>	19	5
3. Transportation			
TOTAL II		<u>17</u>	<u>5</u>
		<u>101</u>	<u>28</u>
<u>III - Government</u>			
Salaried	10	(7)	
Wage-Earners	<u>15</u>	<u>25</u>	<u>8</u>
TOTAL III		<u>25</u>	<u>8</u>
TOTAL I, II, III		355	100
		===	===

Source: P.T.O.

Source to Table 16

- (1) Elie Gannage, "La Redistribution des Revenus au Liban", "L'Economie Libanaise et le Progrès Social", op.cit., p. 193.
- (2) Badre, op. cit., Monograph No. 3, for industrial Workers; UNRWA, Present Economic Structure of Lebanon, Appendix 2, sub-section 1 of General Assembly Report, (Beirut, 1954) p. 46, for handicrafts.
- (3) Table 19, Infra, ~~footnote 3.~~
- (4) Paul Klat, "Le Commerce et ses Incidences Sociales", in L'Economie Libanaise et le Progrès Social, op.cit., p. 97.
- (5) Badre, Monograph No. 4, Loc. cit.
- (6) Badre, Monograph No. 6, Loc. cit. *Vide also Table 18, Infra footnote 1*
- (7) ~~Badre, Monograph No. 4, Loc. cit.~~
- (D) Table 19, Infra.

Thus in 1950, 64 per cent of the active population was engaged in the production of goods and produced 37 per cent of the national income; corresponding figures for the production of services and the government sector being 28%-56% and 8%-7% respectively. This seems to be the first conclusive indication of the existing wide disparities in per capita incomes in Lebanon; the discussion of this phenomenon is however relegated to the coming section when the active population is broken down by income brackets.

Per Capita Income

In 1950, the year for which there is the most complete data, national income stood at LL 1,038,000 or equivalent to a per capita income of LL 820; at the then current dollar exchange rate, this was equivalent to \$ 235.

International comparisons of income are subject to serious reservations owing to the crudeness of the available estimates in domestic currency for many countries, to difference in concepts and institutional arrangements, and to the difficulties of converting the estimates into a common currency.¹ Table 17 below presents data relative

1. For a discussion of the problems of making international comparisons of income, vide U.N. Department of Economic Affairs, National and Per Capita Incomes, Seventy Countries, 1949, Statistical Papers, Series E. No. 1, (N.Y: 1949)

to 58 countries classified (a) by size of per capita income in 1949, and (b) by continental division. The data presented is reasonably adequate for broad comparisons of orders of magnitude of the per capita income levels of the various countries covered and for indicating the disparities between the under-developed and industrialized countries.

Table 17 bears out the previous statement that "the economic level, in fact enables out of its own effort, to earn an income higher per person than anywhere else in Asia or Africa with the exception of Israel".¹

Socio Economic Groups and Per Capita Levels

In 1950, the active population by social groups, was estimated as follows: 120,000 wage earners,² 70,000 salaried people,³ 115,000 landowners and 50,000 independents and employers.⁴ Thus if the economic orientation of the

-
1. In the case of South Africa (cf. Table 17) per capita income in 1949 stood at \$ 204 as against \$ 230 in the case of Lebanon.
 2. Made up of (in thousands): 70 agricultural labour, 20 industrial labour, 5 in handicrafts, 9 in construction and 15 in government enterprises.
 3. Made up of (in thousands): 35 in trade, banking and finance, 2 in industrial enterprises, 17 in services, 4 in transportation and 10 civil servants.
 4. Made up of (in thousands): 30 in trade, banking and finance, 5 in handicrafts, 6 in transportation and the rest in industries, contracting and construction.

Note: Footnotes^{1, 3, 4} above and footnote 1 p. 93, Cf. Table 19, Infra.

TABLE 17

COUNTRIES CLASSIFIED BY SIZE OF PER CAPITA INCOME
IN 1949 AND CONTINENTAL DIVISION

Income Per Capita in US Dollars	P o p u l a t i o n		A f r i c a	A m e r i c a North	A m e r i c a South	A s i a	Europe and U S S R	O c e a n i a
	Number (Million)	Per Cent						
Under \$ 100	509	34	Kenya N. Rhodesia	Dominican Republic	Ecuador Paraguay	Burma Ceylon India Iran Pakistan Philippines Thailand		
\$ 100-200	284	19	Egypt S. Rhodesia	Mexico	Brazil Chile Colombia Peru Surinam	Japan Syria Turkey	Bulgaria Greece Spain Yugoslavia	
\$ 200-300	83	6	Union of S. Africa	Cuba Puerto Rico		Lebanon	Austria Hungary Italy	
\$ 300-450	305	20			Argentina Uruguay	Israel	Czechoslovakia Finland Germany (Western) Ireland Poland USSR	
\$ 450-600	69	5			Venezuela		Belgium France Iceland Luxembourg Netherlands Norway	
\$ 600-900	89	6		Canada			Denmark Sweden Switzerland United Kingdom	Australia New Zealand
\$ 900 and over	149	10		U.S.A.				
T O T A L	1,488	100						

General Note: The countries are listed alphabetically in each group. The concept of income used to calculate the per capita data is national income produced within the territorial boundaries of the country, or net geographical product at factor cost.

Source: Reproduced from UN., National Income and its Distribution in Under-developed Countries, ST/STAT/SER.E/3 (N.Y., 9 Oct.1951), p.3.

country towards the trade and services sectors has helped the country's overall growth, it has on the other hand helped concentrate wealth in the hands of a few persons; as a matter of fact the net national product by distributive shares roughly stood as follows in 1950: 58 per cent profits and interest 30 per cent salaries and wages, and 12 per cent rent.¹ The resultant mal-distribution of income is better understood by a glance at table 18, classifying the active population by income brackets and showing the broad sectors in which they are engaged and whence they draw their income.

By dividing the active population into income groups, the above table sheds some light on the social structure of the economy. Three categories of income groups can thus be differentiated within the economy, (a) the low income group, (b) the middle class, and (c) the wealthy class.

Before an attempt is made at an analysis of the said social groups, it may be good to consider Table 19, relative to the Per Capita Incomes divided by industrial brackets, to which reference has already been made.

1. Roughly assessed from Table 19, Infra.

TABLE 18

DISTRIBUTION OF INCOME OF ACTIVE POPULATION, 1950

Income Brackets In LL	Active Population Engaged In										Total No (000)	Per Cent	Cumulative Percentage From Low Income Up	
	Production of goods		Production of services		Government		Production of goods		Production of services					Government
	No (000)	Per Cent	No (000)	Per Cent	No (000)	Per Cent	No (000)	Per Cent	No (000)	Per Cent	No (000)	Per Cent		
Under LL 1,000	70	30	..	..	..	..	..	..	..	..	70	20	20	20
1,000 - 1,999	120	53	35	37	15	60	..	..	..	..	170	49	69	69
2,000 - 2,999	36	16	17	18	..	..	..	..	..	..	53	15	84	84
3,000 - 3,999	..	..	4	4	..	..	..	..	..	..	4	1	85	85
4,000 - 4,999	..	..	6	7	..	..	..	..	..	..	6	2	87	87
5,000 and Over	2	1	32	34	10	40	..	..	..	..	44	13	100	100
Total	228	100	94 ⁽¹⁾	100	25	100	..	..	..	..	347 ⁽¹⁾	100		

(1) The figure does not include 7,000 persons engaged in the transportation sector but who do not render the service directly to the consumers.

Source: Table 19, Infra.

Low Income Group:

This includes all persons whose per capita income is below LL 2,000 per year; this group accounts for approximately 50% of the active population and is mainly composed of wage-earners. Within it there are two sub-categories, namely (a) those earning an income probably below subsistence¹ and these are all agricultural labourers, and (b) those earning an income anywhere between LL 1,000 and LL 2,000; the majority falling in the latter group are small landowners, employees in the commercial sector and hired-hands in handicrafts.

Thus 50 per cent of the dependent population is cared for by earners within this very low income bracket; it is therefore not hard to visualize in what direction should development programs be focussed in the future.

The Middle Income Group: This includes all persons whose income ranges between LL 2,000 and LL 5,000; they account for 15 per cent of the active population, the majority of whom, or 85 per cent earn an income of less than LL 3,000. This income group consists preponderantly of industrial wage-earners and salaried people in the services and transportation sectors.

1. Legislative decree No. 29/ET of May 12, 1943 sets the minimum wage at LL 75 per month or LL 900 per year.

The Wealthy Class: This class accounts for 13 per cent of the active population and receives over 40 per cent of the national income . This is the sector of the extremes for at the one end are the civil servants who "graze" the upper middle class limit and at the other are the prosperous bankers, businessmen, industrialists and owners of service establishments.

In summary the average labourer nets LL 1,200 a year, corresponding figures are LL 1,300-LL 1,500 for small landowners, LL 2,400 for salaried people and around LL 9,000 for merchants and the rest.¹

1. Cf. Table 19, Supra.

TABLE 19

PER CAPITA INCOME BY INDUSTRIAL BRACKETS 1950

Industry	Population (a)		Income (b)		Per Capita (c)	
	Total (1)	Active	Total	Active	of Total	of Active
<u>All Industries</u>	1,267	355	1,038	1,038	820	2,925
<u>I. Production of Goods</u>						
1. Agriculture	658	185	206	206	320	1,100
Owner-Cultivators		115		154		1,340
Hired Hand		70		52		750
2. Industry & Handicrafts	119	33	137	137	1,150	4,500
i. Mechanized	83	23	120	120	1,450	5,200
Establishments		1		66		51,000
Wage-earners		22		44		2,000
ii. Handicrafts	36	10	17	17	470	1,700
Owners		5		11		2,150
Wage-earners		5		52		1,100
3. Construction	36	10	42	42	1,170	4,200
Engineers & Contractors		1		17		17,000
Wage-earners		9		25		2,800
Total I	813	228	360	360	440	1,580
Per Cent of Total	64%	64%	35%	35%	54%	54%
<u>II. Production of Services</u>						
1. Trade, Finance & Insurance	230	65	340	340	1,480	5,230
Employers		30		277		9,250
Employees		35		58		1,650
2. Services	68	19	101	101	1,485	5,300
Establishment (self-emp.)		23		49		21,000
Salaried		16.7		38		2,300
3. Transportation	60	17	44	44	721	2,600
Self-employed		6.4		27		4,200
Hired		3.6		11		2,900
4. Real Estate			96	96		
Total II	358	101	581	581	1,300	4,800
Per Cent of Total	28%	28%	56%	56%	160%	160%
<u>III. Public Sector</u>						
Government	90	25	72	72	800	2,900
Salaried		10		52		5,200
Wage-earners		15		20		1,300
Total III	90	25	72	72	800	2,900
Per Cent of Total	8%	8%	7%	7%	98%	98%

(a) Table 16, Supra p. 115

(1) Total population figures are based on the assumption that to each producer there are 2.57 dependents.

(2) Assuming that on the average every handicraft shop is run by the owner and one helper; with a per capita income of LL 1,100 the average wage in the handicrafts would stand at LL 3.50 per diem, a figure that on the average is fairly realistic

(3) See footnote (1), Table 18, Supra p. 120(b) Badre, National Income Monographs and Lecture, Op. cit.

(c) Overall Per Capita Income in Section II, excludes income from the Real Estate Sector

CHAPTER III

LAND TENURE, AGRICULTURE AND THE FOOD SUPPLY

"Princes and Lords may flourish or may fade
A breath can make them as a breath has made
But a bold peasantry, their country's pride
When once destroyed can never be supplied."

GOLDSMITH, The Deserted Village.

This chapter is concerned with problems besetting developments in agriculture; such problems touch both the people working the land and the land itself.

The chapter is divided into two sections. The first aims at a critical cursory survey of the land tenure problem in general, and at the problem of tenure relationships in particular. The second section is concerned with the land and food supply. In this context, an attempt is made to determine the potentialities in this sector. The discussion therefore dwells on the present pattern of cultivation and on future prospects in this context. It then moves to determine the pressure of the rural population and the chances of alleviating it in the future. The discussion closes with the assessment of income arising in the agricultural sector.

A. Land Tenure

In the previous chapter, the problem of income distribution was highlighted; it pointed out in general,

to the wide disparities in the levels of income, and in particular, to the marked tendency for agricultural income to gravitate towards the lowest levels.

To fully and realistically understand these two crucial facts - especially since they relate to around 60% of the population, and that ultimately, the assessment of the impacts of the development programs have to be related to their effect on the welfare of the population, one must, among other basic matters, understand the country's system of land ownership and cultivation.

Land Tenure

"Land tenure is usually defined as the "bundle of rights" which make up property of land and is considered a legal matter in the vast field of jurisprudence. From a broader viewpoint, however, it is also often taken to cover, in addition to the definition and the determination of proprietary rights in land, all the relationships which arise among men as a result of the ownership, occupancy and use of land.¹ It is in this broad meaning that land tenure is here used with less emphasis on its legal implications¹ than on its agricultural and sociological significance".

1. Paul J. Klat, "Whither Land Tenure in the Arab World", Middle East Economic Papers, 1955, op.cit., p. 47.

The system of land tenure in Lebanon is based as elsewhere in the Middle East, ¹ on the Ottoman and Moslem Law; it was codified for both Lebanon and Syria in 1930. ² The system is complex and difficult; it recognizes several categories of land, which, still submit to differing legal procedures dating back to the early Arab and Ottoman days.

1. For a comprehensive understanding of the historical and legal backgrounds of the Land Tenure System in the Middle East, Vide:

- i) Afif I. Tannous, "Land Ownership in the Middle East," Foreign Agriculture, December 1950, Vol. XIV, No. 12.
- ii) Paul J. Klat, op.cit., pp. 47-51.
- iii) Paul J. Klat, Land Tenure in Syria and its Economic and Social Effects, with some suggestions for Reform. Unpublished Thesis, (Oxford: 1948).
- iv) Isam Y. Ashour, The Remnants of the Feudal System in Palestine, Syria, and the Lebanon, unpublished M.A. Thesis, (A.U.B.: 1946).
- v) Albert Khuri, "Land Tenure", S.B. Himadeh (ed). op.cit., Chapter III.
- vi) Alfred Bonne, State & Economics in the Middle East (London: C. Tilling & Co. Ltd., 1948), pp. 108-114.

2. Arrête No. 33339 of November 12, 1930.

1. Land Ownership:

State domain in Lebanon is insignificant, it is estimated at 60,670 ha.¹ With the exception of this 6.5% of total area, all land in the country is privately owned. Very small holdings predominate in Mount Lebanon. A recent estimate² showed that 90% of the population in Mount Lebanon own land; 81% in North Lebanon; 75% in the Bekaa and 70% in South Lebanon.

A village survey jointly undertaken in 1953 by the Central Office of Statistics and Point IV produced the following information on land tenure in Lebanon:

-
1. I.Y. Ashour, The Remnants of the Feudal System in Palestine, Syria, and Lebanon, op.cit., p. 26, writes: "The State of Lebanon inherited from the Ottoman empire three comparatively large strips of land. As two of these strips have not yet been surveyed, the exact total area is unknown. It is estimated at about 606,700 dunums. The largest of these three strips is known as Jourd-el-Miri and is situated in Akkar (N. Lebanon). Its area is around 600,000 dunums (Rapport à la Société des Nations, 1929, p. 112) Only a very small part of this area is cultivated. The remaining larger part consists of forests and pastures. Next in extent is the land situated near Tyre and which is known as Ras-el-Ayn. This piece of land has been surveyed and has an area of 5,500 dunums all of which is under cultivation. The third strip of land, known as Mograd, is situated in Akkar and has an area of about 1,200 dunums".
 2. Le Commerce du Levant, April 18, 1953.

TABLE 20
NUMBER OF FARMS AND HOLDINGS CLASSIFIED
ACCORDING TO SIZE

Size of Unit	No. of Holdings (a)	No. of Farms (b)	Per cent of Land Area
Less than 10 hectares	132,800	123,600	70-75%
10 ha. and less than 20 ha.	3,500	3,700	{ 15-20% {
20 ha. and less than 50 ha.	1,400	1,100	
50 ha. and less than 100 ha.	550	160	
100 ha. and above	430	110	10%

(a) A holding is the total area owned by one individual or institution within Lebanon. It includes land which is not cultivated; it also includes religious trusts (wakfs) considered as one holding for each religious sect.

(b) No. of farms or No. of operational units.

Source: Conference on Agricultural Credit,
Report on Agricultural Credit in
Lebanon, Beirut, Oct. 1953.

Thus the majority of owners in the country own holdings of less than 10 ha. and of greater significance are the estimates of the Ministry of National Economy that reveal that the large

majority of the members of this class own less than 2 ha.
each.¹

By far of greater significance and of most serious social implications is a study, made by the Lebanese Ministry of National Economy, of ownership of the 270,000 cultivated ha.² The findings are summarized in the following Table.

TABLE 21

NUMBER OF LAND OWNERS BY SIZE OF FARMS

Size of Farm	No. of Land Owners	Area under Cultivation	Per cent of Total
0.5 and less than 5 ha.	84,111	94,500	35
5 and less than 10 ha.	991	40,500	15
10 ha. and over	171	135,000	50

Source: I.B.R.D. Research Files.

1. Conference on Agricultural Credit,
op. cit., p. 4.

2. I.B.R.D. Research Files.

Table 21 reveals: (a) a high concentration in the ownership of land and, by a swing to the other extreme, (b) uneconomic sizes of farm holdings. Thus an extremely small minority (171 persons) of land owners controls little over a third of it. Beyond their economic significance both these features are wrought with important social implications.

The real problem, however, lay in the nature of small holdings. This has led Professor S. B. Himadeh to conclude: "Land is so divided that it provides the country with comparatively small benefits. Although about 75 per cent of the farmers own their own land, their holdings cannot be counted as efficient units, mainly because such holdings are very small and scattered along mountainsides. The size and situation of such holdings are due to the frequent fragmentation of land through inheritance and sale in time of financial stress"¹. The problem of excessive fragmentation of holdings has been exemplified by N. Alamuddine in an address delivered before the conference on World Land Tenure Problems"²:

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1. IBRD Research Files: Quotation from a letter by Professor S. B. Himadeh to Mr. F. Bochenski of I.B.R.D. on the question of land tenure in Lebanon
 2. Najib Alamuddine, Practical Proposals for the Solution of Land Problems in Lebanon, (Madison: University of Wisconsin, October 16, 1951), p. 2.

"I may say that in one village, the number of parcels per property is 56, and the area of each parcel is about .06 hectares. The width of each parcel is a few meters and the length is a few kilometers. It is estimated that 30 per cent of efficiency is lost because of this fragmentation, 10 per cent because of the distance, 10 per cent due to the loss of land, and 10 per cent to the excessive seeding". However, to counteract the evils of such a condition "The small farmers largely own the farm they operate", and often supplement their income from the summer resort trade and emigrants' remittances and other avenues, "while the medium class farmers tend to rent land from smaller and bigger land owners to enlarge the farm they operate"¹.

2. Land Cultivation

In an article on "Land Tenure Reform", G. Hakim writes: "Land tenure reform will be taken to mean the bringing about of such change in social institutions and property relations as will make possible a rise in agricultural productivity. Such reform may not in itself

1. Conference on Agricultural Credit,
op. cit., p. 5.

produce the desired result of higher productivity, it would create an institutional framework that would encourage a greater investment of capital in land, and the application of improved agricultural techniques. The essential question is the relation of the cultivator to the land: whether he owns it, cultivates it directly himself or collectively with others, rents it for a fixed money rent or for a share of the produce, or merely works on it as a wage labour." 1

In Lebanon four systems of land tenure, in the above context, may be distinguished: ²

- (a) Capitalistic tenure, with the land cultivated by wage labour, (plantation farming);
- (b) Money rent tenancy;
- (c) Share tenancy, or the "Metayage" system;
- (d) Individual peasant proprietorship (the family farm).

The attention of the reader is here drawn to two observations, namely: (a) there is no clear cut line of demarcation

1. George Hakim, "Land Tenure Reform", in Middle East Economic Papers, 1954, op.cit., p.77.

2. The coming analysis is based on Hakim's article, op.cit., pp. 79-89.

Note: where underlined, it has been done so by the author.

in Lebanon among the various forms of tenancy, they exist both singly and in combination, the last two types predominating; and, (b) the system of land tenure need not have, at least theoretically, any relation to the size of the farm.

(a) Capitalistic Land Tenure

Under the first form the farm is run more like a business enterprise than under the second or third; it is operated by hired labour under a capitalist-entrepreneur. The most common form of this system is plantation farming where cash crops are cultivated, particularly for export; it is presently the rule on recently acquired large estates by townspeople; it is prevalent on the plains (citrus and bananas), on elevated slopes and plateaus (deciduous fruits), and in the Bekaa.

The system has its advantages from the point of two factors of production only, namely, capital and land. The responsibility for capital investment and application of advanced technology lies with the entrepreneur who utilizes these factors in accordance with the expected profitability of the enterprise; consequently, yield per acre is generally relatively high. In as far as labour is concerned, the reward it receives in wages bears no relation to the personal efforts but is a function of the demand and supply of labour. Judging by the low income

of hired hands on farms, this system produces a very low standard of living for the rural population and cannot therefore be considered conducive to economic development as it leaves wage-earners in this field of production with minimum savings.

(b) Money Rent Tenancy

Money rent tenancy is prevalent mainly on irrigated land.¹ Under this system, the cultivator is a tenant who sublets the land from a large landowner against payment of a fixed money rent. In the event where the tenant is a large-scale entrepreneur employing hired labour, the ills of the system are identical to those already pointed out under capitalistic tenure. If, on the other hand, the tenant farmer is poor, he usually is haunted by the idea of eviction after the common one year tenancy period. The tenant farmer finds no incentive to invest in the land beyond what he deems could turn out to be remunerative within the short span of his tenancy; rather than conserve the fertility of land he has a tendency to exhaust it.²

(c) Share Tenancy or "Métayage" System

The Métayage system is most prevalent on the traditional semi-feudalistic estates, mostly in the south

1. Sayigh, op.cit., p. 44.

2. Hakim, op. cit., p. 82.

of the country and in the Bekaa plain.¹ The metayer system is an association whereby a landlord cedes his land to a peasant for cultivation against the payment of a share of the gross produce of the land. As a rule this is a yearly tenancy terminable at will by the landlord or his agent. The tenant has no definite lease on the property and may sometimes be evicted before the end of the season.²

There is no contract which fixes the relation between the landlord and the tenant; their relationship is fixed by custom and varies from one place to another.³ As a rule, the owner provides the labor and, usually, also the seed, stock and tools; the share of the tenant in the gross produce varies according to custom, location and fertility of the soil, two-thirds being the most common.⁴

"The evils of this system lay in the fact that it discourages investment of capital and exertion of effort on the part of the tenant, because the landlord shares with him the fruit of such capital and effort and, in addition, any permanent capital reverts to the landlord

1. Sayigh, Loc. cit.

2. Ashour, op. cit., p. 39.

3. Ibid.

4. Himadeh's letter, loc. cit.

upon termination of the tenancy. Moreover, the system encourages the exhaustion of the fertility of the soil, and hence the tenant becomes more like a miner than a farmer. Furthermore, the metayage system makes of the tenant a sort of serf to the landlord, thus impairing his personal freedom. The tenant's serfdom is increased when he becomes indebted to his landlord, usually at usurious rates of interest. In the elections for parliament, the tenant is compelled to elect his landlord or whoever his landlord wishes. Consequently, large estates cultivated as they are on the metayage system constitute a handicap not only to agricultural development, but also to political and social progress.¹"

(d) Peasant Proprietorship

The individual peasant proprietorship system predominates in the hill and mountain area, where the fruit and vegetable farm family is the rule;² the reason for this form of land tenure can be traced to early days when Mount Lebanon enjoyed on and off relative political autonomy.

Under this system the actual cultivator is the owner of the land; he is a small scale enterpriser who owns all or most of the factors of production used in his enter-

1. Sayigh, op. cit., pp. 17-19.

2. Hakim, op. cit., p. 84.

prise.¹ In most cases the family farm averages 10 acres.²

This system, if coupled with correction in land fragmentation, seems to be the remedy to the ills of the present land tenure system in Lebanon. G. Hakim writes: "... peasant proprietorships is the best system of land tenure, it provides the greatest investment on land and the use of modern technology.³ The problem of land tenure reform in the underdeveloped countries is a problem of incentives".⁴

In its summary and conclusions in the Report on Land Reform, ECOSOC writes: "Examples have also been given of several different types of reforms designed to remedy these defects; such as the great change from tenancy to ownership".⁵ P.J. Klat poses the question, namely "Granted that Arab agriculture is backward, but it is essentially a land tenure problem? Are there no other problems just as important in conditioning rural life and activities in the

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1. Hakim, op. cit., p. 84.
 2. Afif I. Tannous, "Land Ownership in the Middle East", Foreign Agriculture, Vol. XIV, No. 12, December, 1950.
 3. Hakim, Loc. cit.
 4. Ibid., p. 89.
 5. UN. Economic and Social Council, Land Reform: Defects In Agrarian Structure As Obstacles to Economic Development, document E/2003, N.Y. 14 June 1951), p. 108.

Arab World today?"¹ Klat himself attempts an answer by first admitting the presence of other problems, but when it comes to determining their relative importance he does so by assessing them through a description of what has happened in the same area only when other forms of tenure have prevailed. In doing so he specifically refers to the situation in some parts of Lebanon "where most agricultural lands are the full property of their occupiers, with no immediate overlord... Isolated in their mountains the farmers remained independent, free from Ottoman oppression and firmly attached to their lands.... The result was that whereas on the rich plains of the interior, poverty and destitution were the rule, most of the peasants on the barren slopes of the Lebanese hills were happy, healthy and relatively prosperous". Klat goes on to conclude by saying "It is very difficult to say which of the two private property (in the sense of owner-occupancy as opposed to share tenancy) or freedom, caused all this change, it is probably both, as they are closely interrelated, the one conditioning the other, and being as it were, inconceivable without it. Free from oppression, favoured by a particularly clement climate and above all strengthened by the knowledge that they would

1. Klat, op. cit., p. 59.

enjoy the full fruits of their endeavours and exertions, the Lebanese farmers are slowly converting their small holdings beautifully kept and productive farms....

these will always stand as an immutable tribute not only to these farmers' magnificent achievements but also to the tenure system which made these achievements possible".¹

In a round table discussion² including F.A.O. and Middle Eastern experts, one of the panel members explained: "any land tenure system must fulfill certain main criteria, namely, the system should:

- (a) be conducive to security for the cultivator.
- (b) stimulate production in line with modern technology and the potentialities of the land.
- (c) enable the cultivator to have an income commensurate with his productive effort and an equitable share of the national income.
- (d) Enhance the bargaining power of the cultivator vis-à-vis the persons on whom he depends in his economic activities.
- (e) Satisfy the desire for dignity status and participating citizenship among farmers.

1. Ibid., pp. 59-61.

2. F.A.O., Should Land Policy Promote Private Owner Cultivatorship, Tenancy or Large Estates?, (Salahuddine: Iraq, October 1955), Report R.-1 p. 2.

The F.A.O. Report then reads: "As expected, a very strong case was made for owner cultivatorship as the principal goal of land policy in Near Eastern countries. A great majority of the speakers supported this view. Most of the tenure reforms now underway in the region aim at the establishment of a "family type" holdings, where ownership and cultivation rights coincide and where the major source of labor throughout the year is the farmer and his family. It was claimed that no other type of tenure is capable of fulfilling so many of the requisites of a good tenure system; that it provides security to the farmer, incentives for his productive effort, status, dignity, and that it gives the best possible scope for government assistance in credit, extension, social services that are needed to make him an effective and producer and to increase his income bargaining power".

It is evident from the above that there exists a concensus of professional opinion with regard to the avenue towards which efforts should be directed if development in this sector were to materialize; besides the above authorities have incontestably gone a step further in explicitly stressing the paramount importance of

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1. Ibid.

human dignity in the solution of the tenure problem; references to the "ownership-criterion" are not lacking in their statements; they all seem emphatic on one point namely, that unless an institutional framework in property relations be created, all efforts to encourage a greater investment in land, and the application of improved agricultural techniques would probably be wasted .

B. Agriculture and Irrigation

Soil and water are the main natural resources of Lebanon. The land use pattern by districts is as shown in Table 22.

Of the 273,000 ha reported as cultivated in 1950, 218,000 were cropped within the year and the remainder was left fallow.¹ The pattern and amount cropped in 1955 were approximately the same as in 1950.²

Cultivable, Rainfed and Irrigable Area

No scientific survey has been conducted to date as to give a conclusive figure relative to the potentially

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1. "In contrast with neighbouring countries, a small proportion of about one fifth of cultivated land is left fallow each year". Conference on Agricultural Credit, op.cit., p. 3.
 2. In 1955 the amount cropped totalled 216,000 ha., of which 51,000 were irrigated and 165,000 were rainfed; cf. Tables 23 and 26 Infra.

cultivable and irrigable area in the country. Various sources have produced estimates of both the cultivable and irrigable areas; these estimates differ considerably from the official ones. For example, the United States Agricultural Mission¹ and the United Nations Survey Mission to the Middle East² differ slightly with regard to the total cultivable area; thus, whereas, the first estimates that the cultivable area can be increased by 260,000 ha., the second puts it at 298,000 ha. However, the estimates of both missions are poles apart with regard to the potentially irrigable area; while the United States source estimates the additional irrigable area at four times, or 162,000 ha., the present irrigated one, the United Nations source estimates it to be equal to 44,520 ha. only. Gibb estimates the area that can be devoted to arable agriculture at 260,000 ha. of which 160,000 ha. seem to be proved in various districts³ while the remaining 100,000 ha. constitute "important areas under cultivation in the mountains but without more detailed

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1. U.S.A.A., op. cit., pp. 14-17.
 2. UN. Conciliation Commission, op. cit., p. 27.
 3. "Bekaa 125,000 ha., Akkar 12,800 ha., Tripoli - Beirut 10,000 ha., and Beirut - Tyre 13,000 ha." Gibb, op.cit., p. 42.

TABLE 22

LAND USE PATTERN BY DISTRICTS (1955)

(In Hectares)

DISTRICT	AREA (a)		CULTIVATED (b)					Cultivable but uncultivated (a)	Afforested (a)	Rocky and Waste (a)
	Total	Mountains	Irrigated		Dry					
			Total	Orchards	Others	Total	Orchards				Others
North Lebanon	195,833	163,312	15,712	3,965	11,747	62,921	17,340	45,581	26,070	74,855
Mount Lebanon	194,948	186,725	11,010	6,250	4,760	21,595	8,090	13,505	23,100	118,143
South Lebanon	204,537	174,804	10,200	3,910	6,290	49,343	5,390	43,953	5,785	111,039
Bekaa	442,810	196,665	14,188	1,775	12,413	88,499	14,580	73,919	19,045	271,128
Beirut	1,780	-	-	-	-	-	-	-	-	-
Total	1,039,908	721,506	51,110	15,900	35,210	222,358	45,400	176,958	74,000	575,165

Source: (a) UNRWA Research Files; (from an interview with the Director General of Statistics, Beirut, August 7th, 1950).

(b) i- I.B.R.D. Research Files.
 ii- Ministry of Agriculture, Estimates of Lebanon's Agricultural Wealth, unpublished typed statistics, (Beirut: November 1956).

Note: The latter source (ii) estimates the area of irrigated land at 48,085 ha. To this has been added 2,700 ha. of the completed Kasmieh project; 200 ha. in the Nahr Ibrahim region; and, 125 ha. in Batroun.

information than has been made available it is impossible to assess their extent." ¹ It is thought, according to the same source ², that there are about 35,000 ³ ha that can be irrigated in the spring, and perhaps an additional 15,000 ⁴ ha. in summer - the latter figure somehow overlapping with the former because the same land may be cultivated and irrigated twice yearly.

The greatest variation in the estimates quoted above occur in the case of how much uncropped land can be brought under cultivation. The lowest is the official estimate of 115,000 ha., the highest 298,000 ha. The latter estimate appears entirely unrealistic for it would indicate that in this overpopulated and food deficient country there exists more land suitable for cropping than has been developed over the centuries.

Officially, the "Development Zone" is 115,495 ha., estimated to be potentially cultivable but presently uncultivated. The development potential in this respect is not very impressive - even assuming the availability of capital funds; the reason is that most - i.e. around

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1. Ibid.
 2. Ibid., pp. 72-75.
 3. Spring Irrigation: Akkar Plain: 10,000 ha., S. Lebanon (Kasmieh area): 1,000 ha. and Yammouneh and S. Bekaa: 20,000 ha.
 4. Summer Irrigation: Akkar Plain: 5,000 ha. and Yammouneh and S. Bekaa: 10,000 ha.

45 per cent - of this "zone" is in the Bekaa (cf., Table 22) where the rainfall is the lowest¹ in the country, and along rocky hillsides in Mount Lebanon where the land has to be literally carved out of rocky slopes. The congestion of the cultivated land in Lebanon is such that most of the uncultivated land has undoubtedly been proved by experience to be difficult to work profitably without heavy expenditure.²

Table 23 gives the crop pattern on rainfed land in 1955.

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1. Cf. Table 2, Supra.
 2. Gibb writes "The greater proportion of this (cultivable but uncultivated) would have to be worked out by terracing the mountain slopes which is a slow and costly process, and which can only be justified for the planting of new olive groves or, where water is available for the cultivation of fruit trees. Expansion in the Bekaa could be obtained particularly in the Gaza of Hermel but there the soil is so poor and of such marginal nature that its value for arable purposes is doubtful unless means can be devised for irrigating it. It may, however, prove suitable for the development of pasturage for the grazing of cattle. The conclusion to be derived from the above is that Lebanon must devote her energies to an intensification of cultivation of those arable lands already ploughed rather than attempt to bring new lands into use." Gibb, op.cit., p. 44.

The USOM/Lebanon Mission writes: "A practical appraisal of Lebanon's land resources forces the conclusion that it is most probable that

TABLE 23

CROP PATTERN, HARVEST, YIELD AND VALUE OF CROP ON RAINFED LAND - 1955

Crop	Area (Hectares)	Harvest (Tons)	Yield :(Quintals per ha)	Value (LL thousands)
Cereals	100,900	98,000	9.0	23,630
of which:				
Wheat	70,000	60,000	8.6	16,200
Barley	20,000	26,600	13.3	5,220
Millet	9,000	9,900	10.0	1,980
Pulses	11,550	12,100	10.5	2,864
Vegetables	1,800	25,100	140.0	3,723
of which:				
Melons	1,500	23,100	155.0	1,848
Fruit Trees	24,400	97,200	40.0	18,800
of which:				
Grapes	20,000	70,000	35.0	12,000
Figs	2,500	20,000	80.0	3,000
Industrial Crops	26,000	47,150	18.1	35,650
of which:				
Olives & Olive	18,000	43,000	24.0	26,800
Oil	3,000	2,400	8.0	7,200
Tobacco				
Total	164,650	302,650	18.4	84,667

Source: Ministry of Agriculture, Office of Agricultural Statistics, loc.cit.

Irrigation

From the previous discussion, it can be concluded that the prospects of extending the land under cultivation are not in the least bright; in this context, development of any consequence can come only with expanded irrigation. It must be emphasized that irrigation and drainage projects will bring but little new land under cultivation, such projects will only irrigate land presently cropped on a rainfed basis. Thus irrigation will increase yields and broaden crop adaptability but will not add appreciably to the cultivated area; this is also true of drainage projects, for the area of uncropped swamps is extremely limited. Bushes and swamp grasses are harvested from even this small area.

Identifiable expenditures from the ordinary budget and the Development Works Fund for Irrigation, on water supply and drainage works since 1944 have amounted to over LL 70 million.¹ These expenditures have resulted in the irrigation of 35,400 ha. as shown in Table 24 below, thus bringing the irrigated area in Lebanon to a 51,110 ha.

there will be little net increase in the cultivated area of the country. As a matter of fact, sound land use principles indicate the advisability of retiring a considerable area of presently cropped land to permanent or rotation pasture." US. Department of the Interior, op.cit., p. V - 21.

1. Cf. Tables 89 and 91, Infra.

TABLE 24

AREAS IRRIGATED IN LEBANON BY DISTRICTS
SINCE 1944

<u>District</u>		<u>Hectares</u>
1. <u>North Lebanon</u>		
Akkar Plain (N. EL Bared)	2,000	
Minnie Gardens (N. EL Kebir)	800	
Tripoli Plain (N. Abou Ali)	1,500	
Batroun Plain (N. EL Jouz)	<u>300</u>	4,600
2. <u>Mt. Lebanon</u>		
Kesrouan Littoral (N. EL Kalb)	300	
Metn Littoral (Waters from Antelias, Chiah, Hadeth, Hazmieh, Bourj Hammoud)	600	
Faraya, Hrajel, Mayrouba region (Nahr EL Salib)	200	
Damour region	400	
Barouk, Deir EL Kamar, Moukhtara (Barouk Nahr el Safa)	300	
Nahr Ibrahim	<u>1,000</u>	2,800
3. <u>South Lebanon</u>		
Kasmieh (Litani & Ras-El-Ain)	4,500	
Dirdara (Marjayoun)	100	
Saida	<u>700</u>	5,300
4. <u>Bekaa</u>		
a. <u>N. Bekaa</u>		
Yammouneh, Baalbeck Plain (Yammouneh)	3,300	
Addous, Baalbeck, Chmistar, Makne	2,000	
Laboue, Hermel, EL Qa'a region (Orontes)	<u>1,000</u>	
	6,300	
b. <u>S. Bekaa</u>		
Khuraizat, Annik, Qub-ELias, Chtaura Bardoni (right bank of Litani)	3,500	
Anjar, Terbol (Ras-el-Ain) Yahfoufa (Left bank of Litani)	3,500	
Lower course of Litani	<u>1,500</u>	
	8,500	14,800
5. <u>Various Mountainous Regions</u>		
Ehden, Becharre, Laklouk, Akoura, Afka, Ghazir, Djezzine, etc.	<u>7,900</u>	<u>7,900</u>
		TOTAL <u>35,400</u>

Source: Interview with Mr. Amassian, Ministry of Public Works, Water & Irrigation Department, May 29, 1956

Irrigation projects already started, or under study but not yet started, would if completed, add an additional 56,730 ha. of irrigated land. Table 25 lists such projects by districts.

The potentially irrigable area should be put at around 50,000 ha. because the acreage given in the table includes canals and roads.¹

Presently irrigated land is cropped according to the pattern shown in Table 26.

Comparative statistics of yield on rainfed and irrigated land reveal that the ratio of the overall average between the two categories stands at 1:5.22, value-wise the same ratio is 1:3.75.

C. Crops and the Food Supply

Cropping patterns on both rainfed and irrigated land (cf., Tables 23 & 26) reveal that the main feature of Lebanese agriculture lies in its diversity. A large variety of tropical, semi-tropical and temperate zone crops are grown successfully. This is mainly due to a unique combination of a variety of a topographical and climatic variations.

Cereals

The area devoted to cereals cultivation accounts for the bulk of the annually cropped area, or around 50 per cent of the 215,000 ha. Domestic production of cereals suffices for around 40 per cent of the domestic consumption. In 1955, an average year, total production of wheat, barley, maize and millet totalled 112,000 tons against total estimated

1. I.B.R.D., Op.cit. p. 18.

TABLE 25

IRRIGATION PROJECTS BY DISTRICTS IN LEBANON
IRRIGATED LAND

Project by District	Present	Irrigated Land Remaining for completion	Total Planned
1. N. Lebanon Akkar Plain	2,000	9,200	9,200
2. Mt. Lebanon Beirut-Saida Plain	-	3,870	3,870
3. S. Lebanon Al Kharrub Lower Nabatiyeh Tyre - Jwaya Jezzine-Upper Naba- tiyeh	-	3,500 3,700 6,000 5,000	18,200
4. Bekaa			
a. N. Bekaa			
Yammouneh	3,300	7,700	
Laboue, Hermel			
El Qa'a	1,000	4,000	
Extension of El Qa'a		2,700	
b. S. Bekaa			
El Kraizat, Ammik Qub Elias,			
Chtaura, Bardoni	3,500		
Anjar, Terbol			
Yahfoufa	3,500	10,700	25,100
			56,370

Source: Interview with Mr. Amassian, Ministry of Public Works, Water & Irrigation Department, May 29, 1956.

TABLE 26
CROP PATTERN, HARVEST, YIELD AND VALUE OF CROP ON IRRIGATED LAND - 1955

Crop	Area (Hectares)	Harvest (Tons)	Yield :(Quintals per ha)	Value (LL thousands)
Cereals	7,100	13,800	19.5	3,360
of which:				
Maize	6,800	12,800	18.8	2,560
Pulses	3,230	6,490	20.0	3,478
of which:				
BeaBeans	2,000	5,250	26.2	3,150
Vegetables	20,290	230,550	100.5	28,000
of which:				
Onions	3,000	40,000	133.0	4,000
Tomatoes	1,200	26,000	216.0	2,600
Potatoes	5,000	40,000	80.0	4,800
Cauliflower	900	21,000	234.0	2,100
Cucumbers	1,220	12,800	105.0	1,920
Fruit Trees	15,900	219,300	137.0	57,300
of which:				
Citrus	5,000	104,000	208.0	20,800
Bananas	1,500	17,000	113.0	5,950
Pears	1,500	15,000	100.0	6,000
Apples	3,000	30,000	100.0	12,800
Plums	1,300	13,000	100.0	1,300
Peaches	1,300	9,000	69.0	2,250
Industrial Crops	4,580	12,700	27.9	6,435
Total	51,100	482,840	94.5	98,573

Source: Ministry of Agriculture, Office of Agricultural Statistics, loc.cit.

requirements of 275,00 tons. In view of the postwar world shortage of cereals, the desire of the Lebanese to increase their production of wheat and barley at the cost of other crops is understandable, though it may prove to be uneconomic. The memory of mass starvation in the country during World War I lingers, and there is a strong feeling that a permanent deficit in staple food makes the country too dependent on imports, which, if not obtained at rather high prices in Syria, have to be paid for in hard currency.

Wheat is mainly grown in the plains of the Bekaa and Akkar; the average yield per acre in the country as a whole is 9 quintals per hectare;¹ new varieties might produce better results. Maize, which is little used, is grown under irrigation, in some regions successfully interplanted with groundnuts. In addition small quantities of sorghum (1,000 ha. in 1955) are grown in the dry farming sections, and some rice (300 ha.) in the plain of Akkar.

While increased cultivation of the staple foods is fully justified in periods of emergency, it would seem that in normal times, because of its climate, terrain and environment, the country could more profitably concentrate on fruit and vegetable production and on other types of intensive farming. Full self sufficiency in

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1. Crop yields were obtained on 146 farms in a sample survey made in the Bekaa covering 1952 operations. On these farms the average wheat yield was 830 kgs. per ha. on dry land and 1,230 kgs. per ha. on irrigated land. Of the total land under wheat about 1/10 was irrigated; it appears that yields in the Bekaa exceed those in other regions by a considerable margin.

cereals seem hardly attainable and would, in any case, be prohibitively expensive and justified only under war time conditions.

Fruits

The area devoted to fruit cultivation accounts for around 18 per cent (40,300 ha. in 1955) of the annual cropped area. The growing of fruits is one of the most promising developments in Lebanese agriculture. With pulses and vegetables, it provides between one third and one half of the country's exports. About 65 per cent of the area under orchards is irrigated; it is expected that the same intensity of irrigation will apply to areas to be devoted to fruit growing in the future.

The Lebanese littoral is well-suited to the cultivation of citrus and in certain regions to the cultivation of bananas. The general practice is to plant bananas between newly planted citrus trees and to remove them when, after 6 or 7 years, the latter reach the fruitbearing stage.

While at present both citrus and bananas encounter export difficulties in view of their high prices, it is believed that future marketing possibilities are better for bananas, particularly in Syria and Iraq, while citrus will always encounter competition from Israel and other

Mediterranean countries. In 1955 production of citrus was 104,000 tons of which 55,500 tons were exportable; in the same year 17,000 tons of bananas were produced of which 7,000 tons were exportable.

Grapes occupy 9 per cent of the cropped land. Average annual production in 1955 stood at 70,000 tons of which over 70 per cent was pressed for wines and spirits or dried or converted into molasses.

The fig tree is well adapted to many regions in Lebanon; its requirements of soil, water, and care in cultivation are small, and its yields good at a low cost. 1955 production of figs amounted to 20,000 tons of which 18,000 tons were consumed locally.

Olives are the principal local source of edible oil; in an average year some 40,000 tons of olives are produced on about 18,000 ha.; the crop is largely pressed for oil and the cake used for fuel. If exports were to increase, other fats would have to be imported for domestic consumption which at present requires 7,500 tons of the 9,000 tons of oil produced annually.

As fruits typical of the temperate zone are grown neither in Syria or Israel, nor in Iraq, Jordan and Egypt, there is a good natural market for Lebanese apples, pears, peaches and cherries, increasing quantities of which are grown in the Lebanese littoral. The surplus of fruits

of this kind amounted in 1955 to a little over 20,000 tons (14,000 tons of apples) or to about 1/3 of domestic production.

Vegetables & Legumes

Areas under vegetables accounted for 10 per cent of the total cropped area in 1955. Vegetables growing is particularly well adapted to the Lebanese economy as it requires little land, is not dependent on any one type of soil and yields quick returns. Intensive cultivation of vegetable is of recent origin. At present production totals some 230,000 tons of which around 20 per cent is available for export.

The Bekaa is the major vegetable producing area in Lebanon; it is estimated that 44 per cent of the total average annual production comes from this area.¹ North Lebanon produces about one fourth of the total production of vegetables while the remainder is produced in Mt. Lebanon and the Saida-Tyr coastal strip.² This category includes potatoes and members of the onion family; in 1955 the most important items in order of their harvest were onions, potatoes, tomatoes, cauliflower and cucumbers.

1. U.S.O.A. Litani Report, op.cit.,
p. V-23.

2. Ibid., p. V-24.

Industrial Crops

Tobacco is grown in sufficient quantities to meet local needs and permits exports of up to 500 tons a year; the produce is handled by the Tobacco Monopoly.

The growing of silk worms for silk spinning was at one time the most important single culture in the district of Mount Lebanon; severe competition from synthetic and other fibers has nearly stopped the silk industry, and mulberry trees (3,000 ha. rainfed) are being displaced by fruit trees: Orange and banana on the coast, and apple and olive trees on the hills.

Sugar cane is grown to a limited extent (280 ha. irrigated) on the littoral so far with little success, as the varieties grown did not yield sufficient cane and appeared to have a low sucrose content.

Sugar beet is grown in North Lebanon to serve the needs of a new sugar mill near Tripoli.

Pulses:

7 per cent of the cropped area is devoted to pulses cultivation and, except for chick peas (2,000 ha.) all varieties are under dry farming. These varieties figure primarily on the diet of very low income groups. Vetch, the most common crop, is grown for animal fodder.

Gibb recommends their growing as they are "valuable for maintaining soil fertility"¹.

Rural Population Pressure

It has been shown in the previous section² that for the country as a whole the yield per irrigated hectare is 5.22 times that cropped on a rainfed basis.³ In order to assess the density of the rural population on the cultivated land, the amount of irrigated land has to be translated into productivity by multiplying each irrigated hectare by 5.22, or the ratio of the average yield between rainfed and irrigated land.

Table 27 reveals that for the country as a whole the ratio of the rural population to the weighted cultivated area is shown to remain approximately constant between 1955 and 1975. In other words, with the proviso that all irrigation projects would be implemented according to schedule and completed by 1975, the rural population in Lebanon is expected to increase at approximately the same rate as that in the expansion of areas under cultivation; thus, given the above provision, population

1. Gibb, op.cit., p. 49.

2. Cf., Tables 23 and 25, Supra.

3. The author interviewed Mr. Alfred Kettaneh, an important capitalist farmer in the Bekaa, on December 6, 1956. Mr. Kettaneh believed the ratio of 1 to 5.22 to be a very reasonable one for the country as a whole.

TABLE 27

RURAL POPULATION PRESSURE BY DISTRICTS IN 1955 AND 1975

District	1955										1975									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)					
	Rainfed	Irrigated	Total Cultivated	Irrigated Areas Weighted by 5.22	Total Weighted Cultivated Areas	Expected New Irrigation	Total Irrigated Areas Weighted by 5.22	Rainfed	Total Irrigated Areas Weighted by 5.22	Total Weighted Cultivated Areas	Total Irrigated Areas Weighted by 5.22	Total Weighted Cultivated Areas	Total Weighted Cultivated Areas	Total Weighted Cultivated Areas	Total Weighted Cultivated Areas					
N. Lebanon	62,921	15,712	78,633	81,860	1,447,81	9,200	2,491,2	53,721	786,33	1,300,41	1,837,62	218	330	1,51	1,81					
Mt. Leban.	21,595	11,010	32,605	57,362	789,57	3,870	1,488,0	177,25	326,05	776,74	953,99	295	447	3,74	4,69					
S. Lebanon	49,343	10,200	59,543	531,42	1,024,85	18,200	2,840,0	311,43	595,43	1,482,48	1,793,91	187	284	1,82	1,58					
Bekaa	88,499	14,188	102,687	739,19	1,911,86	25,100	3,928,8	63,399	102,687	205,083	268,482	138	210	0,72	0,78					
TOTAL	222,358	51,110	273,468	2,662,83	4,886,41	56,370	10,748,0	165,988	273,468	5,610,46	7,270,34	838	1,271	1,71	1,74					

Note: All areas are given in hectares.

Source: Columns (1), (2), Supra, Table 22
 Column (4) arrived at by multiplying Column (2) by 5.22 i.e. ratio of yield between cropped & rainfed land
 Column (6) Supra, Table 25
 Column (8) Arrived at by deducting from Column (1) Column (6)
 Column (12) Arrived at by deducting from the total, the balance being total urban and rural population in the remaining four districts; deducting from this total rural, we are left with total urban in the four districts; deducting this percentage of urban population in each district, we were left with the rural population in each district. Rural population in each was taken as a percentage of the total and the result was applied to the 1955 and 1975 population.

Column (13) Arrived at by projecting the 1955 population at the rate of 21 per thousand.

pressure will be approximately the same in 1975 as in 1955 or 1.74 and 1.71 persons per hectare respectively. This does not necessarily mean that each district would be characterized by this phenomenon: South Lebanon, which is to benefit a lot from the Litani project, is an exception; in this district the data given shows a relief of population pressure on cultivated land, while in North Lebanon and the Bekaa the situation is expected to deteriorate slightly in the case of the former and to show practically no change in the case of the latter; as for Mount Lebanon the situation is anticipated to be impaired considerably and unless such excess population is to shift to some other area like the Bekaa or South Lebanon - a very remote possibility in the case of the latter - per capita incomes will undoubtedly gravitate towards lower levels. To counteract such an inescapable fate, responsible circles should encourage more intensive agriculture by means of irrigation projects and credit facilities; and develop better tourism resorts and facilities.

Even assuming perfect mobility of the rural population, the fact remains that for the country as a whole, the areas under cultivation would by 1975 have increased only proportionately to the increase in rural population. How would the situation present itself after 1975? The odds

appear to be against the country.

The point must be emphasized, however, that in the projection of the increase in the cultivated areas, the state of technical knowledge affecting productivity has been assumed constant throughout. This need not be and most probably is not true. It indicates, however, a very important avenue to which the government should give serious consideration.

Forests

At one time the country was renowned for her forests. At present, however, the term "forest" must be accepted advisedly, it is limited to some 74,000 hectares of indifferent timber land. The traditionally and commercially precious cedar can be found only on the national emblem, and in few mountain reservations. Neglect by the Ottomans, war destruction, charcoal burning and destruction of seedlings by goats have contributed to bring about this condition.

At present ownership of forests is divided between the government, 61 per cent, private ownership, 22 per cent, and communal ownership, 17 per cent.¹ In 1954 forestry products stood at: charcoal, 27,000 tons; fire

1. Gibb, op.cit., p. 60.

logs, 81,000 tons; pine-seed, 200 tons and timber 175,000 tons. Except for a deficit of 25,000 tons in timber production, all the other categories were enough to meet domestic requirements.¹

Forests are essential to the Lebanon, not only as a source of timber, which at present has to be partly imported, and as a climatic and tourist asset, but also to prevent further soil erosion caused by the stormy winter rains, and already apparent on the mountain slopes which occupy a considerable part of the country's surface. It is estimated that instead of the 7 per cent from 25 to 30 per cent of the land ought to be forested; this would be the only possible utilization of some of the slopes of Mount Lebanon, Mount Hermon and the Anti-Lebanon range.²³

Livestock

Figures concerning the number of livestock in Lebanon are subject to a considerable margin of error since no census of animals has ever been made. The 1951 figures presented in Table 29 are based on information made available to the US Foreign Operations Administration in conjunction with the report on the development of the Litani River;

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1. Statement of the Lebanese Delegation to the F.A.O. regional conference held in Beirut 13-16 September 1954.
 2. Gibb, op.cit., p. 61.
 3. Ibid.

the figures were furnished by the Ministry of Agriculture, principally the Veterinary Department.

TABLE 29
ESTIMATED NUMBER OF LIVESTOCK, 1951

<u>TYPE</u>	<u>NUMBER</u>
Goats	548,000
Sheep	56,000
Cattle	28,000
Pigs	2,000
Buffalo	250
Poultry	703,500
Horses, mules and donkeys	37,500

Source: Adopted from U.S.O.A. Litani Report,
op. cit., p. V-25.

1
Certain factors militate against the prospects of increasing livestock numbers to an appreciable extent; main among such factors are the following: (a) the limited area available for pasturage, (b) the management of such areas is rendered excessively difficult by the seasonal nature of rain and the practice of nomadic animal husbandry,

1. Gibb, op. cit., p. 54.

and (c) the lack of technical skills in controlling animal diseases.

Goats are raised in all parts of the country, but mainly in the Bekaa district.¹ Although they inflict untold damage to the growth of young forests and thus limit imperative reforestation programs, yet, through providing milk, meat, skins and hair to the village economy, with little needed care, they supplement the village family's meagre income.

Sheep are of the fat tailed variety which produces a coarse wool, the greater part of which is exported to America for carpet weaving.² They are, however, largely bred for their meat.

Cattle are primarily draft animals and only after their usefulness in the field has ended are they slaughtered for their meat and hides; it was estimated in 1951 that out of approximately 28,000 cattle, only about one fourth were dairy cows.³ They are fed on natural forage and chopped straw; few are given green fodder. As a result yields are low and products obtained of inferior quality.⁴

1. Ibid., pp. 53 and 55.

2. Ibid.

3. U.S.O.A. Litani Report, op.cit., p. V-25.

4. Gibb, Loc., cit.

The numbers of horses, mules, donkeys, and camels are comparatively small. Pigs are bred on a limited scale, due to the market limitations of a half-moslem country. Poultry is widely raised.

The slaughtering industry works largely on imports, mainly on the hoof from Syria, Transjordan, Iraq, and Turkey. It is comparatively large; in 1955 it handled 22,000 head of cattle, 230,000 sheep, 43,000 goats and 2,000 pigs.¹

Table 30 below gives quantity and value of livestock products in 1949:

TABLE 30
LIVESTOCK PRODUCTS (1949)

Product	Unit	Quantity	Gross Value (LL'000)
Milk	1,000 litres	20,400	10,200
Wool	Tons	192	575
Hides	..	..	1,850
Eggs	1,000	75,000	5,250
Meat	..	..	<u>7,283</u>
TOTAL			25,158 ²

Source: Badre, Monograph No. 1, op.cit.

1. Ministry of National Economy, Bulletin Statistique Trimestriel, Vol.VI- No. IV.
2. Net Value stood at LL 13,923,000 the difference between gross and net value being the cost of livestock raising.

National Income Arising in Agriculture

1948 and 1949 are the only years for which comprehensive and detailed data is available on income arising in the agricultural sector; such data is given in the table below:

TABLE 31
GROSS AND NET INCOME FROM AGRICULTURE,
1948 and 1949

<u>GROSS INCOME</u>	<u>1948</u>	<u>1949</u>
Agricultural Crops	160,412	148,304
Forestry	1,090	1,213
Silk	1,143	840
Animal Products	28,262	25,158
Fishing	<u>2,810</u>	<u>2,546</u>
Total Gross Income	193,717	178,061
<u>COSTS</u>		
Agriculture	10,213	7,365
Livestock	14,315	11,235
Fishing	<u>702</u>	<u>636</u>
Total Costs	25,230	19,236
Net Income at Market Prices	168,487	158,825

Source: Badre, Monograph No. 1, loc. cit.

The national income study shows that agricultural crops accounted for 82.8 per cent and 83.3 per cent respectively in 1948 and 1949 of Lebanon's gross income from agriculture; animal products for 14.6 per cent and 14.1 per cent; fishing for 1.5 per cent and 1.4 per cent; forestry 0.6 per cent and 0.7 per cent and silk for 0.6 per cent.

Of the gross value of agricultural crops, fruits and vegetables represented 57.8 per cent and 69.6 per cent, cereals 24.7 per cent and 14.8 per cent, leguminous crops 13.0 per cent and 11.9 per cent, and industrial crops 4.5 per cent and 3.7 per cent in 1948 and 1949.

CHAPTER IV

INDUSTRY, MINING AND POWER

The outstanding characteristic of modern economic history has been the spread of industrialization or of its effects to virtually every sector of the globe. Many writers on Lebanon, judging by the level of development in many an industrialized western country, have jumped to the hasty conclusion that overall economic planning should have as its goal the imitation of industrialized countries as an answer to many of its problems others, however, ~~some think this~~ to be somewhat or even utterly fallacious. Thus, current economic literature on Lebanon seldom fails to bypass the question of industrialization and the role that it could or should play in the solution of the more fundamental economic problems. The stress, however, varies in intensity from a prescribed panacea for most of the material woes in the country to a casual reference to it as a possible and/or partial remedy only.

This chapter will be divided into two sections: the first, on industry and mining, is intended to be general and indicative; the second, on power, will be rather specialized and exhaustive.

A. Industry and Mining

The manufacturing industries of Lebanon, which are largely of the light and secondary type, developed largely

from traditional handicrafts, a fact which, even now, accounts for the prevailing small-size, family-type enterprises scattered all over the country.

Before World War II, Lebanese industrial production was insignificant; lack of imports during the war, coupled with the large expenditures and consumption needs of allied armies stationed in the country, contributed to a rapid expansion of existing productive facilities. Even production under technically primitive conditions proved profitable during the war, and most of the older establishments succeeded in amortizing quickly the costs of their plant, without, however, (due to import difficulties) being able to renew their equipment.

In the couple of years immediately following the end of the war, Lebanese industry continued to enjoy a seller's market, and with the help of accumulated reserves resulting from excessive war profits, capital equipment was renewed and additional capital was invested in new enterprises. Although with the meagerness of available statistics one cannot assess the extent of this industrial expansion, yet, there is evidence in the value of imported machinery that most of it took place immediately after the war and that it tapered off after 1949.¹

1. i: Edmund Asfour, "Industrial Development in Lebanon", Middle East Economic Papers 1955, op. cit., p. 3.

With the revival of imports, the free exchange policy-generally leading to appreciated currency vis-à-vis foreign exchange and consequently benefiting import trade-and the lack of a high protective policy, many of the "war-grown" industries collapsed and the remaining, as shown in Table 32, continued operating at levels far below capacity.

It is apparent from the following table that most industries operate at under capacity in a market where similar foreign manufactured products are imported. A possible explanation to this situation can be made on the ground that the difference in quality between the local and the imported product is so great that they can be considered as two separate commodities.¹

Apart from the environmental conditions, the factors that retard the development of industry are, as elsewhere, capital, labour, skill, resources and markets.

Capital:

It is against a background of four important considerations that the capital requirements of an industrialization program have to be examined:² (a) the shortage of

ii: Association of Lebanese Industrialists, Guide to Lebanon's Industries, (Beirut: Dar-el-Ahad, 1950), p. g.

1. Badre, Monograph 3, op.cit., p. 27.
2. UN Department of Economic and Social Affairs, Processes and Problems of Industrialization

TABLE 32

PLANT CAPACITY, PRODUCTION AND DOMESTIC CONSUMPTION
OF MAIN INDUSTRIES (1942)

<u>Industry</u>	<u>Unit</u>	<u>Capacity</u> <u>Plant</u>	<u>Production</u>	<u>Domestic</u> <u>Consumption</u>
1. Food	Tons	73,860	17,600	34,250
2. Beverages	Th. Litres	18,000	4,450	3,800
3. Textiles	Tons	16,670	5,400	6,385
4. Wood & Cork	Cub. meters	160,000	56,000	80,000
5. Beauty Products	Tons	18,000	6,500	6,000
6. Tanneries	Th. Litres	450	100	250
7. Construction	Tons	302,000	2,500	2,000
8. Metal Works	Tons	9,000	255,000	251,000
			3,571	5,100

Source: Compiled From: Association of Lebanese Industrialists, op.cit

capital in relation to both land and labour resources; (b) the general rule that a manufacturing establishment requires substantially more capital than an agricultural or commercial unit; (c) the fact that most of the capital invested in a factory is usually far more fixed in nature and location and far less flexible in function than that invested in a farm or shop; and, (d) the lack of an institutional framework.

(i) Capital Shortage

The prevailing high interest rates is a sure indication of an overall shortage of capital in the country; Asfour writes: "It is true of course that the high interest rate reflects high risks in some sectors and perhaps a high liquidity preference among savers in the country, but even the lowest rates, which may be occasionally granted in the case of highly secured loans, are generally high compared with the corresponding levels in more developed countries".¹ This situation is due to various factors:

In the first place, capital shortage is a characteristic phenomenon in under-developed countries, sometimes relative in the sense that labour and land could be more productive if more capital were available, sometimes

in Under-developed Countries, document E/2670
ST/ECA/29 (New York: December 1954), p. 33.

1. Asfour, op.cit., p. 4.

absolute in the sense that the supply of capital is insufficient to employ the population fully even in the least capital intensive activities.¹ The main reason for this situation in general is that in most under-developed countries the margin between receipts of wages or sale of produce of the working population and their expenditure on necessary consumption goods is so narrow or even negative as to permit only a very low, if any, level of savings.

In the second place, in the case of Lebanon the difficulty is aggravated by the maldistribution of income: the high income group from which the bulk of private savings should be expected to be constantly forthcoming, consists predominantly of merchants real estate and landowners: In the case of merchants, savings are not always realized in monetary terms but are more likely to flow back directly into business expansion by way of increased inventories. Similarly, with the increasing tourist trade, missions and foreign business firms, and the realization that Lebanon is confirming itself as a transit country, real estate owners tend to reinvest their savings in new or modernization of their real estate

1. A number of UN Documents published by the Department of Economic Affairs have analysed the causes and consequences of the shortage of capital in under developed countries, among them are:

service facilities (including hotels). In the case of landlords and plantation owners, savings also tend to be either hoarded or flow back into the same or cognate economic fields and to become invested - at least in part - in additional land. The net result is that in the case of merchants and real estate owners, the funds tend to leak out of the country fairly rapidly in payment for imports, predominantly, in the case of the former, in the form of consumption goods. In the case of land and plantation owners hoarded savings or proceeds from the sale of land tend to leak out of the economy in the form of expenditures on conspicuous consumption, predominantly imports.

In the third place is the competition of other forms of investment, particularly real estate. This, from one point of view, is a form of investment; however, it adds little to the country's industrial output as in many cases it has a fairly high import content.¹ The prevalence

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- i) Domestic Financing of Economic Development, (New York: 1950).
 - ii) Methods of Financing Economic Development in Underdeveloped Countries, (Lake Success: 1949)
 - iii) Mobilization of Domestic Capital in Certain Countries of Asia and the Far East

1. "Iron wood and sanitary installations are mainly imported goods, while cement, stones and tiles are for the most part produced domestically. The

remaining material is about half imported and half comes from domestic production. This means that about two fifths of the materials used in construction, in terms of value, is produced, locally and about three fifths is imported." Badre, "The National Income of Lebanon", op.cit., p. 20.

of high rents makes investment in real estate profitable enough reflecting adversely on ordinary returns that might be expected from an industrial undertaking.

In the fourth place is the lack of institutional aids that can help channel savings from one sector to another.

ii) Capital Requirements of Manufacturing Industries

A manufacturing establishment requires substantially more capital than an agricultural or commercial unit; in addition, because of the lack of an industrial environment, industrial concerns have first to invest in the cost of acquiring and installing plant equipment and second have to provide for various ancillary services as well as carry larger stocks of raw materials.¹ This tends to render the cost per industrial establishment in Lebanon even higher than that of a corresponding unit in an industrialized country. The result is to magnify the relative shortage of local capital on the one hand and to increase costs of production on the other which tends to be reflected in higher prices of the domestic product; this difficulty

1. Lebanese industrialists have, in a memorandum addressed to the Government recently, asked the latter for a LL 40 million credit to finance the purchase of raw materials. Le Commerce du Levant, November 28, 1956.

coupled with the open-door import policy and the artificially pegged exchange rate of the Lebanese pound vis-à-vis foreign currencies and the protective policy of neighbouring countries reduce Lebanese industry to its narrow market and invite foreign competition on its own home front.

Owing to the foregoing factors, it is not uncommon to witness industrial failures which tend to scare away local investors from this field thereby reducing the prospects of the availability of capital to other would be industrial entrepreneurs.

iii) Relative Inflexibility of Manufacturing Capital

The nature of industrial capital is rather unadaptable in the sense that due to the physical characteristics of certain particular machines devised for one purpose, even if machines had technical flexibility as single units, their installation in a plant in a precise association with other machines reduces their adaptability markedly, sometimes to the point where their function is confined to the one process for which the plant was originally designed. Thus given the limited market and the quickly changing taste patterns of the population especially as it is regularly confronted with new and better quality imported products, the risk of the industrial

investors - in seeing the demand for their product curtailed - is considerably enhanced. With the increasing risks, the chances of industrial investment to compete with other forms of investment is certainly impaired.

iv) Lack of a Financial Institutional Framework

The money market, though relatively well developed in Lebanon is not well equipped to satisfy the demands of industry: medium and long term loans for private enterprises are almost a curiosity, and a stock market, only very recently organized,¹ deals only with shares of a very small number of well established concerns.² Existing financial institutions are more or less solely devised to cater to the commercial sector; the lending policies are likely to favour trading activities and to a lesser extent agricultural ones. Moreover they are accustomed to handling short term credits, not the cheap long-term loans which manufacturing enterprises are more likely to require; as collateral they are used to real estate and inventories - assets which are far less important to a factory.

Labour and Skills

The level of skill of industrial workers is certainly below average western standards; of a total 21,854 industrial

1. Law of 2nd January 1957.

2. Asfour, op.cit., p. 5.

workers in 1951, only 1572 persons were classified as skilled.¹ This is reflected in low productivity ; stop watch readings have shown that output per worker is low and that his productivity is one-fifth of what it could be.² Low productivity leads to lower wages; thus, average monthly wages of skilled labour for all industries in 1951 reached LL 603 compared with LL 134 for other male workers, LL 54 for women and LL 39 for children of both sexes under the age of 16.³

Industrialists claim that the average labour is not efficient and hence, though it is relatively cheap, it costs much in the aggregate. This can be attributed to two main factors, viz: the wage system used and the low wages paid. The average unskilled labour gets between LL. 1.5 and LL 4.5 per diem; no matter how efficient or inefficient he proves to be, or how hard he works, this amount will be paid to him. Consequently, and perhaps rightfully, he will work as little as possible and get the most out of his work both in terms of money and leisure time; the result is a low quality of domestically produced goods. A system of wages computed on the basis of efficiency would eliminate or at least decrease

1. Bulletin Statistique Trimestriel, op. cit., Vol. IV, No. 4.

2. H. Fairfield, "Needed Good Industrial Management", Al-Kulliyah Vol. XXX, No. 5, (May 1955), p. 22.

3. Bulletin Statistique Trimestriel, op.cit.

the inefficiency of labor.¹ A lot could be achieved
in this respect via vocational training and the
recruitment of foreign experts.²

Another aspect of skill which requires special emphasis is managerial inefficiency. The causes of inefficiency which are primarily attributable to the entrepreneur, may be subdivided into two classes.

1. For example the Roman or Halsey Bonus Schemes or the Priestman Plan of wage computation are three methods widely used in Great Britain and might be applicable in Lebanon

The Roman Bonus Scheme provides for a bonus of a "percentage" increase of pay equal to the percentage the hours saved bears to the hours allotted, which percentage will be added to the amount earned or work done.

The Halsey Bonus Scheme provides for a bonus of 50% on hours saved at the usual rates per hour.

The Priestman Plan: A standard of production is agreed upon between the management and workers' representatives and work done beyond that standard will be compensated by payment of a bonus. Carter, Advanced Accounts, (London: Pitman Press, 1950), pp. 781-782.

2. A basic agreement concerning technical assistance between the Lebanese Government and the UN, ILO, FAO, UNESCO, ICAO and WHO, was ratified by Parliament on April 7, 1954.

Firstly are those resulting from lack of knowledge in the details of the enterprise; this can be remedied by showing management the advantages of better methods of administration through the keeping of better financial and statistical records of all work done in the factory and the employment of modern methods and techniques of control, preparation of budgets etc... Secondly are those resulting from the organizational structure and the attitude of the employer towards the employee.

Resources and Markets

Limited variations in the range, quality and availability of local resources are among the most important causes that have hampered industrial development in the country. Resource endowment depends in part on the size of the country: In Lebanon, there is so far no mining industry except for some recently discovered iron ore of yet undetermined quantity¹; electric power is in short supply and all mineral oil is imported. The Lebanese

1. Known mineral deposits in Lebanon are:

<u>Mineral</u>	<u>Location</u>	<u>Remarks</u>
<u>Metallic</u>		
Galena	Mt. Hermon	No evidence of occurrence in quantity.
Iron Ore	El Mrouj	Evidence exists of possible deposits.
<u>Non-Metallic</u>		
Building stone	Widespread	Plentiful supplies.
Building Material	Widespread	Plentiful supplies
Water	-	Investigations needed

producer stands at a great disadvantage¹ with respect to the foreign competitor with regard to fuel and power costs:

<u>Mineral</u>	<u>Location</u>	<u>Remarks</u>
Petroleum	-	Investigations in course.
Lignite	North and Mt. Lebanon	Quality poor and mining unprofitable in normal times.
Asphalt	Hâsbâya	Deposits appear to be small and difficult of access.
Silica Sand	Araya and Aley	Probable that other deposits exist which would be worth investigation if the glass industry is developed.
Barytes	Chekka	Extent of deposits unknown
Pyrite (Lignite impurity)		Development would depend on extent to which lignite is found.
Ochre	Vicinity of Bikfaya	Limited quantities

Adapted from: Gibb, op.cit., p. 67.

1. The local producer counts two main cost advantages over his foreign competitor:

(a) Labour (unskilled) is paid:

LL 120	per	40	hour	week	in	the	USA
LL 60	"	"	"	"	"	"	England
LL 30	"	"	"	"	"	"	Lebanon

(b) On a given LL 50,000 profit, the British producer pays LL 18,120 in taxes, whereas the Lebanese producer pays only LL 5,290.

Fuel oil is sold at LL 52 per ton in Lebanon as against LL 30 in Port Said and LL 29 in Iraq; Gas oil is sold at LL 70 per ton as against LL 59 in Iraq. Electric power is sold in Lebanon at a higher price than in most other industrialized countries. The Kwh is sold in New York at PL. 2; in the Tennessee Valley at P.L.0.8; in England at PL. 2.5; and in Lebanon at PL. 6.0¹

As to agricultural production, it was shown, in the previous chapter that on the whole the country suffers from a deficit in this respect. However, fruit and vegetable production is becoming more and more specialized, and part of the surpluses are being processed for local consumption. The large imports of processed foods however, due mainly to differences in quality rather than to the lack of locally produced raw materials "suggests that the processing of agricultural surpluses and the improvement of the quality of currently produced foodstuffs hold possibilities for establishing new industries for the local market;

1. L.L. El Dahdah, The Industrial & Commercial Review of Lebanon, (May 1954), p. 8.

Note: By decision of the Council of Ministers, Decree No. 1197 of January 12, 1957 has been amended to read "during the night and until 6 a.m.; the rates charged are fixed at PL 4 per Kwh." Le Commerce du Levant, March 6, 1957.

should these industries hope to cater for the export market then the prices of local products in terms of foreign exchange may become a limiting factor".¹

The narrowness of the domestic market and the limitations of the regional markets are main limitations to both the growth of present industry and to the search for possible new industries. The narrowness of the market limits the inducement to invest; on this point Nurkse writes: "It is a matter of common observation that in the poorer countries the use of capital equipment in the production of goods and services for the domestic market is inhibited by the small size of the market, by the lack of domestic purchasing power, not in monetary terms but in real terms",² he then goes on to say: "In the exchange economy of the real world, it is not difficult to find illustrations of the way the small size of a country's market can discourage, or even prohibit, the profitable application of modern capital equipment by any individual entrepreneur in any particular industry.... the limited size of the domestic market in a low-income country can thus constitute an obstacle to the application of capital by any individual firm or industry working for that market. In this sense the small domestic market

1. Asfour, op.cit., p. 7.

2. Ragnar Nurkse, Problems of Capital Formation in Underdeveloped Countries (Oxford: A.T. Broome and Sons, 1953), p. 6.

is an obstacle to development generally."¹

The regional market² is also limited by both artificial and economic barriers. Artificial barriers take the form of customs barriers³ and boycotts; economic barriers are mainly similar to those facing the local product on the domestic market.

It can be concluded from the above discussion that most factors necessary for a successful industrialization program are relatively lacking. Environmental conditions that would help foster industry within its framework are deficient; capital is scarce and when available tends to flow into various other investment channels; skills are not up to required standards; resources are

1. Ibid., pp. 7-8

2. Regional market is taken here to mean neighbouring Middle Eastern countries including Israel. After the rift with Syria in March 1950, Lebanon lost in that country an extensive natural market for its products.

3. At present Lebanese production enjoys a relative advantage in neighbouring Arab countries in so far as preferential customs treatment (a 25% reduction) is accorded to industrial products provided 50% of their final value has been added locally.

extremely limited and the market is very narrow. It can, therefore be argued in the light of the preceding deterrents that it is unlikely that local industry, given the free play of market forces, could expand appreciably or that any new line could be developed and produce anything that could measure up on the basis of price and quality to imported items; this is true of both big and small industries and, in the case of the latter - needing little capital and skill - they are already numerous and any attempt at expanding them would be quite difficult.

The relative share of the industrial to the overall income since 1950, offers enough justification to assume that there has been no basic change in the structure of industry over the past six years.¹ On this assumption, detailed data furnished by the national income study,² will be used as a basis for the forthcoming analysis. The analysis will mainly aim at: (a) highlighting the main general and specific findings of the above study; (b) indicating why certain industrial fields are more profitable than others; and, (c) pointing to what industrial fields seem to offer relatively brighter prospects for future expansion and development.

1. Income arising in the Industrial Sector totalled LL 137 million and LL 141 million in 1950 and 1954 respectively. Supra, Table 8.

2. Badre, Monograph No. 3, op.cit.,

Characteristics of the Lebanese Industry

Lebanon is more highly industrialized than most other Middle East countries (cf. Table 33). Labour employed in manufacturing industries (using machines) other than construction totalled 22,039 persons¹ in 1950, in addition to an estimated 10,000 persons engaged in handicrafts.² In 1950 industry accounted for over 9 per cent of the gainfully employed population and contributed 13.2 per cent of the total national income as against 19.8 per cent in agriculture.³ The great difference in the number of workers in the agricultural and industrial sectors, when the incomes arising from them are not far apart indicates clearly the substantial difference in their productivity.

Table 33 gives some data on industrial labour and income arising in the industrial sector in several Middle East countries for which data is available. If, however, labour employed in manufacturing industries alone were considered - i.e. excluding handicrafts, then Lebanon would be second only to Israel (percentage-wise) and even then the difference is not appreciable.

1. Ibid., p. 6.

2. Table 19, Supra.

3. Table 14, Supra.

TABLE 33

INDUSTRIAL LABOUR FORCE AND INDUSTRIAL INCOME IN SELECTED MIDDLE EAST COUNTRIES

Country	Industrial Labour Force(a)		Industrial Income(b)	
	Total Thousands	Percent of Active Population	Total Millions	Percent of Total Income
Lebanon (1950)	32	9.1	LL. 137	13.2
Syria (1950)	100	9.1	LS. 125	10.0
Egypt (1947)	663	7.9	LE. 69	8.0(1953)
Israel (1952)	127	21.3	IL. 203	26.0
Iraq (1949)	75	12.4	n.a.	n.a.
Turkey (1950)	n.a.	n.a.	T.L. 114	11%

Note: Persons in handicrafts totalled Lebanon: 10,000
 Syria: 60,000, Israel: 73,000, Iraq: 30,000.

Source: Lebanon: (a) Supra, Table 16, (b) Badre op.cit
Syria: (a) I.B.A.D. The Economic Development of Syria (Baltimore: The Johns Hopkins Press; 1956) p.10
 (b) Ministry of Finance, The Syrian Economy (Damascus Government Press; 1953) p.39.
Egypt: U.N. Statistical Yearbook, op.cit.
Israel: (a) Israel Office of Information, Israel 1954 (Printed in U.S.A. 1955) pp.221-222
 (b) Central Bureau of Statistics, Provisional Estimate of Israel's National Income 1952-53 (Jerusalem: Government Printer; March 1955).
Iraq: UNRWA Research Files
Turkey: UN Statistical Yearbook, op.cit

From Dr, Badre's study, it is possible to make various interesting observations:

(a) The capital output ratio in the different industries ranges from 42 per cent in the case of miscellaneous industries to 420 per cent in the case of metal products with the average for all industries standing at 142 per cent (cf. Table 35); it is to be noted that 7 out of the 16 industries accounting for 68.1 per cent of all industrial capital had a capital-output ratio below the overall average. This is due partly to differences in the degree of efficiency in the utilization of capital and partly to the existence of over capacity.

(b) Capital investment per person and per establishment is higher in Lebanon (1948: LL 4,900 and LL 84,700) than in Egypt (1947: LL 4,100 and LL 57,400) and for Palestine (1942: LL 3,400 and LL 47,800) but lower than in the U.S. (1947: 23,700 and LL 1,400,000).¹

(c) The non-metallic minerals, textiles and food industries are the most heavily capitalized and account alone for 63 per cent of capital invested in industry, 60 per cent of total industrial labour and contribute 58 per cent to income arising in the industrial sector.²

1. Badre, op. cit., p. 27.

2. Ibid., p. 24.

Wood and cork, furniture and paper show the lowest investment per establishment and employ a few number of persons (1,543) but the net output per person in these three industries is above average.

(d) Miscellaneous industries show the highest capital investment per person with non-metallic minerals ranking second and printing third. It is worthwhile noting that in 4 out of 6 industries where the capital investment per person is above the average, net output per person is below average and that the reverse is true in 6 out of 10 industries.¹

Profitability of Lebanese Industry

As can be seen from tables 34 and 35, metal products followed by the rubber, leather, chemicals, furniture, food, paper, and wool and cork industries have the highest returns on invested capital; the returns range between two and five folds the overall average return of 35 per cent. This is a result of various factors, viz.

(a) It is a reflection of a low capital investment in these industries: except for the rubber industry, the seven remaining ones have a capital investment ranging between LL 29,000 and LL 93,000 while the average for all industries stands at LL 115,000.

1. Ibid., p. 26.

TABLE 34

CAPITALIZATION, OUTPUT, WAGE BILL, DEPRECIATION & NET PROFITS IN INDUSTRY (1920)

(IN THOUSAND L.L.)

Industry (1)	No. of Establi- shments	Cap./est. (2) L.L. 000	Value of Output	Cost of Materials	Wage Bill	Rent	Deprecia- tion	Net Profit (3)	Rate of Return %
1. Food	455	55	136	67	22	7	3	37	67.2
2. Beverages	123	87	99	48	38	5	4	4	4.6
3. Textiles	60	543	659	331	117	33	23	155	28.5
4. Weaving Apparel	15	219	154	61	160	9	10	(- 88)	0
5. Wood & Cork	48	29	79	43	14	3	1	18	62.0
6. Furniture	95	48	109	40	28	4	3	34	70.8
7. Paper	9	53	102	37	21	6	3	35	66.0
8. Printing	100	86	58	25	26	2	3	2	2.3
9. Leather	64	71	222	120	32	8	3	59	83.0
10. Rubber	6	161	349	100	72	15	3	159	98.7
11. Chemical	64	93	256	127	42	14	5	68	73.1
12. Non Metallic Minerals	156	228	138	38	41	6	10	43	18.9
13. Metal Products	30	88	369	147	49	5	3	155	176.1
14. Machinery	27	120	132	53	54	4	5	16	13.3
15. Electrical	4	390	478	251	106	32	25	64	16.4
16. Miscellaneous	29	223	94	19	37	4	9	25	11.2
TOTAL OR AVERAGE	1285	115	163	74	36	8	7	38	33.0

(1) Excluding concessions (such as Tobacco Monopoly) public utilities (such as electric power stations), and handicrafts (that do not use mechanical power)

(2) Capital actually invested in machinery, building materials etc. excluding working capital

(3) Arrived at by deducting cost of materials, wage bill, rent & depreciation from value of output

Source: Wage Bill: Bulletin Statistique Trimestriel op.cit
All Others: Badre, Monograph No.3 Op.cit

TABLE 35

RATE OF RETURN, CAPITAL OUTPUT-RATIO AND BREAKDOWN
OF THE FINAL PRODUCT INTO ITS COMPONENT COST ITEMS

Industry	Rate of Return %	Capital Output Ratio	Cost Items as a percent of the Final Product	Wage- Bill	Ren t	Depre- ciation	Mark-up
			Materials				
1. Metal Products	176.1	4.19	40.0	13.2	4.0	0.8	42.0
2. Rubber	98.7	2.17	28.6	20.6	4.3	0.9	45.6
3. Leather	83.0	3.12	54.0	14.4	3.6	1.4	26.6
4. Chemicals	73.1	2.75	49.6	16.4	5.5	1.9	26.6
5. Furniture	70.8	2.27	36.7	25.7	3.7	2.8	31.1
6. Food	67.2	2.47	49.2	16.2	5.2	2.2	27.2
7. Paper	66.0	1.93	36.3	20.6	5.9	2.9	34.3
8. Wood & Cork	62.0	2.72	54.3	17.7	3.8	1.4	22.9
9. Textiles	28.5	1.21	50.2	17.7	5.0	0.8	42.0
10. Non-Metallic Min.	18.9	0.61	40.0	13.2	4.0	0.8	42.0
11. Electrical	16.4	1.65	52.5	22.2	6.7	5.2	13.4
12. Machinery	13.3	1.10	40.1	40.9	3.1	3.8	12.1
13. Miscellaneous	11.2	0.42	20.2	39.3	4.2	9.7	26.6
14. Beverages	4.6	1.03	48.5	38.4	5.1	4.0	4.0
15. Printing	2.3	0.67	43.1	44.8	3.4	5.2	3.4
16. Wearing App.	0	0.70	39.6	103.9	5.8	6.5	55.8
Average	33.0	1.42	45.4	22.1	4.9	4.3	23.3

Source: Same as Table 34 Supra.

X

- (b) The capital output ratio in all eight of them is way above the 1.42 overall average.
- (c) Except for the furniture industry, the share of wages in the value of the final product is below the 22.1 per cent average for all industries.
- (d) Judging by the value of annual depreciation, all of the above 8 industries must have very little capital tied in machinery; on the other hand, whereas, they account for 46 per cent of employment in this sector, their share of total industrial capital is slightly over 30 per cent. It is also worth mentioning that they employ over 53 per cent of all skilled labour. Also the ratio of skilled to unskilled labour is as high as 1:5.
- (e) Judging by the number of establishments within certain categories in this group on the one hand and by the mark-ups they allow on their costs of production, there seems to be some degree of monopoly; thus the rubber industry which counts only 6 establishments allows itself a mark-up of 46 per cent on its costs of production.

X

On the other side of the scale, Tables 34 and 35 show that wearing apparel, printing, beverages, miscellaneous, machinery, electrical non-metallic minerals and textiles show relatively low average rates of return and even a negative one in the case of wearing apparel. Apparently the reasons for this situation are the following:

- (a) These industries are relatively over capitalized judging by the average capital per establishment (LL 200,000) and by the value of depreciation per firm.
- (b) The capital output ratio is low, ranging between 42 per cent and 121 per cent as against an overall average of 142 per cent.
- (c) The share of wages in the value of the final product is rather high, in many instances, running over 35 per cent; besides, due probably to the degree of mechanization the ratio of skilled to unskilled labour in these industries is relatively low, namely, 1:7.5.
- (d) Judging by the mark-up allowed on their cost of production there seems to be a strong competition for their products and/or many marginal firms within this group.

On the whole, the overall average rate of return of invested capital (33%) is rather relatively high and definitely exceptionally so in the case of the first group. "This may be more an indication of high risk than a measure of economic feasibility. The high rates of profit support the proposition that if available capital were redirected in favour of industrial investment then an over-all expansion in industry vis-¹à-vis other sectors would be expected".

Writing about the above conditions in industry, Asfour concludes: "The above, however, should not be taken to mean necessarily that where profits are high new industries could enter the field without throwing part of the existing industry out of business. The survey upon which the above results have been based showed that contact with several establishments, however, did reveal the existence of considerable over capacity, in Lebanese industry as a whole, and a wide variation, in the utilization of capacity among the different industries." The paradox of over capacity and high profits could only mean however, that there is a relatively high element of monopoly among the few industries that are already established. New competitors may force lower prices and

1. Asfour, op.cit., p. 9.

squeezing profits on established industries. Where lowering of prices results in a relatively big increase in sales (i.e. where the elasticity of demand for the product is high) new industries will mean a definite increase in employment."¹

Future Industrial Prospects

As has been pointed out in the course of this dissertation Lebanese industry plays a relatively secondary role; agriculture and trade contribute more apiece to national income. With (a) the competition of other forms of investment for available funds - particularly in real estate and short term commercial loans - and (b) with the weak chance of anticipating a rapprochement between industrialists and merchants whose views, being poles apart, have given way to a grim tug-of-war with respect to a protectionist policy that could artificially foster industrial growth, the obvious question that is likely to come up is "how much scope for industrial development is there in Lebanon?"

The answer to this query can be advanced on two grounds, viz:

In the first place, on the basis of the industrial make-up of the country, it may be argued that in the

1. Ibid., pp. 9-10.

estimates of the industrial potential of the units surveyed¹ most have shown a capacity for stepping up production. Under the circumstances, it would be quite reasonable to say that industrial expansion will not mean a proportionate expansion in the absorption of labour, or in the investment of capital in industrial plant, inasmuch as the present plant and labour force can achieve most of the expanded production.

In the second place much improvement can be introduced on the industrial scene, always bearing in mind, however, the economic limitations of industry in Lebanon, but of which limitations the present level falls very short. If light industries were to remain the rule of the day as they are now¹ they will rely mainly on agricultural products available in the country; then, the success of an industrialization program in Lebanon will depend heavily on the progress that is made in increasing the productivity in agriculture. Not only is agriculture the chief source of employment and the second of national income, but a number of the best immediate opportunities for industrialization are in the processing of food and other

1. Due to the absence of minerals (Supra, p. 153) opinion is unanimous (S.B. Himadeh, op.cit. pp. 133-134 and Gibb, op. cit., p. 8) that industries most suitable for Lebanon are of necessity, light based on agricultural raw materials.

agricultural products - then the problem of raw materials will be on the whole surmounted, even at a higher level of industrial production. As industry develops, some of the surplus labour will be drawn from agriculture. This process should eventually lead to the use of more agricultural machinery, thereby increasing productivity and raising the level of income of agricultural workers; this in turn will tend to increase the local market for industrial products, which is now very limited because of the low income of the agricultural workers who make up the bulk of the population. Industrialization and agricultural improvement are thus dependent on each other.

The following are three main headings under which may be grouped various industries that offer prospects of growth.

(a) Industries that depend on the simple exploitation of available resources. The main industry under this group are hydro-electric projects to which the second part of this chapter is devoted; another important one is fishing.

Fishing can be an important element in the economic development of Lebanon; it is unfortunately ignored and little reference is made to it in official publications. With 220 kms. of coastline Lebanon could build up a worthwhile fishing industry. Expansion of this industry, however, is

conditional on the use of modern techniques on the one hand and on capital outlay for the purchase of equipment on the other; the capital needed is great and "may be beyond the resources of private enterprise"¹.

Not only sea-fishing is important and remunerative: fish ponds are highly so as well. The successful experiments of Palestine along this line can be very instructive.² In 1945 an area of 6,000 dunums of fish ponds produced 1,000 tons of trout; this gives a yield of 167 kilogrammes per one dunum annually; this catch alone compares with the estimated 1,000 and 950 tons of fish caught in Lebanon in 1948 and 1949 respectively.³

The following figures throw some light on the size of this industry in Palestine: fish caught in Palestine in 1944/45 stood at 3436 tons, not including pond culture, the industry engaged 3,357 fishermen using 673 boats.⁴

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1. Gibb, op.cit., p. 64.
 2. The general information and figures relative to fishing and fish-bonds in Palestine are extracted from: Government of Palestine, Survey of Palestine (Jerusalem: Government Printer, 1946), Vol. I pp. 437-439. The survey was prepared for the information of the Anglo-American Committee of Enquiry.
 3. Badre, Monograph No. 1, op.cit., p. 20
 4. Government of Palestine, op.cit.

Thus the average annual yield of Lebanese fishing is about 28% of that of Palestine. It can be safely assumed that owing to the similarity of fishing methods and fishing potentialities on the shores of adjacent waters of both countries, the fishing industry in Lebanon can be developed to the level of its counterpart in Palestine. Its absorptive capacity can be similar also - namely something like 3,500 fishermen can be engaged in fishing in Lebanon. No more than 950 are engaged at present, if the same ratio applying between Palestine and Lebanese yield is to apply between the numbers of fishermen. An additional 2,500 fishermen can be absorbed, provided the equipment is available; still more can be absorbed in industries built around fishing. One is at a loss as to the cost of equipment needed, no figures being available. But it would seem reasonable that no more than LL 7 to LL 10 million would be required to buy(or build) and furnish a fleet of 20 to 30 trawlers and 600 small boats, the value and number working in Palestine in 1945.¹ The net value of the 1,000 tons caught in 1948² was estimated at LL 2.1 million, applying the same value-ratio to a 3,500 tons proposed catch, the net value would be LL 7.35 million, a return high enough to more than fully justify the proposed LL 7 to LL 10 million investment.

1. Jewish Agency, The Jewish Case, (Jerusalem: 1947), p. 475.

2. Badre, op.cit.

Writing on this topic, Gibb justifiably says "We recommend that the Government should pursue an active policy with regard to fishery development"¹.

(b) Industries that are based on the processing of local goods. Since the products of the soil are the main local goods in Lebanon, it would seem natural that any further expansion in industries fall largely in the class of food industries. Other non-agricultural industries of this class include such industries as cement and soap. Recent statistics on the number of industrial establishments² shed some light on industrial progress in this line. (cf. Table 36).

TABLE 36

NUMBER OF INDUSTRIAL ESTABLISHMENTS
IN 1955 AND 1956

<u>Industry</u>	<u>Number of Establishments</u>	
	<u>1955</u>	<u>1956</u>
I. Based on Agricultural Products		
Food	821	859
of which Dairy Products	49	58
Jams, Pastry and Confectionary	210	221
Olive Oil	362	375
II. Based on Non-Agricultural Products		
Cement Products	288	464
Pottery	41	44
Soap	71	76

Source: Commerce du Levant, March 6, 1957.

1. Gibb, op.cit.

2. These figures are not comparable with the national income figures as the former *probably include some handicrafts that were ruled out in the case of the latter.*

(c) The third and the largest group includes industries that depend on imported raw or semi-manufactured goods. It includes such industries as metal industries that depend on imported metals and available scrap, production of furniture wooden goods, leather goods, rubber goods, woollen goods and some chemical industries. The above information also comes handy to prove this point. In the two years 1955 and 1956 the number of foundaries increased from 82 to 95, wooden goods from 218 to 228, metallic furniture fro, 32 to 34, leather goods from 60 to 68, rubber goods from 20 to 23, tricots¹ and paints from 21 to 25.

The Electric Power Problem falls under Industry but calls for a separate treatment; the next section of this chapter is therefore devoted to it.

B. Power

1. Energy Consumption and Economic Growth

² Table 37 indicates the obvious, but rough, positive relation between per capita energy consumption and per capita income for 42 countries. High per capita incomes are found associated with high per capita energy consumption. Evidently, for a country like Lebanon to achieve a high, or still higher per capita income, it must perforce become a

1. Le Commerce du Levant, March 6, 1957.

2. Vide also Table 10, Supra.

heavy, or still heavier, consumer of energy - particularly commercial forms of which potential electric power must, due to the country's water resources, supply the biggest bulk.

The principal reasons for the existence of the energy-income correlation, as well as noticeable deviations from the general pattern, may be found by examining the primary factors which seem to determine energy consumption. Among these partly interrelated variables are the degree of industrialization, the predominance of power-intensive industries, climate, the availability of low-cost hydro-electric power, and the efficiency of energy utilization.

Thus, the determinants of total energy consumption for a particular country at a given time can be broadly identified. The reasons for changes of energy consumption in relation to national income are not easily established for a country, or group of countries, over any considerable period. For some total energy consumption rises much more rapidly than national income; ¹ for others, less rapidly. This, however, refers to total energy consumption. For

1. The components of total energy consumption show similar degrees of positive relation with per capita income. For the electric power component, cf. tables 10 and 37.

TABLE 37

PER CAPITA NATIONAL INCOME, GROSS ENERGY CONSUMPTION AND ELECTRIC
POWER PRODUCTION FOR SELECTED COUNTRIES, 1952.

Country	Per Capita National income (United States dollars)	Per Capita electric power production (kilowatt hours)	Per Capita energy consumption (metric tons coal equivalent)	Country	Per Capita national income (United States dollars)	Per Capita electric power production (kilowatt-hours)	Per capita energy consumption (metric tons coal equivalent)
Australia (1)	912	1,378	3.82	Ireland	385	384	1.81
Austria	348	1,156	1.95	Italy	277	646	.98
Belgium	676	1,085	(2)	Japan	165	604	1.07
Brazil	183	174	.78	Luxembourg	897	2,764	(3)
Burma (1)	43	(3)	.27	Mexico	223	199	.88
Canada	1,284	4,581	7.55	Netherlands	447	828	2.14
Ceylon	109	16	.35	New Zealand (1)	921	1,781	2.96
Chile	289	557	1.11	Norway	714	5,665	5.10
Columbia	219	71	.59	Panama	342	111	.52
Cuba	386	181	1.53	Paraguay	130	26	.28
Denmark	725	621	2.27	Peru	118	32	.57
Dominican Republic	152	50	.51	Philippines	143	46	.36
Ecuador	144	39	.33	Portugal	184	157	.56
Finland	523	1,166	1.83	Puerto Rico	427	328	1.24
France	677	960	2.59	Sweden	914	2,884	4.37
Germany (4)	461	1,121	3.14	Switzerland	972	2,677	2.57
Greece	251	105	.48	Turkey	168	46	.52
Guatemala	162	28	.37	South Africa (1)	270	993	2.12
Haiti (5)	65	5	.25	United Kingdom	715	1,260	4.58
Honduras	137	46	.40	United States	1,857	2,949	8.18
Iceland	588	1,433	3.30	Venezuela	518	136	1.45
India (5)	57	17	.35				

Source: (1) 1952-53

(2) For Belgium and Luxembourg combined, per capita gross energy consumption was 3.80 metric tons coal equivalent. The corresponding per capita national income figure was 683.

(3) Not available

(4) Federal Republic and West Berlin

(5) 1951-52

Source: Per capita national income figures (except that for Chile which was substantially revised) and energy figures from appendix table B of A/CONF.8/802

Per capita electric power production figures derived from population and power production figures derived from population and power appearing in table 1 and 121, respectively, of Statistical Yearbook, 1954, United Nations, New York, 1954.

virtually all countries, the rate of increase in electric power consumption exceeds the increase in GNP in real terms.¹ It has been established that per capita energy consumption constitutes an adequate reflection of the standard of living in a country:² It is, therefore, recognized that thwarting energy demands may impede economic advance.

2. The Power Industry and the Demand for Power

The peculiar nature of the problems inherent in the power industry coupled with several related circumstances in the energy economy highlight the necessity of forward planning to satisfy future power requirements; on the one hand, demand for electricity should be satisfied instantaneously while on the other recourse cannot be made to piled up "inventories" as power, taken as a commodity, does not lend itself to storability. Energy resources, except for hydro-power, are physically limited and undergo drain overtime. Very heavy investment in overhead capital prohibits the possibility of replacement or substitution over a short period of time and, in the case of a country like Lebanon, such heavy investment, can constitute a very serious drain on its limited financial resources and

1. Ibid.

2. Joseph J. Spengler, Proceedings of the American Philosophical Societies (Philadelphia: 1951) Vol. 95, No. 1 pp. 50-51.

and particularly on its vital and precious foreign exchange reserves.

The above conjunctural circumstances therefore, dictate the necessity for the government and other related bodies to pay adequate attention to the question of providing for future power demands on the most efficient basis possible, before large financial commitments are made for the establishment of an electric generation transmission and distribution system. To achieve this end, it is here proposed to limit the forthcoming analysis to, first, a study of the existing power facilities, second, a retrospective view of the growth of power production in the country and, third, an assessment of the future market for power over the coming 10 years.

3. Power Supply Facilities.

Although Lebanon has numerous rivers, the development of hydro-electric power is limited by two factors, namely: (a) the need of an adequate water supply for domestic purposes and for irrigation,¹ and, (b) the considerable difference in the winter and summer flow of most rivers.

1. For the problem of the water supply for domestic purposes, Vide: Ibrahim Abd-el-Al, Construire (Beirut: Imprimerie de l'Ordre Libanais, 1956), pp. 16-17.

Only more detailed geological investigations could determine to what extent the latter handicap could be overcome by a large scale water storage or a national transmission inter-connection system. Even then total power output would still be greater in winter than in summer, but the excess could be consumed in such seasonal operations as heating.

Electric power in Lebanon is presently generated and distributed by one government agency - L'Office¹ d'Electricité et de Transport en Commun - and 43 private companies, the latter operating under state granted concessions.² The Beirut and Tripoli systems, which extend 35-45 kms from each city are interconnected; they have about 200 kms. of 33 kv. and 120 kms of 25 kv. transmission lines.³ The two systems supplied in 1955 over 96.5 per cent of the power generated in the whole country, leaving a remainder of less than 3.5 per cent produced in the Bekaa -⁴ excluding Zahle - and South Lebanon load areas.

At the end of 1955, the installed capacity in the country totalled 68,732 Kw. of which 38,892 Kw - or 56.6

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1. Originally the Beirut Electricity Company, a foreign concern bought out by the Government in 1953.
 2. I.B.R.D., Appraisal of Litani Power and Irrigation Project (Washington, D.C.: August), p.8. ¹⁹⁵⁵
 3. Ibid.
 4. Omar Ajam, Chef du Service des Affaires Electriques au Ministère des Travaux Publics. Interview November 13th 1956.

per cent - were hydro and 29,840 Kw - or 43.4 per cent - were thermal. In 1956, however, due to the pressing requirements of the Beirut load area, total installed capacity was increased by as much as 50 per cent - almost all of it in the Beirut load area - bringing the total installed capacity up to 103,274 Kw., of which 53,354 Kw - or 51.7 per cent - hydro, and 49,920 Kw. - or 48.3 per cent - thermal.¹ The name of the plants the load area, the principal load, the year of installation, the type of power plant and the energy produced in 1955 are given in Table 38.

4. Past and Present Production

An analysis of the past and present electrical load with the projection of the findings of such an analysis into the future, applying factors which are known or which can reasonably be forecast, that would influence the load, is an important factor in arriving at estimates of the magnitude and characteristics of the future load for use in planning power resource development. The following paragraphs discuss - in as much detail as is limited by the dearth of available information, and by the purpose of this dissertation - the past and present electrical situation in Lebanon.

1. Cf., Table 38.

a. Load Areas and their Growth

The country is divided into four principal load areas: Load area division boundary locations are based upon such factors as natural geographic separations, locations of existing power system, boundaries of political subdivisions, and boundaries of concessionary load areas.

Load Area I is the principal load center in the country; it includes the city of Beirut and coastal towns and villages from Nahr Ibrahim in the north to the Bisri River in the south, extending eastward over the mountains to the Syrian border and includes, together with Zahle, a portion of the central Bekaa.

Load Area I is supplied by: (a) one government authority - L'OETC - that in addition to its own generation, purchases power from three private companies - Nahr Ibrahim, El Bared and NETCO - for distribution; (b) 18 comparatively small concessionaires, 15 of which distribute electrical energy purchased wholesale from the OETC and two - one at Jounieh and the other at Zahle - have small power plants to supplement the power purchased from the OETC; and, (c) a small 136^{KW} - hydro-plant supplying Kab Elias. The interconnected Beirut system serving around 800,000 persons, had 47,432^{KW} installed generating capacity (cf. Table 38) at the end of 1955. The small power plants are not interconnected with the Beirut system and energy generated by them amounts to under 3 per cent of the total in load Area I as shown in Table 39.

INSTALLED CAPACITY & ENERGY PRODUCTION IN THE FOUR LOAD AREAS
OF POWER PLANTS IN LEBANON IN 1955

Name of Plant	Load Area	Principal Load	Year Installed	1955 Installed Capacity KW	Type of Plant	1955 Energy Production in KWh	1956 Installed Capacity KW
Safa	I	Beirut	1932	6,400	Hydro	25,179	13,200
Nahr Ibrahim (1)	I	Beirut	1950 - 55	5,000	Hydro	20,154	12,000
Beirut Diesel	I	Beirut	1924 - 50	12,400	Diesel	45,210	12,400
Bared (2)	I	Beirut	1954 - 56	13,500	Hydro	27,185	14,000
Netco	I	Beirut	1954 - 55	7,200	Thermal	29,095	7,200
Kab Elias	I	Zahle	1925	136	Hydro	191	136
Wadi - el Arayech (3)	I	Zahle	1925 - 55	936	Hydro	2,286	936
Zahle	I	Zahle	1952	500	Diesel	237	500
Nahr el Kab	I	Jounieh	1925	260	Hydro	500	260
Maghazel	I	Hadeth	1954	1,100	Thermal	2,540	1,100
Ghamoun	I	Beirut	1956		Thermal		15,000
Beirut	I	Beirut	1956		Turbogaz		5,000
Total Hydro Area I				26,232		75,495	40,532
Total Thermal Area I				21,200		77,082	41,200
Total Area I				47,432		152,577	81,732
Abou-Ali (4)	II	Tripoli	1930 - 55	6,750	Hydro	23,713	6,750
Abou-Ali (5)	II	Tripoli	1932	1,600	Thermal	2,943	1,600
Becharre	II	Tripoli	1925	1,630	Hydro	(6)	1,630
Tripoli	II	Tripoli	1955	2,200	Diesel	8,280	2,200
Nahr - el - Joz	II	Chekka Cement	1950 - 51	4,220	Hydro	12,333	4,280
Chekka	II	Chekka	1950	3,200	Diesel	14,052	3,200
Syr	II	Syr Vill.	1939	26	Hydro	20	30
Total Hydro Area II				12,626		36,066	12,690
Total Thermal Area II				7,000		25,275	7,000
Total Area II (a)				19,626		61,341	19,690
Saida	III	Saida	1930 - 51	1,290	Diesel	5,380	1,290
Tyr	III	Tyr	1948	140	Diesel	61	140
Machgara	III	Machgara	n.e.	22	Hydro	36	22
Nabatiye	III	Nabatiye	1933	64	Diesel	51	64
Hasbaya	III	Hasbaya	1937	16	Diesel	4	16
Rachaya	III	Rachaya	1939	10	Diesel	6	10
Total Hydro Area III				22		36	22
Total Thermal Area III				1,520		5,502	1,520
Total Area III (b)				1,542		5,538	1,542
Baalbeck	IV	Baalbeck	1947	120	Diesel	200	200
Ainata	IV	Ainata	1948	12	Hydro	110	110
Total Hydro Area IV				12		110	110
Total Thermal Area IV				120		200	200
Total Area IV				132		310	310
Total Hydro All Areas				38,892		111,707	53,354
Total Thermal All Areas				29,840		108,059	49,920
Total All Areas				68,732		219,766	103,274

Source: (a) Excluding the I.P.C. private plant, that supplies all of the Company's power requirements; power is generated on the premises using refinery products and by-products

(b) Excluding the Medreco power plant that caters to the oil refinery

- (1) 3200 Kw were installed in 1950, 1,800 Kw in 1955 and 7,000 Kw in 1956.
 - (2) 9,500 Kw were installed in 1954, 4,500 Kw in 1955-56
 - (3) 550 Kw were installed in 1924, 386 Kw in 1955
 - (4) 5440 Kw were installed in 1930, 1310 Kw in 1955
 - (5) The plant had been in operation in France since 1908
 - (6) Production included under Abou Ali hydro plant
- I) USOM Development Plan for the Litani River Basin (Denver 1954)
Vol. I p. VI - 5
- II) Ministry of National Economy, Bulletin Statistique Trimestriel
Vol. VII No. 1
- III) S. Mounla President de l'OETC, Commerce du Levant, Jan. 7, 1956
- IV) Interview with Omar Ajam, op.cit.

TABLE 39

1944 TO 1951 ELECTRICAL ENERGY CONSUMPTION
IN CONCESSIONS AND VILLAGES OF AREA I

<u>Years</u>	<u>Purchase From Beirut System Th. Kwh.</u>	<u>Generation of Independent Plants Th. Kwh.</u>	<u>Total Consumption of Concessions Th. Kwh.</u>	<u>Percent of Load Generated By Concess. %</u>
1944	3,351.6	95.0	3,446.6	2.76
1945	3,959.1	112.0	4,071.1	2.75
1946	4,537.8	128.0	4,665.8	2.74
1947	5,421.7	153.0	5,574.7	2.74
1948	6,408.5	180.0	6,588.5	2.73
1949	7,542.8	213.0	7,755.8	2.75
1950	8,689.0	244.0	8,933.0	2.75
1951	9,235.4	264.0	9,499.4	2.78

Sources: U.S.O.M. P. VI-7 op.cit

TABLE 39

1944 TO 1951 ELECTRICAL ENERGY CONSUMPTION
IN CONCESSIONS AND VILLAGES OF AREA I

<u>Years</u>	<u>Purchase From Beirut System</u> <u>Th. Kwh.</u>	<u>Generation of Independent Plants</u> <u>Th. Kwh.</u>	<u>Total Consumption of Concessions</u> <u>Th. Kwh.</u>	<u>Percent of Load Generated By Concess.</u> <u>%</u>
1944	3,351.6	95.0	3,446.6	2.76
1945	3,959.1	112.0	4,071.1	2.75
1946	4,537.8	128.0	4,665.8	2.74
1947	5,421.7	153.0	5,574.7	2.74
1948	6,408.5	180.0	6,588.5	2.73
1949	7,542.8	213.0	7,755.8	2.75
1950	8,689.0	244.0	8,933.0	2.75
1951	9,235.4	264.0	9,499.4	2.78

Sources: U.S.O.M. P. VI-7 op.cit

Load Area II extends along the coast from Nahr Ibrahim to the Syrian border in the north, including the city of Tripoli and surrounding villages and extending east to the crest of the Lebanon mountain range.

Load Area II is the second load area; it is served by the Kadischa which furnishes off-peak electrical energy to the Chekka cement factory; the latter, since the installation in 1951 of its own modern hydroelectric plant of Nahr-el-Joz, utilizes its own facilities for the generation of approximately 70% of its requirements. The system is interconnected. The system serves a population of around 270,000 persons and had 19,626 Kw. of generating capacity in 1955 (cf., Table 38.)

Load Area II contains the villages of southern Lebanon and the cities of Saida and Tyre.

Communities in Load Area III, where power is available are served by small scattered power plants, none of which is interconnected with another system. It should be noted that in this area with a population of around 250,000 only Saida, Tyre and eleven other villages (60,000) persons, had electricity in 1955. Total available generating capacity stood at 1,542 Kw. in 1955 (cf., Table 38).

Load Area IV includes the eastern slopes of Mt. Lebanon, the northern part of the Bekaa valley and the northwestern slopes of the Anti-Lebanon range.

Population in this load area was estimated at 100,000 persons in 1955; with the exception of Baalbeck (population 10,000) and Ainata, (population 5,000), no other villages have any electric power. Installed capacity in 1955 stood at 132 kw.

Table 40 below gives the relevant information on production by load areas since 1936 to date:

Table 41 summarizes the annual compound rates of increase evidenced in the various load areas as well as in the whole country, first over chosen periods and, second over the whole period 1936-1945 for which statistics were available. The choice of the intermediary periods is by no means arbitrary; such periods have been chosen to coincide with certain main political events that are found to have a direct bearing on the behaviour of electric power production. Thus 1936-1939 represents a normal prewar period during which increasing concern was brought to bear on the electricity supply industry; the 1940-45 period is characterized by abnormal war conditions, while 1946-1955 is one of readjustment and normal growth.

The data presented in the two tables lends itself to some interesting observations mainly with regard to the direct association of political considerations and the growth of the electricity supply industry. The noted ups and downs in electricity production will first be taken up on the national level, deferring to a later stage the analysis of the load areas.

TABLE 40
 GENERATION OF ELECTRIC POWER BY
 LOAD AREAS 1936-55

Year	L.A. I	L.A. II	L.A. III TH. KWH	L.A. IV	TOTAL
1936	15,900	12,800	1,000		29,700
1937	17,000	14,900	1,150		33,050
1938	19,000	14,700	1,200		34,900
1939	21,900	17,000	1,300		40,200
1940	21,500	11,200	1,450		34,150
1941	20,500	9,500	1,600		31,600
1942	24,500	17,500	1,750		43,750
1943	33,000	14,300	2,000		49,300
1944	35,100	13,200		83	48,700
1945	42,021	15,700		99	58,200
1946	45,976	17,300		109	63,800
1947	53,639	20,000		126	74,250
1948	63,680	23,600		150	88,000
1949	76,092	28,400		178	105,350
1950	83,756	31,300		194	116,000
1951	101,922	38,959		240	142,038
1952	160,038	43,000	1,040	270	160,038
1953	130,025	48,500	1,170	305	180,000
1954	126,324	50,464	2,841	310	179,939
1955	152,577	61,341	5,538	310	219,766

Source: i - 1936-1943 inclusive: Omar Ajam, L'Equipe-ment Electrique du Liban, (Beirut: Imprimerie Catholique; 1952) p.30

ii - 1944-1953 inclusive: U.S.O.M. working papers on Litani River Development op.cit as contacted to the author by Mr. Snyder of Point IV in July 1956.

iii - 1954-1955 inclusive: worked out by the author from Bulletin Statistique Trimestriel op.cit.

TABLE 41

RATES OF INCREASE IN ELECTRIC POWER GENERATION
BY LOAD AREAS IN 1936 - 1955

Period	Load Area I	Load Area II	Load Area III	Load Area IV	Overall
1936-1939	11.2%	10.0%		9.1%	11.1%
1940-1945	14.4%	6.7%		-	11.1%
1946-1955	15.8%	15.0%	33.4%	12.3%	14.6%
1936-1955	12.6%	8.6%		9.7%	11.3%
Redoubling Period	5.7 yrs	8.4 yrs		7.4 yrs.	6.4 yrs.

Note: Rates calculated by the compound interest formula, viz: $A = A(1+r)^n$

Source: Supra, Table 40

For the country as a whole the 1936-1939 period was one of normal expansion associated with an annual compound rate of increase in electricity production of 11.1 per cent, or a rate corresponding to a redoubling period of $6\frac{1}{2}$ years.

The period 1940-41, witnessed a sharp decline in production as a result of the disruptive effects of the initial war years, together with the black-out regulations enforced in the country. 1941, the year the country was occupied by allied forces entering the country from Palestine, showed total production - 31.6 million Kwh. (cf., Table 40) at a level almost that of 1936 and 22 per cent short of that of 1939. However, with the occupation of the country in 1941, production was stepped up tremendously - 38 per cent - in 1942, and the production curve picked up until 1946 at the compound annual rate of 13.5 per cent thus corresponding to a redoubling period of slightly over 5 years.

The 1946-1955 period was one of real growth with demand forthcoming from all load areas; during this period, unlike the 1940-1945 one, the country was in a position to relieve the intensive pressure on its system by importing generating equipment from abroad; thus, around 24,500¹ Kw - 17,000 Kw hydro and 7,524 Kw thermal - were installed between

1. Omar Ajam, op.cit., and Table 38, Supra.

1946 and 1950 inclusive; and, 28,000¹ - 17,000 Kw hydro and 11,000 Kw thermal - in the period 1951-55 inclusive. This trend was continued in 1956 when 34,542 Kw - 14,462 Kw hydro and 20,080 Kw thermal were installed.²

The above attests to the ever increasing demand for power in the country, with production doubling since 1939 every 6.4 years. In 1955 per capita consumption of power was 147 Kwh. as against 40 kwh. in 1942.

It must be emphasized that the rate of increase is by no means abnormal; on the contrary, it is to be expected since many factors influencing the evidenced increase in demand for power cannot be counted among the primordial factors³ that normally exert any pressure on power demand in a fairly advanced country where the industry has really reached a satisfactory national level. Thus in Lebanon the evidenced growth is believed to have been mainly due to more people being connected to one grid or another, to the substitution of electric power for other forms of energy and to the increasing usages to which such power can be put. In other words one may justifiably argue that until the present time, with the limited present generating capacity, consumption is definitely below

1. Table 38, Supra.

2. Ibid.

3. Such as a change in the industrial set-up of the country, availability of raw materials for processing, power tariffs, etc.

normal; thus, in 1951, per capita consumption in load areas III and IV was estimated at 4 Kwh, and 2.5 Kwh¹ respectively.

As to the growth by load areas, the fact that load areas III and IV with a combined population of slightly under 400,000 persons,² and a total generating capacity of only 1,674 Kw. in 1955,³ constrains the dismissal of the analysis of observed past trends of growth in power production in these areas in the coming analysis. As to load areas I and II, they will be analysed together hereunder, due to the fact that **it is** X believed that the reasons of growth in them are common to both.

The main reasons for the very high rates of increase outlined in the previous analysis are believed to be true of the two sectors. However, one more reason calls for very special attention, namely the distribution and density of the population.

The principal electric power loads in Lebanon have developed in and around the two major cities of Beirut and Tripoli (cf. Table 38). The high mountains have acted as a barrier to the spread of the benefits of civilization; thus despite the country's small size, the extention

1. USOM. op.cit., Plate VI-1

2. Population estimated by USOM, Ibid., at 350,000 in 1951; at a rate of natural increase of 21 per thousand, 1955 population would stand at 389,000 persons.

3. Cf. Table 38.

of power system into the more remote or economically poor areas in northern, northeastern and southern Lebanon involved costs which made any such extension unattractive to power companies. The net result was to have main load areas either in or just outside the two main cities of Beirut and Tripoli where population density is extremely high.

The distribution of the population between rural and urban areas and the size of the towns and villages bear directly on household power consumption - which forms around $\frac{1}{3}$ of total power produced.¹ In this context, a study,² made to secure some indication of the trend of growth of load among various population categories in India, will be used to explain the Lebanese experience. Residential communities were divided into five population groups; the maximum demand in watts and energy sold in Kw per capita per annum were calculated; highly industrialized towns were omitted in order to have an indication of power requirements and its growth for domestic and commercial uses, municipal services, public lighting, cottage and small scale industries. The period chosen was between 1939 and 1948, thus covering one period of restrictions on

1. Table 44, Infra.

2. I.B.R.D., Research Files.

civilian requirements, and, one of abnormal demand. It can be safely said that the average over the entire period may be taken as a trend of normal growth. The findings are reproduced in the following tables:

The following tables reveal that although initial demand does not vary with the size of the population yet the rate of growth is higher for densely populated areas. Rural areas - under 10,000 indicate a rate of growth of 5.6 per cent as against a $7\frac{1}{2}$ - $15\frac{1}{2}$ per cent for larger urban city areas. With regard to energy consumption, again the rate of growth is highest in big cities.

b. Growth by Sectors

A consideration of the growth of power consumption by economic sectors may lead to a better understanding of over-all growth and be of assistance in estimating future demand. In the case of Lebanon, the number of years that can be studied is limited by the available data. In the following analysis the consumption by sectors will be discussed under three broad headings, namely (a) the private sector, (b) the industrial sector including traction and (c) losses.

Table 44 gives the consumption of electric power by sectors in Lebanon for the nine-year period 1944-1953.

The table shows that (a) as far as their share in the market for power is concerned, the sectors by order

TABLE 42

MAXIMUM DEMAND

Population Group In Th.	No. of Localities	Watts per Capita		Percentage Annual Increase
		1939	1948	
Up to 10	14	6.1	9.2	5.6%
10 but less than 20	40	5.1	8.5	7.4%
20 but less than 50	74	4.2	6.7	6.6%
50 but less than 100	38	4.1	8.1	10.8%
100 but less than 250	16	4.1	9.9	15.7%

Source: I.B.R.D. Research Files

TABLE 43

ENERGY CONSUMPTION

Population Group In Th.	No. of Localities	KWH per Capita Per Annum		Percentage Annual Increase
		1939	1948	
Up to 10	14	7.1	17.2	15.8%
10 but less than 20	40	9.4	23.7	17.0%
20 but less than 50	74	10.0	21.0	12.2%
50 but less than 100	38	11.6	28.7	16.4%
100 but less than 250	16	12.7	39.0	23.0%

Source: I.B.R.D. Research Files

of importance are: (i) the industrial, (ii) the private, (iii) losses, (iv) traction and (v) miscellaneous sectors; (b) the various sectors are found to claim a more or less constant percentage share of the total market over a fairly long period. A study covering western European countries shows that both facts revealed by Table 44 are true of 18 O.E.E.C. countries; besides it was found, with regard to the constant percentage share of the various sectors, that when this constant relationship of the various sectors to the total is disturbed, first the change is found to take place very gradually and rarely appreciably from year to year and second in the rare cases of a spontaneous and appreciable change, such a change can be imputed to an obvious reason, such as a historical event or a shift from a peace to a war economy.

i- Industrial Load

Table 45 gives the industrial load in Areas I and II.

The table reveals that the industrial load in the country is proportionately distributed between load Area I - 60 per cent - and load Area II - 40 per cent.

The "industrial sector" carries the heaviest weight and maintains throughout the whole 9-year period the coveted position and seems to have lately confirmed itself in this

1. The Study was made by the author when at I.B.R.D.

TABLE 44

CONSUMPTION OF ELECTRIC POWER BY SECTORS.

1944-53.

In Th. Kwh.

Year	Industry Kwh	%	Traction Kwh	%	Private Kwh	%	Miscellaneous (1) Kwh	%	Losses Kwh.	%	Total Kwh
1944	23250	47.7	1460	3.0	15870	32.5	1506	3.2	6614	13.6	48,700
1945	28000	48.1	1870	3.2	18973	32.6	1805	3.2	7552	12.9	58,200
1946	30500	47.8	2240	3.5	20615	32.3	1848	3.2	8468	13.3	63,800
1947	35500	47.8	2840	3.8	24272	32.7	2303	3.2	9335	12.6	74,250
1948	41500	47.2	3530	4.0	28484	32.4	2746	3.1	11740	13.3	88,000
1949	49700	47.2	4400	4.2	34129	32.4	3276	3.2	13845	13.1	105,350
1950	55000	47.4	5180	4.5	37641	32.4	3604	3.2	14575	12.6	116,000
1951	66470	46.8	6251	4.4	45619	32.1	4347	3.1	19345	13.6	142,038
1952	75000	46.9	7000	4.4	51532	32.2	4980	3.1	21526	13.5	160,038
1953	85000	47.2	7800	4.3	57947	32.2	5571	3.2	23682	13.1	180,000
Compound rate of Increase	15.5%		20.5%		15.5%		15.7%		15.2%		15.7%
Redoubling period	4.6 y.		3.5 y.		4.6 y.		4.6 y.		4.7 y.		4.6 y.

(1) Including Agricultural uses, municipal lightning and domestic water in the ratios 1.5 : 1.5 : 1 respectively

Source: Same as in Supra Table 40 footnote (ii)

TABLE 45
INDUSTRIAL LOAD IN LOAD AREAS I & II
1944-1953

Year	Load Area I		Load Area II		Total Th. Kwh.
	Th. Kwh.	Percent	Th. Kwh.	Percent	
1944	14,000	60.2	9,250	39.8	23,250
1945	17,000	60.7	11,000	39.3	28,000
1946	18,500	60.7	12,000	39.3	30,500
1947	21,500	60.6	14,000	39.4	35,500
1948	25,000	60.2	16,500	39.8	41,500
1949	30,000	60.4	19,700	39.6	49,700
1950	33,000	60.0	22,000	40.0	55,000
1951	39,462	59.3	27,008	40.7	66,470
1952	45,000	60.0	30,000	40.0	75,000
1953	51,000	60.0	34,000	40.0	85,000

Note: L.A. III & IV have no industrial power.

Source: Same as Table 44 Supra

position. It is interesting to note that industrial electricity consumption tends to increase more rapidly than industrial production; the above study¹ showed that for 1951-1953, a period of recession in Europe that succeeded one of intense economic activity, indices of industrial power consumption continued to increase, often substantially, whereas indices of industrial production either remained stationary or else increased less rapidly.

The "traction sector" presents no problem for the analyst simply because all the power consumed in this sector is accounted for by the street car system in Beirut. The high rate of increase can be imputed to the growing size of Beirut especially due to a constant rural exodus to the capital; these new comers are poor and make great use of this system of cheap public transportation.

In the private sector the use of electric power has been growing at a fairly high rate; the average overall rate for the 9 year period has been of the order of 15.5 per cent per annum.

Table 46 gives private consumption of electricity by load areas:

1. Ibid.

TABLE 46

PRIVATE LOAD BY LOAD AREA - 1944-1953

	Load Area I Th. Kwh. Percent	Load Area II Th. Kwh. Percent	Load Area III Th. Kwh. Percent	Load Area IV Th. Kwh. Percent	T o t a l
1944	13,700 86.3	1,900 12.0	235 1.5	35 0.2	15,870
1945	16,400 86.4	2,250 12.0	282 1.5	41 0.2	18,973
1946	17,800 86.3	2,460 12.0	310 1.5	45 0.2	20,615
1947	21,000 86.5	2,860 11.8	360 1.5	52 0.2	24,272
1948	24,600 86.3	3,400 12.0	422 1.5	62 0.2	28,484
1949	29,500 86.4	4,050 11.9	505 1.5	74 0.2	34,129
1950	32,500 86.5	4,500 11.8	560 1.5	81 0.2	37,641
1951	39,399 86.1	5,540 12.2	680 1.5	100 0.2	45,619
1952	44,500 86.3	6,150 11.9	770 1.5	112 0.2	51,532
1953	50,000 86.3	6,950 12.0	870 1.5	127 0.2	57,947

Source: Same as Table 44. Supra.

As seen from Table 46, the heavy bulk of private consumption is in Load Area I. This is expected for various reasons, viz. (a) load areas III & IV have such an insignificant amount of power that it can be safely disregarded, the balance, which is over 98% is consumed in Load Areas I and II; (b) population density and distribution in load area I is definitely higher than in load area II; and, (c) although there are no figures to bear us out, yet it can be safely assumed that there is a sizable difference in per capita incomes in both load areas.

The under consumption of domestic electric power in Lebanon is better shown by comparing per capita domestic consumption in Lebanon with that in the O.E.E.C. countries thus in 1953 per capita domestic consumption in Lebanon stood at 40 Kwh per annum as compared with Norway, 1810 Kwh Sweden: 702 Kwh, UK: 513 Kwh Denmark: 360 Kwh, Germany: 268 Kwh, Luxembourg: 162 Kwh., Belgium 158 Kwh, the Saar: 145 Kwh, Italy: 115 Kwh, Greece: 46Kwh, Portugal: 36 Kwh and Turkey 24 Kwh.¹ It must be noted that consumption was particularly high in countries with much hydro power and in the UK where most power (around 85% in 1953) was accounted for by public supply systems. Besides, questions of climate and geographic location should not be overlooked, in fact

1. Ibid.

these factors explain in part why domestic consumption in northern countries is higher than in the southern ones.

The reason for the "losses" of electrical power amounting to between 12.5 and 13.5 per cent (cf. Table 44) occurring in transmission and distribution admit of a highly technical character and are therefore beyond the scope of the present analysis. It may, however, be interesting to note that losses form a very "normal" percentage; losses in O.E.E.C. countries ranged between 5 per cent and 20 percent in 1953.¹

5. Future Power Requirements

It must be noted that in estimating the future power requirements in the country, the object is to find out whether or not the planned development in this direction will not present problems of over capacity in the future. It has been shown that until now electrical energy consumption in load areas III and IV has amounted to between 2 and 3 per cent (Cf. Table 38) of the total national consumption. This, in addition to the fact that no considerable extension of power systems into these two areas is expected to occur

1. Ibid.

until during the later part of the time period under consideration in the present power market study, constrains the assumption that the usage in these areas will remain relatively very low. The future power requirements will therefore be more or less limited to load areas II and III.

The dearth of power statistics and information on the major factors influencing present and estimated future electric power requirements - such as natural resources, per capita incomes in various load areas, industrial production indices etc. - leaves the analyst with only one major tool, namely: per capita consumption.

Table 47 below gives the estimated population at five years intervals between 1939 and 1970.

TABLE 47

ESTIMATED POPULATION, 1939-1970 (In th.)

<u>Load Area</u>	<u>1939</u>	<u>1945</u>	<u>1951</u>	<u>1955</u>	<u>1960</u>	<u>1965</u>	<u>1970</u>
I	510	596	704	792	902	1,021	1,125
II	205	240	255	270	292	313	334
III	213	216	247	250	258	262	269
IV	92	95	98	100	103	105	107
TOTAL	<u>1,020</u>	<u>1,147</u>	<u>1,304</u>	<u>1,412</u>	<u>1,555</u>	<u>1,701</u>	<u>1,835</u>

Source: Adapted from USOM Litani report, op. cit., Table VI-7 for year 1951-1970, and estimated for 1939, 1945.

From Tables 47, and 40 above, Table 48 is prepared to give the per capita consumption for load Areas I and II and the compound rates of increase in per capita consumption over these periods.

TABLE 48

PER CAPITA POWER CONSUMPTION AND AVERAGE ANNUAL RATES OF INCREASE, 1939-1955 IN LOAD AREAS I & II

A. <u>Per Capita Power Consumption</u>				
Year	Load Area I		Load Area II	
	Population Thousands	Power Consumption Mil. Kwh	Population Thousands	Power Consumption Mil. Kwh
		Per Capita Pow. Cons. Kwh		Per Capita Pow. Cons. Kwh
1939	510	21.9	205	17.0
1945	596	42.0	240	16.0
1951	704	102.0	255	39.0
1955	792	153.0	270	61.3

B. <u>Average Compound Annual Rates of Increase In Per Capita Consumption</u>		
Period	Load Area I	Load Area II
	1939-1945	8.7%	Negative
1945-1951	12.7%	14.8%
1951-1955	7.5%	10.4%
1939-1955	11.8%	6.5%

Sources: Tables 40 & 47 Supra

The adopted estimated future average rates of increase per capita usage in load areas I and II will be 7.5% and 6.5% respectively. These rates will be adopted for two reasons, namely: (a) the 7.5 per cent rate (in load area I) is representative of the most normal period within the series, while the 6.5 per cent (in load area II) covers a period of curtailment of demand and a second of abnormal one; the 6.5 per cent average over the entire 1939-1955 period may be therefore taken as a trend of normal growth; and (b) the fact that they represent the lowest rates of increase will give results that will represent the most conservative future estimates of energy requirements.

TABLE 49

FUTURE ENERGY REQUIREMENTS

<u>YEAR</u>	<u>Load Area I</u> <u>Mil. Kwh.</u>	<u>Load Area II</u> <u>Mil. Kwh</u>	<u>Total</u> <u>Ml. Kwh.</u>
1955	193.1	61.3	254.4
1960	250.0	90.8	340.8
1965	406.6	133.4	540.0
1970	645.0	195.0	840.0

Sources: Tables 47 and 48, Supra.

It would not be unreasonable to assume that load areas III and IV will require some 160 million Kwh. by 1970, bringing total future requirements in the country to 1,000 million K_wh by 1970, thus coinciding with the IBRD projections until that date. The IBRD projections are reproduced in Table 50.

TABLE 50

ESTIMATED FUTURE ELECTRICAL ENERGY CONSUMPTION, IN MILLION KWH ESTIMATES

	<u>Actual</u> <u>1951</u>	<u>1955</u>	<u>1960</u>	<u>1965</u>	<u>1970</u>
Residential & Commercial	45.6	85.7	174.0	311.0	499.0
Industrial	66.5	73.9	124.0	203.0	320.5
Agricultural	1.6	2.7	4.5	7.7	15.0
Municipal Lighting	1.6	2.7	6.7	12.5	20.3
Traction	6.3	8.0	14.8	17.9	19.6
Domestic Water	1.1	1.8	2.8	4.4	7.1
Losses	19.3	26.2	44.2	73.5	118.5
TOTAL	142.0	201.0	371.0	630.0	1,000.0

Source: I.B.R.D. Op.cit

Table 50 above reveals that the IBRD experts estimate that in the 20 year period 1951-1970, there will be a striking change in the composition of power consumption by sectors; thus whereas in the pre 1951 period the private sector accounted for one third of total consumption, this sector confirms itself year after year until by 1970 it would account for 50 per cent of total consumption. On the other side of the scale, the situation is reversed for the industrial sector which accounts for 47 per cent of total consumption in 1951 and is expected to claim 32 per cent only of total consumption by 1970. The remaining sectors are expected to maintain their position percentage-wise.

For the same period, the I.B.R.D. estimates the future compound annual rates of increase in the various sectors as follows: private sector: 13.6 per cent; industrial sector: 8.7 per cent, traction: 6.2 per cent; miscellaneous 12.8 per cent; and losses 10.0 per cent. The overall rate being of the order of 10.8 per cent (Cf. Table 50.)

Table 51 gives the summary of capabilities and power requirements in Lebanon until 1970. The table is based on plants already existing, under construction and planned.

TABLE 51

SUMMARY OF CAPABILITIES & POWER REQUIREMENTS

(Based on Plants existing and under Construction)

Description	1955		1960		1965		1970	
	Kw	Th. Kwh	Kw	Th. Kwh	Kw	Th. Kwh	Kw	Th. Kwh
A. Existing Power Supply								
Safa, hydro (1)	6,400	25,179	13,000		13,000		13,000	
Nahr Ibrahim, hydro (2)	5,000	20,154	20,000		20,000		20,000	
Beirut Diesel (3)	12,400	45,210	10,000					
Bared, Hydro	13,500	27,185	13,500		13,500		13,500	
Netco, Thermal (4)	7,200	29,095						
Kab Elias, Hydro (5)	136	191	136					
Wadi el Arayech, hydro (5)	936	2,286	936					
Zahle, Diesel (6)	500	237						
Nahr el Kalb, Hydro (5)	260	500	260					
Maghazel, Thermal (6)	1,100	2,540						
Chamoun, Thermal (7)			30,000		30,000		60,000	
Beirut, Tubogaz (8)			5,000		5,000		5,000	
Jour, hydro (9)			24,000		24,000		24,000	
Bisri, hydro (10)					60,000		75,000	
Abou Ali, Hydro (11)	6,750	23,713	19,550		19,550		19,550	
Abou Ali, Thermal (12)	1,600	2,943						
Becharre, Hydro (13)	1,630		650		650		650	
Tripoli, Diesel	2,200	8,280	2,200		2,200		2,200	
Nahr el Joz, Hydro	4,220	12,333	4,220		4,220		4,220	
Chekka, Diesel (14)	3,200	14,052	3,200					
Syr, Hydro (15)	26	20	26					
Saida, Diesel (16)	1,290	5,380	500					
Tyre, Diesel (17)	140	61						
Machghara, hydro (18)	22	36						
Nabatiye, Diesel (17)	64	51						
Hasbaya, Diesel (17)	16	4						
Rachaya, Diesel (17)	10	6						
Bealbeck, Diesel (19)	120	200						
Ainats, hydro (20)	12	110						
Yammouneh, hydro (21)			12		12		2,000	
Orontes, hydro (22)			2,000		2,000		3,000	
Kelia, hydro (Dibbine) (23)			3,000		3,000		24,000	
Zrariye, hydro (24)							24,000	
Awali, hydro (25)							36,000	
Total	68,732	219,766	152,212	371,000	221,132	630,000	296,120	1,000,000
Peak Load (Kw) (b)	60,000		105,000		166,000		250,000	
B. Energy Requirements (Mil. Kwh) (c)								
L.A.I.				250.0		406.6		645.0
L.A.II.				90.8		133.4		195.0
L.A.III & IV				30.2		91.0		160.0
Total (d)		219.8		371.0		630.0		1,000.
Load Factor		41.81%		40.33%		43.32%		45.66%

- (1) 6,600 Kw installed in 1956
- (2) 7,000 Kw installed in 1956 and 8,000 Kw in 1959
- (3) 2,400 kw withdrawn in 1959 and 10,000 kw in 1962 relegated as reserve capacity
- (4) Withdrawn and relegated to reserve in 1959
- (5) Withdrawn in 1965
- (6) Withdrawn in 1960 of which half relegated to reserve.
- (7) 15,000 kw installed in 1956, 15,000 kwh in 1959, and 30,000 kw in 1970
- (8) 5,000 kw installed in 1956
- (9) 24,000 kw installed in 1959
- (10) 60,000 kw installed in 1962 and 15,000 kw in 1968
- (11) 11,300 kw installed in 1959 and 1,500 kw in 1960
- (12) Retired from service in 1959
- (13) 980 kw retired from service in 1959
- (14) relegated to reserve in 1962
- (15) retired from service in 1962
- (16) 790 kw retired in 1959 and 500 kw relegated to reserve in 1962
- (17) relegated to reserve in 1959
- (18) Withdrawn in 1962
- (19) Relegated to reserve in 1959
- (20) Withdrawn in 1962
- (21) Installed in 1958
- (22) Installed in 1960
- (23) Installed in 1965
- (24) Installed in 1966
- (25) Installed in 1970

Source: (a) - i. Same as Table 38 Supra
 ii. I.B.R.D. Litani Report Op.cit
 (b) Ibid (a ii)
 (c) i. Table 49 Supra
 (d) I.B.R.D. Litani Report, Op.cit

It can be concluded from Table 51 that the proposed investments in power facilities between 1955 and 1970 are fully justified; this is because after adopting the minimum rates of increase in power consumption it was found (cf. Table 51) that the proposed installations will be just sufficient to cope with the estimated requirements with plants operating at between 40 per cent and 46 per cent load factor.

6. Power Rates.

The object of this section is to advance a hypothesis that the manipulation of power rates will not have a considerable effect on power consumption in Lebanon.

The economic problem of the elasticity of demand for electricity cannot be considered solely in the light of the costs of supply and the consequent tariff charges. It has been shown in the course of the previous discussion that private and industrial consumption in Lebanon account for over 75 per cent of total power consumed in the country. From this fact it is obvious that the question of power rates must be related to (a) the incomes earned by the consumers and the various other claims upon that income, and (b) the share of power in the cost of the finished product. It is feared that undue importance is being given a priori to the effect of power rates on electricity consumption. Very many considerations seem to militate against the restrictive effect of an increase in rates on

consumption. Validity of this hypothesis lends itself to a critical examination from two main angles, first, from the point of private consumption, and second, from the point of industrial consumption.

1. Power Rates and Private Power Consumption

As far as private power consumption is concerned, even assuming that a supply system has reached a more or less national stature, one is first to look at the general level of income, and second, to differentiate between various income groups.

The observed fact in countries in various stages of development is that expenditure on energy - electric and otherwise - has a minor claim on the family budget, thus proving that an increase in power rates will not have a noticeable effect on private consumption, especially when the advantages of power are equated with other advantages accruing to the family from its other household budgetary expenditures. Table 52 brings out this fact.

As far as the elasticity of the demand curve for power is concerned, there seems to be a minimum amount of electricity consumption which is necessary for lighting purposes for which demand is relatively inelastic even with low income groups. Once this minimum amount is satisfied demand tends to be more or less elastic, until it reaches the point where further consumption of electricity is required for the transformation of power into heat

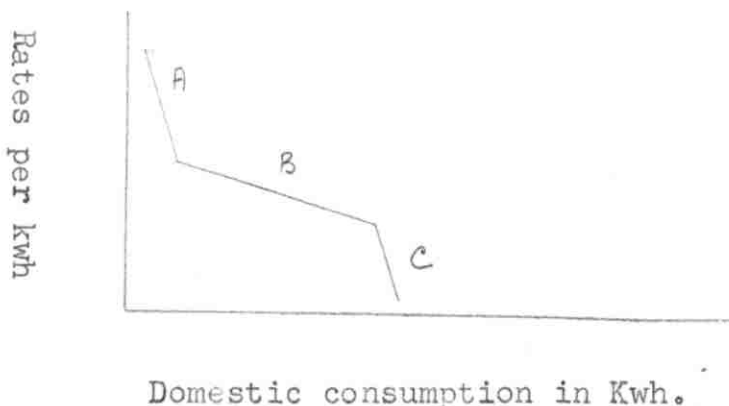
PERCENTAGE DISTRIBUTION OF CONSUMPTION EXPENDITURE ACCORDING TO INCOME PER FAMILY (1954)

Country	Lowest Income Group			Middle Income Group			Highest Income Group								
	Food	Furni- ture & Rent	Fuel & Light	Food	Furni- ture & Rent	Fuel & Light	Food	Furni- ture & Rent	Fuel & Light	Food	Furni- ture & Rent	Fuel & Light	Cloth- ing	Cloth- ing	Others
I. AMERICA															
Canada	37.0	23.4	6.4	10.6	22.6	32.7	23.3	3.5	13.1	27.4	24.8	22.4	2.4	16.7	33.7
Guatemala	63.5	10.8	6.8	7.9	11.0	53.6	16.2	5.7	9.0	15.5	62.7	17.4	5.7	7.2	7.0
Panama	43.5	21.1	5.7	5.2	24.5	34.0	17.7	3.2	13.2	31.9	20.3	17.0	2.3	15.7	44.7
Venezuela	56.3	18.3	5.7	5.8	13.9	49.0	15.7	3.4	9.1	22.8	37.5	15.5	1.8	13.3	31.9
II. EUROPE															
Austria	57.1	7.8	7.1	9.9	18.1	50.5	10.3	5.4	11.6	22.2	47.2	10.8	5.3	14.1	22.6
Denmark	41.5	10.3	6.2	15.0	27.0	31.7	10.0	5.1	17.5	35.7	25.6	8.2	4.4	17.1	44.7
Germany W.	45.4	11.7	5.1	9.3	28.0	41.2	13.5	4.1	13.7	27.5	36.1	17.8	3.6	14.4	28.1
Ireland	55.3	7.3	9.1	8.7	19.6	42.6	8.8	7.5	15.0	26.1	34.8	10.5	4.7	17.6	30.9
Netherlands	38.0	19.5	6.4	12.6	23.5	33.7	17.2	5.5	15.5	28.1	24.7	18.3	3.7	17.6	35.7
Norway	33.4	13.7	3.1	16.1	33.7	26.0	18.6	3.4	12.6	39.4	23.1	19.5	2.1	11.6	43.7
Portugal	66.9	9.8	8.8	3.8	10.7	58.3	10.3	5.1	10.6	15.7	37.3	16.8	3.6	11.3	31.0
Switzerland	42.4	17.7	5.6	9.6	24.7	36.8	19.4	5.1	11.8	26.9	33.9	18.3	5.0	13.1	29.7

Source: International Labour Office, Year Book of Labour Statistics 1954; (Geneva: 1954) Table 27.

or motor energy. It is only in this medium stage that power rates are liable to exert a relative considerable influence on power demand. Progress in domestic electrification therefore, i.e., the elasticity of the demand curve after this point, is mainly determined not by the movement in power rates but by the expendable margin of income available to the householder for the purchase of electric appliances. In a country like Lebanon where this margin is narrow¹ the curve tends to be relatively inelastic. Translated into a diagram, the demand curve for domestic consumption would have two kinks as follows:

Household Demand Curve for Power



-
1. The margin is narrow for the bulk of the income recipients as noted earlier in the discussion about distribution of income.

Where phase A is the minimum amount required for lighting - phase B the maximum required for lighting - phase C where power is required for transformation into heat and/or energy.

It is to be noted that within phase C, in countries where per capita income is both high and relatively well distributed, i.e. where households are in a position to earmark a portion of their income for the purchase of electric home appliances, power rates play a definite part in the decision of consumers inasfar as opportunities for substitution are present, for example: electric as against gas ranges. However, once the investment is made, power rates cease to exercise that same limiting effect on power consumption. Power rates therefore play a definite role in determining the elasticity of demand for power consumption after the first point of inflection; how effective this role is, after the second point of inflection is primarily conditional on the presence of opportunities for substitution.

2. Power Rates And Industrial Power Consumption

In the case of most developed and underdeveloped countries, industry accounts for the most substantial share of total power consumed. However, as shown in Table 53, except for electro-chemical and metallurgical industries power accounts for a minor part of the cost of the value added in manufacturing:

TABLE 53

COST OF ENERGY IN MANUFACTURING INDUSTRIES
IN THE UNITED STATES, BY MAJOR INDUSTRY
GROUP, 1947

Industry Group	Value Added by manufacture (Millions of dollars)	Cost of fuels and purchased electric energy	
		Total (millions of dol- lars)	Percent value added
All manufacturing industries	74,426	3,332	4.5
Food & kindred products	9,025	279	3.1
Tobacco manufactures	641	6	0.9
Textile Mill Products	5,341	166	3.1
Apparel & related products	4,443	30	0.7
Lumber & Products, except furniture	2,497	68	2.7
Furniture & fixtures	1,378	22	1.6
Paper & allied products	2,875	198	6.9
Printing and Publishing industries	4,269	35	0.8
Chemicals & allied products	5,365	297	5.5
Petroleum & coal products	2,015	97	4.8
Rubber Products	1,303	46	3.5
Leather & leather products	1,533	21	1.4
Stone, clay & glass products	2,306	258	11.2
Primary metal industries	5,765	1,317	22.8
Fabricated metal products	4,921	111	2.3
Machinery (except electrical)	7,812	147	1.9
Electrical machinery	3,894	64	1.6
Transportation equipment	5,869	125	2.1
Instruments & related products	1,080	12	1.1
Miscellaneous manufactures	2,090	33	1.6

Source: IBRD research files, adapted from "Productive Uses of Nuclear Energy", based on U.S. Bureau of the Census, Census of Manufactures; (Washington, D.C.: 1947), Vol. I.

It is obvious from Table 53 that a revision of power rates would not prove a determining criterion for a reconsideration of the firm's production policy; consequently, it would exercise no appreciable effect on the demand for power. An increase in the cost of power may tempt the producer to shift the burden on to the consumer in the form of a price increase; but, whether he proves successful or not in his attempt, it is seriously doubted - unless he be a critical marginal producer - that as a result he would curtail his power consumption or that he would turn to furnish his own power.

CHAPTER V

FOREIGN TRADE & THE BALANCE OF PAYMENTS

The chapter is divided into four parts: (a) the first part discusses the importance of the foreign trade sector as a prime contributor to national income; (b) the second part dwells on the various characteristics of foreign trade, its direction and on the various trade agreements; (c) the third part is concerned with the balance of payments analysis; and (d) the fourth and last section evaluates Lebanon's foreign trade in the light of future economic growth.

A. Foreign Trade & National Income.

Various considerations, economic and otherwise, have contributed to the particular growth of the trade sector. The net national product arising from trade developed as shown in Table 54.

Table 54: Contribution of the Trade Sector to Net National Income at Current Prices, 1950-1954

(In L.L. Millions)

	<u>1950</u>	<u>1951</u>	<u>1952</u>	<u>1953</u>	<u>1954</u>
A. <u>Foreign Trade</u>					
Imports	123.3	120.0	125.0	134.0	(247.1
Exports	2.8	3.1	2.2	2.8	
Transit	59.4	99.0	90.0	90.0	
Entrepot	<u>15.0</u>	<u>15.0</u>	<u>15.0</u>	<u>15.0</u>	
Total Foreign Trade	200.5	237.1	232.2	241.8		247.1

	<u>1950</u>	<u>1951</u>	<u>1952</u>	<u>1953</u>	<u>1954</u>
B. <u>Domestic Trade</u>					
Agricultural Products	45.6	45.9	46.3	46.7	47.1
Industrial Products	53.4	54.0	54.6	55.2	55.8
Total Domestic Trade	99.0	99.9	100.9	101.9	102.9
Total	299.5	337.0	333.1	343.7	350.0

C. Percentage Contribution of:

a. Foreign Trade to total trade	66.9%	70.3%	69.7%	70.4%	70.6%
b. Domestic trade to total trade	33.1%	29.7%	30.3%	29.6%	29.4%
c. Foreign trade to national Income	19.3%	22.1%	21.3%	21.3%	21.2%
d. Total trade to national Income	28.9%	31.5%	30.5%	30.2%	30.0%

Source: I.B.R.D. Litani Report, op.cit.

Two very interesting complementary observations can be made at this point namely: (a) as can be seen from Table 54, not only does the trade sector (foreign and internal) contribute the most substantial share to the overall income but the foreign trade share by itself competes with any other sector ⁴; thus, between 1950 and 1954, the agricultural sector accounted for between 19.3 per cent and 19.8 per cent of total national income (cf., Table 14) while for the same period the foreign trade component of the trade sector contributed between 19.3 per cent and 22.1 per cent (cf, Table 54); and

4. Except for 1950 where it measures up to the agricultural sector (cf., Table 14).

(b) the fact that so much of the country's income depends on factors beyond the direct control of the economy does and should give rise to rational concern and anxiety. It is believed that there is a lot of truth to often-expressed contentions that the country should to a certain extent see to it that a larger proportion of its requirements be supplied locally; besides there seems to be another vital point to which attention should be drawn, namely the division of income among factors of production. Table 55 shows that in 1950 profits constituted by far the largest factor payment amounting to 86 per cent of the total, while wages amounted only to 10 per cent and rent to 4 per cent; this exceptionally high proportion of profit-income is not encountered in any other sector ¹ and can have far reaching social implications; thus in 1950 this sector employed as salaried people - as much as 30,000 persons (cf, Table 19); if income accruing to them totalled LL. 29.2 million, then their per capita income would stand at less than LL. 1,000 per year; besides, when this relatively minor but wealthy section of the population draws such a substantial income from foreign trade activity, it is only natural to expect (a) that the bulk of its realized profits seeking reinvestment will automatically tend to flow back into cognate fields of activity, and, (b) that the consumption tastes and patterns

1. A.Y. Badre, "The National Income of Lebanon" op.cit., p. 20.

of this group of the population are more or less heavily biased in favour of imported goods. Thus three relevant criticisms can be voiced hereunder, namely: (a) the increased facilities given this sector to promote its activity is ultimately leading to increased realized profits that tend to a concentration of wealth in the hands of a few; (b) the handsome and quick profits netted in this sector prove a bottomless pit for capital resources seeking investment to the detriment of other sectors, thereby rendering the balanced growth of the sectors in Lebanon extremely difficult to achieve; and, (c) the lower income group - the salaried people - within this sector are not benefitting from its growth and are consequently not allowed to realize more or less any savings.

Table 55: Income arising from Trade by Category of Transaction at Factor Payments in 1950
(in LL Million)

	<u>Wages</u>	<u>Rent</u>	<u>Profits</u>	<u>Total</u>
Agricultural Production	4.6	1.7	38.6	44.9
Industrial Production	5.2	2.0	43.2	50.4
Imports	12.1	4.6	101.5	118.2
Exports	0.5	0.2	4.5	5.2
Transit	5.4	2.1	46.0	53.5
Entrepot	<u>1.5</u>	<u>0.5</u>	<u>11.4</u>	<u>13.3</u>
Total	29.2	11.1	245.2	285.5

Source: Badre, op.cit.

TABLE 56

LEBANESE FOREIGN TRADE 1951-1954

(In L.L. Million)

	1951	1952	1953	1954
<u>Imports</u> (1)				
At Official Rates	320.7	347.0	361.7	484.4
At market rates (2)	407.6	435.9	411.2	526.5
<u>Exports</u> (1)	97.7	77.4	87.7	105.6
Reexport				
After reimbursal of customs duties	1.6	3.9	.7	3.1
Ex-warehouse, ex-bond	6.6	15.6	9.2	10.8
<u>Gold</u>				
Imports	22.5	38.7	30.3	103.9
Exports	8.0	.6	.7	13.6
<u>Transit, Total</u>	1136.8	1038.7	1063.0	1034.0
Merchandise	323.1	327.6	304.9	359.8
Petroleum (3)	459.1	471.2	472.8	480.1
Gold	354.7	239.9	285.3	194.1

(1) Including gold, imports, c.i.f. ex customs duties; exports f.o.b. Lebanon

(2) Calculated at free market rates; excluding gold.

(3) Crude oil received by the I.P.C. refinery at Tripoli or the Medreco refinery at Saida is registered as imports only when refined and offered for local consumption refined oil shipped to Syria or Jordan is entered in the transit statistics

Source: Bulletin Statistique Trimestriel, op.cit

The very wide divergence in the proportions of income earned from imports and exports (44:1 in 1950; 39:1 in 1951; 57:1 in 1952; and 48:1 in 1953, cf. Table 54) does not appear in the corresponding absolute trade figures. Table 56 shows the components of foreign trade from 1951 to 1954.

In an attempt to indicate the relative ability of the various components to raise income, a comparison of the absolute trade figures with the proportion of income they represent (cf. Table 54) is made. The results are given in table 57.

Table 57: Profitability of Various Foreign Trade Components in Lebanon, 1951-1953

	<u>1951</u>	<u>1952</u>	<u>1953</u>
Imports	29.4%	28.6%	32.5%
Exports	3.2%	2.8%	3.2%
Transit	8.7%	8.7%	8.5%
Entrepot	182.9%	76.9%	151.5%

Source: Tables 54 and 56 Supra.

The table indicates that the entrepot and re-export trade has the highest income rate while the export trade has the lowest, with imports and transit in between.

-
1. Ratio of imports to exports: 2.7:1 in 1950; 4.2:1 in 1951; 5.6:1 in 1952; and 4.7:1 in 1953 (cf. Table 56) *and 5.0:1 in 1954*
 2. In March 1950, the Syro-Lebanese customs union was dissolved; available 1st quarter figures relate to the two countries.

II. Characteristic of Lebanese Foreign Trade

This section aims at an analytical survey of Lebanese foreign trade; it is divided into four parts namely:

- (a) foreign trade mechanism; (b) the commodity trade;
- (c) the direction of trade; and, (d) trade agreements.

A. Foreign Trade Mechanism.

The two effectively outstanding foreign trade mechanism in Lebanon are: (a) the foreign exchange policy; and (b) the tariff policy.

1. The Foreign Exchange Policy.

Under the French Mandate and prior to 1939,¹ exchange operations were loosely regulated in Lebanon; the main legal provisions then aimed at restricting exchange dealings to those banks or brokers that were registered with the "Beirut Bourse". During the 1920-1939 period, the Lebanese pound followed the ups and downs of the French franc.

A couple of months following the outbreak of World War II, the mandatory authorities for reasons of their own introduced foreign exchange control in the country, setting up at the same time an "Office des Changes" to centralize all such transactions²; however, de facto institution

1. Decree No. 977 of September 1, 1922.

2. Decrees Nos. LR/338, LR/339 and LR/340 of December 3, 1939.

of such control did not come until mid-1940, when the French High Commissioner charged the "Banque de Syrie et du Liban" with the job of giving permits for the export of capital through the "Office des Changes"¹. It also linked Lebanon to the Franc Area. These measures made possible: (a) the restriction of foreign exchange leakages to the enemy and, (b) the redirection of trade in the interests of the mandatory authorities. Moreover, by requiring the surrender of the foreign exchange to the "Offices des Changes" the authorities availed themselves of such currencies in exchange for newly printed pound notes that had been issued against French bonds.

On July 15, 1941, Lebanon was declared a member of the sterling area and effective exchange regulations were modified accordingly, to be again revised when the country went off the sterling area in March 1946. During this period about LLS 700 million had been transferred to the sterling area or served to import goods and gold into Lebanon and Syria.²

Between 1939, when exchange control was introduced, and 1948, when the Lebanese Government extended official

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1. Decree No. LR/152 of June 12, 1940.
 2. Joseph Najjar, "Le Probleme Monetaire du Liban", Les Conferences du Cenacle, (Beirut: 1950) No. 5-6 p. 112.

recognition to some exchange transactions at free market rates, the exchange control regulations underwent occasional revisions and modifications that fitted into the transitional period between a war and a peace time economy. As is expected under such circumstances a black money market grew and prospered alongside the foreign exchange control system; as a matter of fact both started together but with inverse degrees of strength and intensity and as the years passed by, the ground lost by the one was taken up by the other until when in 1948 the free market operations were legalized: in fact the decision to do so was a mere adaptation of law to existent practices.

The 1948 exchange regulations stipulated that subject to few restrictions of dealings in foreign exchange could be carried out without recourse to the "Office des Changes"; the new restrictions required among other minor things: (a) that all foreign exchange earnings arising from exports be repatriated and that only 10% of such amounts be surrendered to the "Office des Changes"; and, (b) that all concessionary

1. ~~Decree No. LR/152 of June 12, 1940.~~

2. "Its (the black market) magnitude could be judged from the fact that in 1946 the value of imports as recorded by customs statistics was about LLS 267 millions while foreign exchange granted by the "Office des Changes" was only LLS 138 millions. In fact it is estimated that during 1944-46 around 40-50 per cent of Syro-Lebanese imports were financed by foreign exchange obtained from the black market. In the following two years the percentage rose to around 65%. Samir Makdisi, Post-War Lebanese Foreign Trade and Economic Development; unpublished M.A. Thesis, (AUB: 1955), p. 14.

2. Decree No. K/13532 op.cit.

3. This provision was cancelled in 1949 by the provisions of Decree No. 16369 of Sept. 26, 1949.

companies operating in the country should purchase from the "Office des Changes" 80% of their local currency requirements at the official rates.

On May, 24, 1952, the last exchange restrictions were lifted with the abolishing of the control stipulation¹ pertaining to concessionary companies. Since then all exchange transactions in Lebanon have been free from any restriction.

At the present time, the official rate of exchange² continues to exist for two purposes only; it serves for the calculation of import customs duties, and it is used for a few government bookkeeping entries. Fluctuations on the free market of four main currencies and the gold sovereign are given in Table 58.

It is believed that the de facto³ perfect convertibility of the Lebanese currency vis-avis foreign currencies has reaped the country noteworthy advantages; it has had its plausible impacts on every single sector of the economy. As far as the trade sector is concerned one can justifiably

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1. Various decrees were promulgated during this interim period; viz: Decree No. 3309 of Nov. 7, 1950; Decree No. 7271 of Jan. 8 1952; and Decree No. 7393 of Jan. 26, 1952.
 2. Official conversion rates are: \$1:2.21; L=LL6.19; Swiss Fr. 1=LL6.35; and LSl = LL1.
 3. Because Lebanon avails itself of the transitional arrangements of Article XIV, Section 2, of the Articles of Agreement of the International Monetary Fund, its currency is de jure considered inconvertible.

TABLE 58

FREE MONEY MARKET RATES OF THE FRENCH FRANC
STERLING, DOLLAR, SYRIAN POUND AND THE GOLD SOV.

Average	French Franc (1,000)	(In Lebanese Piasters)			Gold Sovereign (In LL)
		Sterling (Lebanese Account)	Dollar	Percentage Agio on the Syr. Pound	
1949	808.4 (a)	975.3	326.0	5.9	41.08
1950	944.0	906.5	347.1	6.9	38.22
1951	949.0	941.6	373.3	- 3.3	45.20
1952	915.0	937.3	366.3	1.5	42.62
1953	909.3	931.2	342.0	5.8	34.76
1954	877.5	888.2(b)	321.6	10.2	31.02
1955	906.0	894.5	324.0	9.4	30.28
1956	903.0	891.0	322.0	9.7	31.16

(a) Official quotation of the French Franc to September French Franc "Lebanese Account" from then on.

(b) March 20, 1954, Sterling Lebanese Account was abolished in April 1954 onwards, quotation is for the transferable sterling.

Source: Bulletin Mensuel; Op.cit.

argue that thanks to the free money market this sector has shown eminent efficiency and resiliency in the face of set-backs, has been rid of all but economic considerations and literally speaking the markets of the world have been brought within the broad scope of activity of the Lebanese merchants. Besides, the transit, particularly gold, and entrepot trades owe, to a considerable degree, their phenomenal development and profitability to the country's free money market.

2. Foreign Trade Policy and Tariff.

From the foregoing analysis of foreign trade contribution to national income and the ensuing discussion of the foreign exchange system and its beneficial impacts on the economy, two deductions seem to impose themselves with regard to foreign trade policy, namely first the people engaged in this sector stand out as the wealthiest group in the country (cf., Table 19) and as wealth seems to be conducive to political influence, this group mustered enough political pressure to exert on the government and make it carry out a policy in harmony with its own economic interests; in this connection this has resulted in a reluctance on the part of the authorities to enforce any regulations that could ultimately restrict activity in this sector; and second, whatever the motives behind this policy seem to have been, such a policy of trade liberalism seems to have proven its worth and has definitely been instrumental in confirming the country's

position as the Middle East entrepot for many a country.

In summary, therefore, one can argue that the country's foreign trade policy is rather lax and liberal and that it is seriously doubted that any other economic group can bring at least in the foreseeable future, enough pressure on the government as to result in a basic reconsideration of present policy.

The primary objective of the Lebanese customs tariff system is overwhelmingly for revenue purposes; thus in 1954 and 1955, the last two years for which government closed accounts figures are available, customs revenues accounted for as much 35.3% and 37.9 per cent respectively of all ordinary public revenue; besides all indications seem to point to the fact that this percentage is assuming increased importance year after year.

Present day customs tariff schedules in Lebanon are governed by the provisions of decree LR/137 of June 15, 1935; although as time passed, the above law has been subjected to a number of modifications, nevertheless its basic structure has not been changed.¹

The tariff schedule has been based on the League of Nations nomenclature,² and three tariff categories may be

1. Conseil Supérieur des Douanes, Tableau des Droits Inscrits au Tarrif des Douanes, (Beirut: Imprimerie Joseph Saikali, 1952) p.1, and, Makdisi, op.cit, p.22

2. Decree No. LR/189 of September 8, 1936

identified within it, namely:

1. The maximum tariff: This normally applies to imports from United Nations non-member countries; it is usually double the ordinary tariff.

2. The ordinary tariff: This applies to imports from United Nations member countries as well as non-members benefiting from such a privilege; e.g., Switzerland.

3. The preferential tariff: This applies to imports from countries with which Lebanon has contracted special trade agreements to this effect; at present such preferential treatment is accorded to the signatories of the Arab Trade Agreement¹ only, namely: Syria, Jordan, Iraq, Saudi Arabia and Egypt. Special preferential treatment is furthermore accorded by separate individual agreements to Syria, Jordan² and Iraq.

It is to be noted that in the above classification of the existing tariff categories, the three of them applied to imports only; as a matter of fact both export and transit³ duties have been annulled since the time of the Mandate and reexports enjoy a refunding of duty since the break with

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1. Signed on September 7, 1953
 2. Elias Saba, Requirements and Desirability of a Convertible Lebanese Currency, Unpublished M.A. thesis; (AUB: 1956), p. 151.
 3. Decree No. LR/106 of May 1934 pertaining to the export tariff; and, decree No. LR/90 of April 24 pertaining to the transit tariff.

Syria in 1950¹ .

It is obvious that due to the fact that the heavy majority of foreign suppliers come from countries under the second tariff classification, the ordinary tariff is the predominant one; it is usually based on an ad-valorem basis, and ranges between 1% and 50 per cent; needed raw materials are either totally exempt or pay a less than 25 per cent duty, while imports competing with locally produced goods are subject to an over 25% levy; the magnitude of such a levy (between 25% and 50%) is directly proportional to the intensity of the competition between the locally produced and the imported product. All others are subject

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1. Legislative decree No. 4 of April 8 1950; "it (the decree) allowed the refunding of duty on re-exports provided: (a) the re-exported commodity was not similar to any local industrial production unless the re-exporters could absolutely prove that it originated from a foreign country; (b) it was kept in its own initial state; and (c) it was re-exported by the same person or body that had imported it." Makdisi, op.cit. p. 23.
 2. a: There are few specific duties; these apply to fruits and vegetables, textiles, cotton needlework and vehicles. b. ad valorem duties are assessed on the basis of the official exchange rates; official rates are usually (currencies like the Italian lira is calculated on the basis of the free rate) 1/3 off the free rate paid by the importers; thus to assess the real value of the duty as a percentage of the value of the goods, ad valorem duties must be reduced by one third.

to a 25 per cent duty.¹ In conclusion, therefore, one may safely say that the present tariff schedule in Lebanon does not differ much from that during the Mandate; originally devised then as a revenue raising device it also aimed at crippling local industrial production and allowed league of Nations members to practice dumping on the Lebanese market;² with political and economic independence achieved, the tariff remains in essence for revenue purposes, and as is, rarely effectively used as a tool to afford protection to local industry; thus, notwithstanding few exceptional cases of tariff effectiveness in barring out imports of certain goods, the outstanding general characteristic

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1. "As an illustration ... out of 991 items included in the tariff schedule about 386 items are subject to a 25% duty. And out of the remaining 605 items, approximately 104 have one or more of their sub-items bearing a 25% duty. Furthermore, another 119 items are exempt from duty while an additional 98 items have one or more of their sub-items exempted from duty. In other words not more than 23% of the total number of items included in the schedule are completely subject to either a relatively lower or higher duty than 25%. Makdisi, op.cit. pp. 25-26.
 2. Article XI of the Mandate Charter was the first clear expression of the lines upon which the economic life in Syria and Lebanon was to be regulated. With regard to the above context it read inter-alia: "... similarly, there shall be no discrimination in Syria or the Lebanon against goods originating in or destined for any of the said states (i.e. League Members)..." League of Nations, Mandate for Syria and the Lebanon, Geneva: 1922), Geneva: 1922), p. 5.

of the Lebanese tariff system is that it does not afford any serious interference with the freedom of trade in the country.

B. The Commodity Trade

This section will be concerned with the commodity trade activity since 1951. Prior to March 1950, Syria and Lebanon formed one custom's union, and foreign trade statistics up to the 1950 second quarter were published jointly for the two countries.

1. The Balance of Trade:

One of the most consistent traits of the commodity trade in Lebanon is the chronic deficit on trade account; table 59 brings out this salient feature.

Table 59: Lebanese Commodity Trade, 1951-1955
(in LL Million)

<u>Year</u>	<u>Imports</u> ¹	<u>Exports</u> ²	<u>Trade Balance</u>	<u>Ratio of Imports to Exports</u>
1951	407.6	91.3	- 316.3	4.5:1
1952	435.9	80.7	- 355.2	5.4:1
1953	411.2	87.7	- 323.5	4.7:1
1954	526.5	95.1	- 431.4	5.5:1
1955	626.5	112.2	- 514.3	5.6:1

(1) Imports converted at free market rates and excluding gold.

(2) Exports including re-exports with reimbursal of customs duties and excluding gold.

Source: Same as Table 56, Supra.

The table indicates that the ratio of imports to exports is around the 5:1 average. The deficit ranged between LL 316.3 million in 1951 and LL 514.3 million in 1955; besides except for 1953, when the trade deficit registered a decline as compared to the preceding year - most probably as a result of a fall of world prices after the Korean boom and not as a result of a fall in imports (tonnage-wise: cf., Table 60) - the trade deficit shows a persistent increase year after year. The period under consideration is too short to detect any particular trend, however it can be safely argued that unless a basic reconsideration of trade policy materializes, there are no indications pointing to a probable narrowing of the import-export gap.

Volume-wise however (cf., Table 60) the ratio of imports to exports stands around the 3:1 average; this ratio when compared to the 5:1 value ratio reflects the fact that the imports are mainly finished and semi-finished industrial goods including a high proportion of luxury items while exports are made up of bulky and cheap agricultural goods.

Table 60: Lebanese Commodity Trade, 1951-1955

<u>Year</u>	(In Thousand Tons)			<u>Ratio of Imports to Exp.</u>
	¹ <u>Imports</u>	² <u>Exports</u>	<u>Trade Balance</u>	
1951	723	210	- 513	3.4:1
1952	812	219	- 593	3.7:1
1953	902	283	- 619	3.2:1
1954	1,079	388	- 691	2.9:1
1955	1,200	389	- 811	3.1:1

(1) Gold imports were not omitted from the total as they form - volume-wise- an insignificant amount.

(2) Includes reexports and gold exports.

Source: Bulletin Statistique Trimestriel op.cit.

2. Merchandise Trade

Table 61 gives the values of Lebanese imports broken down into five major groups.

The table substantiates statistically certain facts that have already been mentioned in the course of the discussion, namely: (a) animal and food products: the country suffers from a paucity of animal resources and has therefore to rely on foreign suppliers mainly in the neighboring countries; the country suffers from a severe deficiency in its cereals and pulses production; and, it could at least develop its food and drinks processing industries, increasing quantities of which are being imported year after year; (b) the main imported items under the industrial products are: (i) mineral products: these consist mainly of mineral fuels, considerable quantities of which are being used in running industrial plants; savings could materialize on this item with the implementation of power projects and the consequent substitution of electric power for other forms of energy; (ii) chemicals: these are preponderantly made up of pharmaceutical products and fertilizers; and (iii) textiles: these include both finished and raw materials; it is interesting to note in this context that whereas raw cotton accounted for 18.1% per cent of total textile imports, this percentage rose to 30.8% in 1955; however, the fact that the country imported for around LL 40 million of finished textile products in 1955 when local textile mills were operating at levels below capacity

TABLE 61

MERCHANDISE IMPORTS, 1952-1955

(In LL. Thousands)

	1952	1953	1954	1955
1. <u>Animal & Food Products</u>				
Live animals	28,457	39,040	40,512	47,188
Fruits, grains & vegetables, of which:	77,723	77,539	89,373	81,089
cereals & flour	48,527	46,258	67,920	43,797
Oils & fats	2,912	3,072	2,598	5,097
Processed foods & drinks	14,204	13,210	16,064	17,255
Total (1)	123,296	132,861	148,547	150,629
2. <u>Industrial Products</u>				
Mineral products	25,638	27,408	31,408	42,527
Chemicals	14,810	16,238	19,490	21,788
Hides & leather products	5,092	3,999	5,640	6,475
Rubber products	2,850	3,318	4,360	5,331
Paper products	5,831	5,117	7,593	9,536
Textiles, of which:	46,094	44,122	57,668	63,245
Raw Cotton	8,345	9,210	21,395	19,495
Woolen cloth	5,887	4,696	18,506	20,988
Total (2)	100,315	100,202	126,159	148,902
3. <u>Building Materials</u>				
Wood & wood products	7,775	7,363	9,276	13,373
Stones, ceramics & glasswares	5,585	4,642	6,116	8,800
Common metals & manufactures	21,283	25,755	28,150	45,692
Total (3)	34,643	37,760	43,542	67,865
4. <u>Machinery & Vehicles</u>				
Machinery	26,206	22,133	30,176	49,307
Vehicles of which:	13,022	15,076	20,755	37,266
Motor Cars	10,064	11,748	15,476	17,655
Total (4)	39,228	37,209	50,931	86,573
5. <u>Finished Goods & Others</u>				
Shoes & fashion articles	964	650	680	683
Precious metals (excluding gold)	902	741	3,106	11,485
Precision apparatus	3,570	3,433	4,582	6,240
Arms & munitions	501	349	610	1,109
n.e.s. merchandise	1,704	1,987	2,259	3,054
Artware	3,367	119	99	267
Total (5)	11,008	7,279	11,346	22,838
Total	308,490	314,311	380,525	476,807
Gold	38,559	47,369	103,877	50,512
TOTAL	347,049	361,680	484,402	527,319

indicates that there must be an extreme difference in quality between the imported and the locally produced textile goods; (c) building materials: imports of building materials actually doubled between 1952 and 1955; this fact attests on the one hand to the prosperity of this sector and, on the other, to the menace it creates in competing for funds seeking investment; (d) machinery and vehicles; it is gratifying to witness the increased imports of machinery into the country that serve to increase the productive capacity; the increased imports of vehicles should cause no alarm; vehicles include motor cars - a necessity in a transit and tourist country - and, flying and sailing equipment. One can say that in view of the nature of the Lebanese economy, the import of vehicles is a necessity rather than a luxury; and (e) finished goods and other articles: do not constitute such an important item to warrant any special analysis.

Table 62 gives the percentage distribution of merchandise imports, excluding gold, according to the above (cf., Table 61) classification.

Table 62

Percentage Distribution of Merchandise Imports¹

	<u>1952 - 1955</u>				<u>1952-54 Average</u>
	<u>1952</u>	<u>1953</u>	<u>1954</u>	<u>1955</u>	
1. Animal & food products	40.0	42.1	39.0	31.6	38.2
2. Industrial Products	32.5	31.8	33.2	31.2	32.2
3. Building Materials	11.2	12.0	11.4	14.2	12.2
4. Machinery & Vehicles	12.7	11.8	13.4	18.2	14.0
5. Finished goods & Others	<u>3.6</u>	<u>2.3</u>	<u>3.0</u>	<u>4.8</u>	<u>3.4</u>
TOTAL	<u>100.0</u> =====	<u>100.0</u> =====	<u>100.0</u> =====	<u>100.0</u> =====	<u>100.0</u> =====

1. Excluding gold imports.

Source: Table 61, Supra

Thus the relative share of each category to the total is more or less constant year after year; the yearly import pattern is not found to deviate noticeably from the four year average. It seems that at least in the immediate future not much can be made to disturb the import pattern or to decrease the volume of imports.

The alternative therefore lies more on the export side of the merchandise trade.

Table 63 gives the values of Lebanese exports, broken down into broad and major groups for the years 1952-1955.

TABLE 63

MERCHANDISE EXPORTS, 1952-1955

(In LL. Thousands)

	1952	1953	1954	1955
1. Animal & food products				
Live animals	1,445	2,022	3,562	3,199
Fruits, grains & vegetables of which	25,045	33,350	47,390	40,056
Onions	4,380	2,628	3,220	3,805
Potatoes	753	1,394	1,672	1,048
Bananas	1,441	1,738	1,829	2,661
Citrus	7,286	6,396	9,946	9,786
Deciduous	4,134	4,294	5,435	6,005
Oils & Fats	3,368	3,963	1,668	3,804
Processed foods & drinks	<u>3,644</u>	<u>3,400</u>	<u>3,802</u>	<u>6,584</u>
Total (1)	33,502	42,502	56,422	53,643
2. Industrial Products				
Chemicals	1,793	2,224	1,516	1,318
Hides & Leather products	2,680	3,377	3,919	4,507
Rubber products	233	291	237	323
Paper products	1,373	1,640	1,517	1,291
Textiles	20,534	18,889	9,370	12,371
of which:				
Cotton yarn	3,524	3,916	2,039	2,382
Cotton cloth	1,785	1,332	710	302
Rayon cloth products	482	381	395	475
Sacks	<u>1,751</u>	<u>1,182</u>	<u>853</u>	<u>596</u>
Total (2)	26,613	26,421	16,559	19,810
3. Construction Materials				
Wood & wood products	1,136	1,190	1,750	2,186
Stone, ceramics & glassware	1,036	1,865	1,707	1,712
Mineral products	2,094	2,888	3,158	4,631
of which:				
Cement	1,470	1,665	1,651	3,098
Common metals & manufactures	<u>6,999</u>	<u>5,197</u>	<u>4,770</u>	<u>7,634</u>
Total (3)	11,265	11,140	11,385	16,163
4. Finished Goods & Others				
Shoes & fashion articles	732	581	566	406
Precious metals (excluding gold)	73	738	2,523	11,594
Other exports (2)	<u>5,239</u>	<u>6,094</u>	<u>4,514</u>	<u>6,291</u>
Total (4)	<u>6,044</u>	<u>7,413</u>	<u>7,603</u>	<u>18,291</u>
Total	<u>77,424</u>	<u>87,710</u>	<u>91,969</u>	<u>107,907</u>
Gold	<u>6</u>	<u>-</u>	<u>13,613</u>	<u>12,621</u>
T O T A L	<u>77,430</u>	<u>87,710</u>	<u>105,582</u>	<u>120,528</u>

(1) Excluding gold exports

(2) Machinery, vehicles, precision apparatus, arms and munition, artware, etc. which are for the greater part re-exported articles.

Source: Bulletin Statistique Trimestriel, op.cit

The most important conclusion that can be drawn from the table (cf., Table 6~~3~~) is that animal and food products constitute by themselves the most weighty single component in the total export of the country; besides, the exports of fruits and vegetables, the most important single item within this category, have increased from LL 25 million to LL 40 million in only four years; "the extent to which such exports can be developed will depend on the degree to which cultivation is intensified and the quality of the produce standardized as well as the efficiency with which it is packed and handled",¹ It is believed that with respect to this group of commodities, the export horizons are very bright and promising; there can be no doubt that Lebanon can make use of its favourable weather conditions and water resources to intensify and diversify such agriculture.

As for industrial products, stepping exports in this direction will prove quite difficult for reasons already outlined in the discussion on industry. However, it is to be noted that most exports under the second, third and fourth categories are composed of imported goods that have either been finished in the country or of finished products that have been re-exported. It is believed that Lebanon could achieve a lot in this direction and that it is a noteworthy issue into which responsible authorities should pry more seriously. ✓

1. Gibb, Op.cit. , p.166.

As to the commodity export pattern, animal and food products occupy the place of honour with a 51 per cent average for the period 1952-1955; the fall in the share of industrial products exports can be attributed to a dwindling in the value of textile exports; a possible explanation of this situation seems to be that neighbouring markets are establishing their own plants in this field. The increasing importance of finished goods and other exports reflects the important role of the country as an "entrepot" for neighbouring countries, as most of these exports are for the greater part re-exported articles.

Table 64 gives the percentage distribution of merchandise exports, excluding gold, according to the above (cf., Table 63) classification.

Table 64

1

Percentage Distribution of Merchandise Exports
(1952 - 1955)

	<u>1952</u>	<u>1953</u>	<u>1954</u>	<u>1955</u>	<u>1952-55</u> <u>Average</u>
1. Animal & Food products	43.3	48.7	61.3	49.7	50.8
2. Industrial products	34.4	30.1	18.0	18.4	25.2
3. Construction materials	14.5	12.7	12.4	15.0	13.7
4. Finished goods and others	<u>7.8</u>	<u>8.5</u>	<u>8.3</u>	<u>16.9</u>	<u>10.3</u>
TOTAL	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
	=====	=====	=====	=====	=====

1. Excluding gold exports.

Source: Table 63, Supra.

(c) Direction of Trade

The table gives the regional distribution of Lebanese imports and exports for 1951-1955.

Table 65 brings out the fact that Europe has been ever since 1951 the main supplier of Lebanon, followed in 1951 and 1952 by the U.S. and "Other" countries; in 1953 however, the Arab countries have occupied the second place and have maintained it since then. The fact that European countries have and still occupy the first place can be imputed to: (a) the commodity composition of imports (cf. Tables 61 and 62); and (b) to the fact that most gold imports come from Europe. The increasing amount of imports from Arab countries is a direct result of two factors, namely: (a) food and live animal deficient Lebanon has to rely on the preponderantly agricultural economies of the neighbouring Arab countries; and (b) the bilateral trade agreements concluded between Lebanon and individual Arab countries¹ on the one hand and the multilateral arrangements extending preferential treatment to Arab League members on the other, have fostered Lebanese-Arab trade considerably.

Turning to the export side of Lebanon foreign trade, the Arab countries occupy the first place for the following reasons: (a) the composition of Lebanese exports, especially

1. Cf. Table ~~67~~ Infra.

TABLE 65

REGIONAL DISTRIBUTION OF LEBANESE IMPORTS
AND EXPORTS (a) 1951-1955

	<u>1951</u>	<u>1952</u>	<u>1953</u>	<u>1954</u>	<u>1955</u>
A. Imports					
1. Arab Countries					
Egypt	4.7	2.3	3.0	5.1	7.3
Iraq	23.7	17.7	15.1	17.0	23.2
Jordan	1.9	3.1	5.4	10.2	4.6
Saudi Arabia	2.2	4.3	8.6	6.6	18.0
Syria	<u>58.9</u>	<u>63.9</u>	<u>91.7</u>	<u>108.7</u>	<u>86.3</u>
Total Arab Countries	91.4	91.3	123.8	147.6	139.4
2. European Countries					
France	38.4	33.8	32.8	38.9	52.3
U.K.	30.8	38.4	34.5	87.1	81.8
Rest of Europe (b)	<u>53.7</u>	<u>69.8</u>	<u>69.6</u>	<u>197.9</u>	<u>116.2</u>
Total European Countries	122.9	142.0	136.9	223.9	250.3
3. Others					
U.S.	57.0	54.9	52.0	71.7	70.4
Others	<u>49.4</u>	<u>58.8</u>	<u>49.0</u>	<u>41.2</u>	<u>67.2</u>
Total Others	106.4	113.7	101.0	112.9	137.6
T O T A L I M P O R T S	<u><u>320.7</u></u>	<u><u>347.0</u></u>	<u><u>361.7</u></u>	<u><u>484.4</u></u>	<u><u>527.2</u></u>
B. Exports					
1. Arab Countries					
Egypt	9.5	7.1	5.9	8.8	6.8
Iraq	2.7	2.8	4.5	4.6	6.7
Jordan	3.7	3.2	6.4	6.0	6.5
Saudi Arabia	8.1	7.3	10.9	11.9	11.7
Syria	<u>21.9</u>	<u>16.6</u>	<u>13.8</u>	<u>14.9</u>	<u>13.3</u>
Total Arab Countries	45.9	37.0	41.5	46.2	45.0
2. European Countries					
France	3.5	3.7	9.8	4.5	5.7
U.K.	2.6	4.2	5.3	4.2	5.7
Rest of Europe (b)	<u>11.2</u>	<u>7.2</u>	<u>8.1</u>	<u>16.2</u>	<u>17.1</u>
Total European Countries	17.3	15.1	23.2	24.9	28.5
3. Others					
U.S.	22.7	6.8	3.6	6.3	12.0
Others	<u>11.8</u>	<u>18.5</u>	<u>19.4</u>	<u>28.2</u>	<u>35.0</u>
Total Others	34.5	25.3	23.0	34.5	47.0
T O T A L E X P O R T S	<u><u>97.7</u></u>	<u><u>77.4</u></u>	<u><u>87.7</u></u>	<u><u>105.6</u></u>	<u><u>120.5</u></u>

(a) Including gold in imports and exports but excluding the value of re-exports from exports

(b) Austria, Belgium, Czechoslovakia, Germany, Greece, Italy, Netherlands, Poland, Roumania, Sweden, Switzerland and Yugoslavia

Source: Bulletin Statistique Trimestriel, *op.cit*

with regards to fruit and vegetable production; (b) some of the exports are made up of industrial goods that were imported as raw materials, finished in the country and then re-exported, and (c) the trade agreements mentioned above.

Table 66 gives the percentage regional distribution of imports and exports between 1951 and 1956.

The pattern revealed by the table (cf. Table 66) indicates that trade relations with the Arab countries on the one hand, and Europe on the other, have acquired special significance in the sense that they can act as a powerful disturbing factor for the economy. In their endeavour to control and stabilize this factor, the competent Lebanese authorities have turned to bilateral agreements; the following section of the analysis is devoted to these agreements.

3. Trade Agreements

Trade and payments agreements are still a novelty in Lebanon's economic history; they only date back to 1951.

a. Rise and Conclusion of Bilateral Agreements

During the French Mandate (1920-1943) the country was required to abide by the Mandate Charter, and, specifically in this context, by the stipulations of Article XI of the Charter¹ which required the country to award League members

1. Supra., p. 228.

TABLE 66

PERCENTAGE REGIONAL DISTRIBUTION OF
IMPORTS & EXPORTS 1951-1955

	(Per Cent)				
	1951	1952	1953	1954	1955
<u>A. Imports</u>					
1. Arab Countries	28.5	26.3	34.2	30.5	26.4
2. European Countries	38.3	40.9	37.8	46.2	47.5
3. U.S. & Others	33.2	32.8	28.0	23.3	26.1
TOTAL	100.0	100.0	100.0	100.0	100.0
<u>B. Exports</u>					
1. Arab Countries	47.0	47.8	47.3	43.7	37.4
2. European Countries	17.8	19.5	26.5	23.6	23.6
3. U.S. & Others	35.2	32.7	26.2	32.7	39.0
TOTAL	100.0	100.0	100.0	100.0	100.0

Source: Supra Table 65

the benefits of the most favoured nations clause, denying it at the same time all rights of reciprocity. Trade agreements could, however, be concluded with non-League members and with neighbouring countries.¹

With the end of the Mandate in 1943, Lebanon found that on the political level it had achieved unfettered independence while on the economic level it still was tied down to Syria in a complete economic union; no difficulties arose between 1943 and 1948, the period during which both countries followed identical trade policies and exchange regulations. In 1948 came the first clash of interests with respect to the conclusion of a monetary agreement with France; between 1948 and 1950, many considerations, economic and otherwise proved that the union

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1. "The Mandatory, or the local governments acting under its advice, may also conclude on grounds of contiguity any special customs arrangements with an adjoining country". Article XI of the Mandate Charter, op.cit.

The only agreement with any real effects was signed with Palestine on August 20, 1922; it was repealed in 1938 only to be replaced by a less liberal one on November 30, 1939; the latter remained effective until 1948.

Other agreements were: (a) with neighbouring countries: Transjordan signed on May 10, 1923; Iraq, signed on January 31, 1925 (transit trade); Saudi Arabia, signed February 24, 1926 and Egypt signed November 1, 1928; and (b) with other countries: Turkey, signed July 26 1926 and repealed in June 1936; Brazil signed January 19, 1932; Japan, signed July 29, 1936; and Germany, signed February 2, 1937. Most of these agreements came to an end at the outbreak of the war in September 1939.

was unlike Ceasar's wife and a succession of events and differences culminated in its dissolution on March 13, 1950.

The break with Syria found Lebanon ^{cut} out from its two natural markets, namely: the Palestinian market (that had been lost in 1948) and the Syrian one. It is not difficult to see how this situation could have effected: (a) Lebanese industries, which on replacing their worn-out equipment in 1948 had planned newly installed capacity to cater to the joint markets; and, (b) Lebanese agriculture, which had as a result of the severance of all relations with the newly established state of Israel, promoted citrus plantation the increased output of which was to be absorbed by the Lebanese and Syrian markets.

Thus in 1950, Lebanon started feeling the combined impacts of the above factors on its industry and agriculture; besides, the country disposed for the first time of independent foreign trade statistics that revealed an appalling deficit on its trade account.

In attempting a solution to its problems, the government found itself face to face with two handicaps, namely: (a) too many countries did not adhere to the principle of free trade, the pillar stone of the new Lebanese policy¹

1. In his address to Parliament on March 14, 1950, the Prime Minister officially stated that Lebanon, would introduce an open-door policy.

TABLE 67

**EXPORTS TO BILATERAL TRADE & PAYMENTS
AGREEMENTS COUNTRIES 1951-1956**

Country (1)	Kind and date of Agreements (1)	Exports (In Thousand) (2)							
		1951	1952	1953	1954	1955	1956		
1. Arab									
Iraq	Trade Agreement with a payment's clause: Feb. 19, 1951	2607	2732	4480	4489	6708	4710		
Egypt	Trade Agreement with a payment's clause: Sept. 1, 1951	9422	7082	5964	8757	6826	6047		
Syria	Agreement extending preferential treatment to certain products: Feb. 4, 1952; and March 3, 1953	22007	16583	13732	14853	14853	16247		
Jordan	Purely Trade Agreement: August 27, 1952	4111	3602	6387	5987	6504	7836		
Arab League Members	Multilateral arrangement extending preferential treatment: September 7, 1953	--	--	--	--	--	--		
2. Non-Arab									
Italy	Trade and Economic Coop. Agreement: May 27, 1950 & Nov. 11, 1955	4387	3361	2632	2636	3168	6465		
W. Germany	Trade and Economic Coop. Agreement: Nov. 16, 1951 & June 18, 1954	253	433	392	2428	2307	3782		
Czechoslovakia	Trade and Payments Agreement: June 12, 1952; and Nov. 11, 1954	1035	1773	2057	1620	3331	1807		
Yugoslavia	Trade Agreements: July 23, 1953	--	400	--	2	740	445		
E. Germany	Trade and Payments Agreement: Dec. 14, 1953; and Oct. 12, 1955	--	--	--	29	--	585		
U.S.S.R.	Trade and Payments Agreement: April 30, 1954	--	--	--	9	3102	3956		
Turkey	Trade & Ec. Cooperation Agreement: April 2, 1955	378	596	380	282	223	746		
France	Trade & Ec. Cooperation Agreement: April 30, 1955	3414	3666	9785	4447	5725	11083		
China (Com)	Trade Agreements: Dec. 31, 1955	--	--	--	--	--	--		
Poland	Trade and Payment Agreement: Jan. 4, 1956	--	--	--	--	5	--		
Roumania	Trade and Payments Agreement: Jan. 6, 1956	1683	134	22	709	33	819		

Note: Talks are now taking place for the conclusion of agreements with Saudi Arabia, Sudan and Indonesia.

Source: (1) Commerce du Levant, June 9, 1956

(2) 1951-1955: Bulletin Statistique Trimestriel, op.cit
1956: Commerce du Levant, March 6, 1957.

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but enforced a rigorous licensing and exchange systems and liberalized trade relationships only with countries with which they had bilateral trade agreements; and (b) being a signatory to the international GATT convention, its freedom of action in the tariff and trade fields was seriously trammelled; it could neither adopt a protective tariff for local products nor could it grant preferential ones to neighbouring Arab countries that would entitle it to a treatment of reciprocity.

Faced with the above odds, the government sought to remedy the situation by first walking out of GATT (1951) - after three years of unfortunate adherence - and second by stepping up trade cooperation first on the regional level with neighbouring Arab countries and then on the international level with non-Arab countries. To achieve its purpose it resorted to the conclusion of bilateral trade, trade and payments agreements and multilateral arrangements extending preferential treatment. It should be emphasized that the embarkation on such a policy was primarily motivated by industrial, agricultural and trade problems rather than by payments difficulties.

As shown in Table 67, Lebanon has by now around twenty trade and payments agreements or multilateral arrangements.

b. Nature of Bilateral Agreements

The agreements can be divided into three categories:

(a) The first category comprises those agreements signed with Arab countries; they include clauses pertaining to the extension of preferential treatment as well as requirements to facilitate the import of food products and of raw materials necessary to the local industries, and the export of local products; they cover also general items such as "the exchange of services".

(b) The second category covers those agreements with countries having a "free or partially free" economies; the latter (partially free) economies include such countries like Italy, W. Germany, Yugoslavia, France and Turkey. These agreements are based on the laws of supply and demand and require of the contracting parties nothing more than the treatment of each other on the basis of the most favoured nations clause in addition to the granting of export and import licenses and the setting of import quotas.

As far as Lebanon is concerned, the export of goods depends to a considerable extent on the supplier of the goods himself as well as price and quality considerations. Thus the purpose of these agreements is nothing more than finding export outlets.

(c) The third category covers those agreements with countries whose economy is run by the State, such as Czechoslovakia, E.

Germany the U.S.S.R., Roumania and Poland. These countries have agreed to adopt the "clearing" system in force in their respective countries. This system is more or less in harmony with the interests of Lebanon; thus Lebanon is binded by no obligation except to give certain facilities that are in line with the laws and regulations in the country.

c. Outcome of Bilateral Agreements

The outcome of such bilateral agreements is to a great extent contingent on the availability of Lebanese export possibilities, on the price and quality of goods for export and on certain purely economic considerations. It would seem rather impossible to achieve better results from these agreements unless more extensive use is made of the preferential tariff system especially vis-à-vis countries that can make use of considerable quantities of Lebanese surpluses.

Table 68 gives import-export statistics between Lebanon and the Arab countries (first category) during the period 1951-1956.

It is to be noted that individual country statistics show that exports to Iraq and Jordan have increased by 81 per cent and 91 per cent respectively between 1951 and 1956, while the contrary is true of Egypt and Syria that have registered a fall of 36 per cent and 26 per cent respectively for the same period.

TABIE 68

FOREIGN TRADE BETWEEN LEBANON AND ARAB
(1) COUNTRIES 1951-1956

(In Thousand LL)

Year	Lebanese Exports	Lebanese Imports	Trade Deficit	Deficit with Syria Alone Th. LL	% of Total
1951	38,147	76,100	37,953	36,949	97.35%
1952	29,999	73,896	43,897	47,259	107.65%
1953	30,563	102,859	72,296	77,981	107.86%
1954	34,086	127,091	93,005	93,768	100.82%
1955	33,352	103,504	70,152	72,958	104.00%
1956 (3)	33,772	132,301	98,529	94,828	96.24%

- (1) Iraq, Egypt, Syria and Jordan
- (2) Imports from Iraq exclude petroleum
- (3) Statistics for the first three quarters only for Iraq.

Source: Bulletin Statistique Trimestriel, op.cit.

The table indicates that the volume of trade between Lebanon on the one hand and the other four countries on the other has increased from LL 114 million to LL 166 million or an increase of 45.6 per cent in 5 years. It is worthy of mention that the volume of trade, excluding that with Syria, has risen from LL 33 million to LL 39 million or an increase of 16 per cent for the same period.

As for the overall deficit on trade account it has deteriorated; from LL 38 million in 1951, it stood at LL 99 million in 1956. Excluding Syria, however, Lebanon seems to have attained a precarious trade balance with the remaining three countries.

The agreements of the second category, i.e. with countries having a free or partially free economies, are taken up individually hereunder:

Italy: The 1950 agreement covered an exchange of \$2.25 million; Italy however, imported annually (1951-1955) for around \$1 million, and the goods were outside those listed in the agreement; a new agreement was signed towards the end of 1955 and Lebanese exports in 1956 more than doubled those of 1955 (cf. Table 67).

W. Germany: The 1951 agreement with W. Germany proved a dead letter, and although it provided for a \$3.5 million imports annually, Lebanon did not export for as much as \$1 million. A new agreement was signed in mid 1954 stipulating

the investment of German capital in Lebanon to compensate for the considerable trade deficit. W. Germany, however, did not grant Lebanese imports the benefits of the most favored nations clause neither did it invest capital in the country; thus in 1956 whereas German exports to Lebanon totalled LL 37.9 million, its import from the country stood at LL 3.8 million. The agreement was recently cancelled.

Yugoslavia: Except for some citrus exports, Yugoslavia deemed the export prices of Lebanese products high.

France: The agreement was concluded early in 1955. Exports to France nearly doubled between 1955 and 1956.

The agreements of the third category, i.e. with countries where the state controls the economic life, have had a real beneficial effect on the Lebanese economy; Table 69 indicates the result of such agreements:

In conclusion therefore, one can say that the trade agreement have on the whole: (a) stepped up the volume of trade; (b) succeeded in finding export outlets; and, (c) have probably rendered the trade deficit narrower than it could have been.

TABLE 69
LEBANESE TRADE WITH CZEKOSLOVAKIA
THE U.S.S.R. AND EAST GERMANY

	(In Thousand LL)								
	One Year Prior to (1)		One Year After (1)		Agreement		1956(2)		
	<u>Exports</u>	<u>Imports</u>	<u>Exports</u>	<u>Imports</u>	<u>Exports</u>	<u>Imports</u>	<u>Exports</u>	<u>Imports</u>	
Czekoslovakia	1,035	4670	5705	2057	3340	5397	1807	4220	6027
U.S.S.R.	-	62	62	3102	1665	4767	3956	3364	7320
E. Germany	-	-	-	29	459	488	585	1578	2163

Source: (1) Bulletin Statistique Trimestriel,
Op.cit.

(2) Le Commerce du Levant, June 9, 1956

C. Balance of Payments

In its balance of payments manual, the International Monetary Fund defines the balance of payments for a given period as "a systematic record of all economic transactions during the period between residents of the reporting country and residents of other countries, referred to for convenience as foreigners"¹.

Until recently², the task of assessing the balance of payments in Lebanon had proved knotty and elusive in view of the nature of the trade and services biased Lebanese economy on the one hand and the lack of independent trade data³ and the inadequacy of government statistics on the other, when rough estimates prior to 1951 had been produced. They were neither objective nor scientific.⁴ In 1953, this task fell to the Economic Research Institute of the American University of Beirut, under the direction and supervision of Professors E. Fei and P.J. Klat.⁵ In establishing a

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1. IMF Balance of Payments Manual, (Washington D.C.: 1950), p.1.
 2. 1951
 3. During the Mandate and under the economic union with Syria, trade statistics were published jointly for Lebanon and Syria.
 4. For Example: (i) U.S. Department of State "Estimated Balance of Payments (Lebanon) 1950", Data Book, (Washington: May 1951), (ii) Philippe Takla, then Minister of Finance "Lebanese Balance of Payments", Commerce du Levant, December 26, 1951.
 5. Ed. Fei and P.J. Klat et al; The Balance of Payments of Lebanon 1951 and 1952 (Beirut: Dar-el-Kitab, September 1954) pp. 85

workable framework for the study a few departures were allowed from the now internationally accepted classification. In this context the study reads: "The concept of these transactions - international, economic and financial - is of course very elastic and numerous definitions and classifications have been suggested. The most elaborate are those of the IMF, and they are gaining wide acceptance among nations. In Lebanon, however, it would be impossible to follow closely the Funds Concepts and suggested classifications, mainly because of the inadequacy of Government statistics. Besides, even if all the needed data were available, it is doubtful whether as detailed a record as the one proposed by the Fund would be really meaningful to Lebanon today. The primary need is for a much less sophisticated schedule; in a country where no study of the Balance of Payments has ever been made, either by the government or private institutions, it appears that the main aim of any attempt in that direction at this time should be simply to present in as clear a form as possible the country's major international receipts and payments and to explain financing procedures.

However, and mainly in order to achieve a certain comparability of data and to profit to the utmost from available publications it was felt that as few departures as possible should be allowed from the now internationally accepted classification, therefore, the procedure followed in this study is basically that of the IMF's Abbreviated

Balance of Payments Schedule, adapted to Lebanon's particular conditions and requirements".¹

In view of the fact that the results of the said study covered only 1951 and 1952, and that they were later found in want of certain corrections, the forthcoming discussion will be based on corrected figures for 1951-1955 privately secured from Professor P.J. Klat. These figures are given in Table 70.

The table (cf., Table 70) reveals two distinctive features of the Lebanese balance of payments, namely, (a) the recurrent yearly deficit on trade account; and (b) the persistent accrual of a surplus in the total balance of autonomous accounts. Table 71 shows the balance of payments of Lebanon by three broad categories, namely, the trade, services and capital accounts:

Table 71

Balance of Payments by Trade, Services and
Capital Accounts* 1951-55
(In LL Million)

	<u>1951</u>	<u>1952</u>	<u>1953</u>	<u>1954</u>	<u>1955</u>
Trade Account	-259.5	-290.4	-275.5	-370.4	-500.9
Services Account	198.6	188.0	168.6	248.7	325.0
Capital Account	79.8	128.7	139.8	178.7	208.0
TOTAL	18.9	26.3	32.9	57.0	32.1

* Figures are given net

Source: Table 70, Supra

1. Ibid., p. 1.

Thus inspite of the prodigious increase of LL 241.4 million in the deficit on trade account (including non-monetary gold) between 1951 and 1955, the surplus registered on total autonomous accounts proved sizeable enough not only to make good such deficits, but also to out-weigh them and leave a yearly residual surplus. These surpluses amounted to LL 18.9 million in 1951, LL 26.3 million in 1952, LL 32.9 million in 1953, LL 57.0 million in 1954 and LL 32.1 million in 1955.

Section E (cf., Table 70) refers to the way such balances were held. Thus the increase in monetary gold holdings was to the tune of LL 23.9 million in 1951, LL 15.4 million in 1952, LL 13.1 million in 1953, LL 60.1 million in 1954 and LL. 33.9 million in 1955, whereas, foreign exchange assets and bank short term liabilities to non-residents registered increases and decreases over the said period; the net result between the latter movements in balances and the increases in gold holdings equalled the country's net surplus year after year. The result of such substantial surpluses has been reflected in an increase in official and private gold and foreign exchange holdings as shown in Table 72.

Table 72 reveals that whereas the cumulative balance of payments surplus has been of the order of LL. 167. 2 million during the period 1951-1955, the increase in official and private gold and foreign exchange holdings has been to the tune of LL 182.8 million; the discrepancy between the

TABLE 70

BALANCE OF PAYMENTS OF LEBANON
1951-1955

(In LL Million)

A	Goods and Services	1951		1952		1953		1954		1955		
		Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	Credit	Debit	
	Merchandise Trade	124.9	385.3	122.1	401.0	134.4	373.7	172.1	522.2	196.5	693.5	
	Non-Monetary Gold	15.2	14.3	25.0	36.5	3.6	39.8	23.6	43.9	39.5	43.4	
	Foreign Travel	35.0	14.7	47.6	23.1	58.4	29.3	92.3	30.1	125.3	30.5	
	Transport & Insurance	16.3	9.2	21.2	8.5	23.6	18.7	27.2	19.3	40.4	19.5	
	Investment Income	15.6	11.8	16.2	9.2	27.8	9.7	32.4	9.9	48.7	9.4	
	Government, not includes elsewhere	79.5	9.8	72.2	6.6	59.0	6.7	65.1	6.7	62.1	6.8	
	Transit	62.0	-	42.2	-	21.0	-	-	-	-	-	
	Miscellaneous Service	35.7	-	36.0	-	43.2	-	97.7(1)	-	114.7(1)	-	
	TOTAL (A)	384.2	445.1	382.5	484.9	371.0	477.9	510.4	632.1	627.2	803.1	
B.	<u>Private Donations and Capital Movements</u>											
	Emigrants' Remittances & Transfers	58.4	4.0	71.7	2.7	79.5	3.3	85.5	3.2	87.5	3.1	
	Government	0.5	-	2.5	-	4.3	-	18.2	-	24.2	-	
	Charitable & Cultural Institutions	10.2	-	13.5	-	10.7	-	15.2	-	19.2	-	
	Capital Movements (Net)	14.7	-	43.7	-	48.6	-	63.0	-	80.2	-	
	TOTAL (B)	83.8	4.0	131.4	2.7	143.1	3.3	181.9	3.2	211.1	3.1	
C.	TOTAL (A & B)	TOTAL (C)	468.0	449.1	513.9	487.6	514.1	481.1	692.3	635.3	838.3	806.2
D.	<u>Surplus (Credit-Debit)</u>	TOTAL (D)	18.9	-	26.3	-	32.9	-	57.0	-	32.1	-
E.	<u>Compensatory Financing</u>											
	Monetary Gold	-	23.9	-	15.4	-	13.1	-	60.1	-	33.9	
	Foreign Exchange Assets	0.9	-	-	10.4	-	20.8	2.0	-	0.6	-	
	Bank Short Term Liabilities to non-residents	4.1	-	-	0.5	1.0	-	1.1	-	1.2	-	
	TOTAL (E)	5.0	23.9	-	26.3	1.0	33.9	3.1	60.1	1.8	33.9	

(1) Includes "Transit"

Source: Paul J. Klat, Information privately secured on March 23, 1957=

TABLE 72

(1)

CHANGE IN OFFICIAL AND PRIVATE GOLD AND FOREIGN
EXCHANGE HOLDINGS, 1951 - 1955

	1951	1952	1953	1954	1955	Total 1951-1955
Official Holding (\$Million)						
Gold	6.34	4.32	4.10	28.40	10.17	53.33
French Francs	- 4.09	- 1.10	1.87	- 1.24	- 0.76	- 5.32
Others	- 1.19	- 0.55	7.07	- 6.33	1.33	0.33
Total Change	<u>1.06</u>	<u>2.67</u>	<u>13.04</u>	<u>20.83</u>	<u>10.74</u>	<u>48.34</u>
Private Holdings	3.00	4.00	4.60	- 7.40	1.50	5.70
Total Change (\$ Million)	<u>4.06</u>	<u>6.67</u>	<u>17.64</u>	<u>13.43</u>	<u>12.24</u>	<u>54.04</u>
Change in LLMillion B/P Surplus	15.16	24.43	60.33	43.19	39.66	182.77
	18.90	26.30	32.90	57.00	32.10	167.20

1. These are made up of dollars as reported by the U.S. and are deposits and short-term obligations held for Lebanese account as reported by U.S. banks in the New York Federal Reserve District; figures on private holdings held in other countries are not available.

2. Average conversion rates in LP to \$: 373.3 in 1951, 366.3 in 1952, 342.0 in 1953, 321.6 in 1954 and 324.0 in 1955 (cf. Table 58)

Source: International Financial Statistics, op.cit.

two figures can have either (or both) of two explanations, namely: (a) it is either that the "other" private foreign exchange holdings, of which no account has been taken in table 72, have decreased by around LL 15.6 million; (b) or in the event where there had been an increase in such holdings, the surplus in the balance of payments has been understated. Whatever the reason for such discrepancy, the difference is not substantial enough to defeat or invalidate the general conclusion in this context, namely that the increase in gold and foreign exchange reserves is equal grosso modo to the witnessed balance of payments surpluses.

However the balance of payments surpluses have had two ancillary effects, namely (a) it has been possible to increase the gold cover of the currency from 38.6 per cent of note circulation in 1950 to: 44 per cent in 1951, 54.6 per cent in 1952, 61.8 per cent in 1953, 90.4 per cent in 1954 and 95.1 per cent in 1955¹; this increase has been possible notwithstanding the increase in currency in circulation from LL 196 million in 1951 to LL 266 million in 1955¹; (b) it has resulted in a steady appreciation of the Lebanese pound (cf., Table 58); it is to be noted that the rate of the pound vis-a-vis the dollar would have further appreciated had it not been for the implementation of the

1. Bulletin Statistique Trimestriel, Op.cit.

government decision to support the dollar on the Lebanese market.

A casual glance at table 70 would give the impression that the balance of payments of the country is in a pretty good shape; however, a more searching look into its components would betray that it is rather vulnerable and not in as sound a condition as is imagined a priori. The following analysis will therefore attempt to pry into Lebanon's balance of payments weaknesses and strengths.¹

The main general weakness of Lebanon's balance of payments is that it relies heavily on certain precarious and uncertain sources of revenue to cover its recurrent deficits. Such a state of affairs renders the country exposed to the interplay of exogeneous influences thus questioning the viability of the economy to stand up to stresses and strains of factors outside its direct scope of influence.

In this context one touches upon the items making up the invisible exports of the country; reference is here made to such services as exchange transactions, tourism and estivage (foreign travel) transit and entrepot trades, triangular trade operations and the increasing importance of grants and emigrants' remittances. In this connection a change in the control regulations of one or more countries, or a localized regional tension e.g. the Suez crisis

1. The forthcoming analysis is based on P.J. Klat's lecture "Le Commerce et ses Incidences Sociales", Op.cit., and follows similar lines of analysis.

and the effect it had on the tourist trade is a point in fact, or more strict exchange regulations in one or more countries from which emigrant remittances are forthcoming, may prove serious enough to drastically reduce the contribution of any one of such items appreciably. A specific illustration in this context will bring out the point more clearly. Suppose that both the I.P.C. and Tapline pipelines were for one reason or another blown up in Syria; if Lebanon as a result were to lose oil royalties and ancillary revenues from these concessionary companies, this may prove enough to probably wipe out all of the country's balance of payments surplus; this is also true of the transit and miscellaneous services as well as of the emigrants' remittances. These items have contributed in toto between 1951 and 1955 the equivalent of LL 253 million in 1951, LL 257 million in 1952, LL 249 million in 1953, LL 331 million in 1954 and LL 409 million in 1955; a 15 per cent reduction in their contribution would have decreased the 1954 surplus of LL 57 million to a meagre LL 7 million and would have wiped out all surpluses during the remaining years leaving deficits of LL 19 million in 1951, LL 12 million in 1952, LL 4 million in 1953, and LL 29 million in 1955, (cf., Table 70) .

Another weakness in the Lebanese balance of payments emanates from its vital dependence on capital movements the net amount of which averaged LL 50 million annually between 1951-1955. Part of this capital has come from

Egypt at moments of political uncertainty in the said country; such capital is essentially "hot", which having succeeded in escaping the mother country, settles temporarily in Lebanon and serves to swell current account balances; another sizeable portion originates from the oil rich Persian Gulf states and is essentially transient. In both instances the Beirut money market has proved a temporary refuge and a spring board from which the bulk of such capital inflows seek safer political and economic climates; one can hardly say, however, that such capital seeks more remunerative markets when the rates of return in Lebanon are definitely higher than in Europe or America.¹ This is not to say that all such imports have sooner or later to be on the move; there are of course exceptions. However, when such capital imports remain in the country, one can argue that by the very nature of the two outlets into which they seek investment there is liable to spring an inherent danger to the country. The two such outlets are bank current accounts and real estate. In the case of the first alternative they can act as "Democles' Sword" with respect to the country's banking liquidity, for they are liable to be withdrawn at any moment without

1. The author here disagrees with P.J. Klat's argument that Persian Gulf Capital usually seeks more remunerative foreign outlets. It is believed that such capital flights are rather in the nature of a hedge against future political uncertainty and consequent confiscation.

notice; in the case of the real estates' investments, in addition to their serious political implications, such capital imports do not add much, relatively speaking, to the productive capacity of the country. Capital imports really prove beneficial only when invested in productive enterprises that will ultimately increase employment opportunities, contribute to the country's national income, make the country less dependant on foreign suppliers, and afford ultimate repayment of capital and interest.

It is gratifying to know that the government has been aware of the increasing importance of such capital inflows into the country as well as of the potential danger of its being withdrawn and the repercussions such action would exert on the economy. In its effort to stabilize such incoming capital it has taken two very concrete measures namely: (a) by the law of February 10, 1954, newly established local and foreign companies are exempt from income tax provided, inter alia, their initial capital investment is not less than LL 1 million; the law is operative for five years; and (b) by the law of September 3, 1956, the government promulgated the "Bank Secrecy Act" constraining banking institutions not to divulge any information pertaining to holders of deposits and exempting such deposits from legal confiscation or freezing by way of lien.

The third major weakness in Lebanon's balance of payments is directly ascribed to the smooth and constant levelling off of income earned from the gold transit trade. Income from such activity derived mainly from the price disparities between those ruling on the Eastern and Western markets and from the relatively substantial premia that existed between the free and official market prices of gold on various world markets. However with the decision of the Union of South Africa to market part of its production on the free markets of the world, such premia seems to have been wiped away and the gold prices (free and official) have become unified; besides, the fall of the Chinese mainland to the communists and the tightening of Indian frontier controls around the Portuguese Protectorate of Goa has resulted in a thinner transit gold trade; hence a reduction in revenues from the gold transit trade.

Table 73 gives the major areas from which gold in transit comes to Lebanon together with the major areas to which such transit is destined.

Against the above major weaknesses, the balance of payments of Lebanon is in a position to boast certain healthy signs of strength.

The first sign is the witnessed improvement in the volume of export proceeds ever since 1952; credit items of the merchandise trade stood at LL 196.5 million in 1955 as against LL 122.1 million in 1952 (cf., Table 70). It

TABLE 73

INCOMING AND OUTGOING GOLD IN TRANSIT 1951-1955

(in LL Million)

	Incoming into Lebanon				
	1951	1952	1953	1954	1955
Arab Countries	0.8	0.3	0.9	1.1	1.2
Western Countries	306.1	223.3	278.8	188.3	158.7
Eastern and other countries	47.7	16.2	5.6	4.7	14.6
Total	354.6	239.8	285.3	194.1	173.5
		Outgoing from Lebanon			
Arab countries	27.5	50.6	31.9	53.5	31.8
Western Countries	21.2	0.6	1.6	0.3	-
Eastern and other countries	305.9	188.6	251.8	140.3	141.7
Total	354.6	239.8	285.3	194.1	173.5

Source: Bulletin Statistique Trimestriel, op.cit.

should be mentioned in this context that the increase in imports has been more than both the proportional and absolute increases in exports with the result that the deficit on the merchandise trade account has further deteriorated from LL 278.9 million in 1952 to LL 497 million in 1955. The increase in exports is mainly ascribed to development in agriculture-especially due to the change in crop patterns - and to the conclusion of bilateral and multilateral trade and payments agreements. Such agreements have not had any restrictive effects on the freedom of trade, they have simply acted as an advertising media in countries that would have otherwise been reluctant to accept Lebanese products. The keeping up of such policy will definitely enhance future Lebanese exports.

The second sign of strength is the slow but sure development and stabilization of certain balance of payments items looked upon hereto as unstable. Foremost among such entries is tourism.

Few years ago, tourism in the country was more or less regional in nature; the number of tourists or estiveurs fluctuated between 10 and 15 thousand persons depending to a considerable extent on the economic and political climates in neighbouring countries. Since the opening of the Beirut International Airport¹ the country

1. Officially inaugurated on April 28, 1954 the airport took nearly four years to build and cost LL 47 million. Le Commerce du Levant, May 8, 1954.

has been playing host to a completely new kind of tourists or transient passengers, viz: the international visitor who calls on the country for enough time to board another plane, visit historical sites, strike up a business deal, close a contract or simply take it easy for some days. Table 74, shows the number of ordinary and transit passengers through Beirut International Airport between 1951 and 1955.

Table 74

Passenger Traffic Through Beirut International Airport, 1951-1955

	<u>1951</u>	<u>1952</u>	<u>1953</u>	<u>1954</u>	<u>1955</u>
Ordinary Passengers					
Incoming	30,220	80,886	92,184	125,118	149,279
Outgoing	33,024	84,593	91,716	120,389	145,971
Transit Passengers	61,220	151,317	162,691	225,545	275,272
<u>Source:</u>	Bulletin Statistique Trimestriel, <u>Op.cit.</u>				

The total number of ordinary tourists was 127.2 thousand in 1951, 216.4 thousand in 1952, 125.6 thousand in 1953, 151.5 thousand in 1954 and 179.0 thousand in 1955 .

It is to be noted that two considerations are important

1. U.N. Statistical Yearbook 1956; Op.cit.p. 356.
Note: this information quoted by the U.N. is based on police records.

in this context namely (a) the large increase in numbers of visitors, and (b) the fact that the pattern of the tourist trade has undergone a change from the regional to the international. It is thanks to the new pattern of the tourist trade that large fluctuations in revenues from this item are more or less ironed out and that the future growth of this industry is rather bright; the latter statement is true only if both regional and international conditions are not subjected to the stresses and strains of war.

Apart from tourism one can safely advance the general observation that on the whole earnings from services in general have tended over the past few years to firmly consolidate themselves. This is not difficult to observe when one bears in mind the gradual integration of the Lebanese economy into the Arab and Middle-Eastern regional framework. Services to other countries have ceased being unpredictable "Lucky Strikes", or simply the result of differences in exchange and other legislation in various countries abroad; on the contrary they are more and more confirming themselves as a direct function of the country's geographic position which makes of it the natural intermediary between the East and the West. This role of financial and trading intermediary is most fit for a country like Lebanon within the regional set-up of the Arab world. For that matter the country has shown great

resiliency and ability to adapt to new situations; thus with the loss of revenue from the gold transit trade, other services were stepped up with the result that not only did they cover for such reductions in earnings but also succeeded to register in total a balance more favourable than in the previous years. This ability to prove flexible and elastic before newly arising situations bears testimony to the skills and ingenuity of the descendants of the Phoenicians.

If one may be allowed to dream for a moment of a Middle East without economic boundaries, Lebanon, and more specifically Beirut, will play to the hinterland an identical role to that played by New York to the rest of the U.S.; thus acting as the financial and trading center and disposing of the main harbour and airport in the whole region.

Inspite of all the strengths in the balance of payments and *inspite* of all the confidence in the Lebanese economy as attested to by the increasing inflows of capital into the country and the appreciation of the Lebanese pound vis-a-vis foreign currencies, it is believed that the present commercial policy leaves the economy wide open to suffer the slings of factors beyond its control. In this context a concrete illustration is given below to bear out such belief.

The relaxation of international tensions in mid 1953 had a depressing effect on the prices quoted for gold and foreign exchange on the Beirut market. Such external factors were bound to operate with major effect on Lebanon's narrow and speculative market, which is geared predominantly towards the foreign trade sector. The fall in the general level of world prices proved correspondingly disruptive to the Beirut market and resulted in considerable inventory losses; merchants who did not have inventories on hand could by purchasing cheaper dollars buy the same commodities at even cheaper prices from outside; the net result was that these traders could and did undersell those with piled up inventories. The net result was that the bull on the market degenerated into a serious trade recession with an increasing rate of insolvencies¹ and 25 actual bankruptcies.² It is true that internal factors had played an important role in precipitating such a situation; however, what is being here argued is that in spite of the government's policy to maintain the dollar rate, it has no control over world prices, a fall in which, under present conditions can seriously affect the whole economy.

It might therefore be desirable to adopt a policy

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1. The outstanding liabilities of insolvent traders had been conservatively estimated at between LL 2.5 and LL 3 million.
 2. UNRWA, Q.B.E.D. No.8, Op.cit., p. 26.

that is more or less of a balance between a generally free and a moderately restricted foreign trade policy. The latter may lead to the development of other productive sectors such as industry and agriculture without really infringing on the relative freedom of trade.

D. Foreign Trade & Future Growth

It should be noted at the start that the possibilities offered by the foreign trade sector within the context of future development and growth can hardly be discussed independently of parallel contributions of other sectors or without advocating the adoption of certain fiscal and monetary measures and some degree of government intervention: In this brief section therefore the relation of foreign trade to future economic growth will be discussed from the various capital contributions that the former can make available for purposes of development to the latter.

In the first place, the relative contribution of the foreign trade sector to the country's national income is the greatest and as such offers prima facie the greatest possibilities of direct contribution to the level of savings which in turn determines the level of capital formation. Moreover, it was shown in the discussion of the balance of payments, that the foreign trade sector offers the greatest lure for the attraction of foreign capital.

Prima facie therefore and with the above implications in mind, the foreign trade sector should prove the

backbone of future growth. It is feared that the possibilities are not as bright as they look at first sight.

In the first place the disparities in the distribution of income in this sector are enormous; in 1950, the average income of the 30,000 employees in this sector averaged less than LL 1,000 per year;¹ therefore one can confidently argue that the savings of this group are nil. On the other hand, the employers in this sector, judging by their income, are definitely in a position to save; however, it is not hard to imagine that it is only natural for such people to have heavily biased import taste patterns and to expect their savings to either be reinvested in their commercial ventures or to be held in the form of bank balances subject to call at short notice to meet the liquid requirements of a pressing commercial deal. From this it follows that the fact that they deposit such savings in banks is enough encouragement for such institutions, in view of their high reserve ratio, to embark on a more liberal credit policy. However from every day experience and bearing in mind the preponderantly commercial character of the banking system in the country, banks are ready to cater solely to the requirements of the business community and would not consider any long term loans that can finance the acquisition of capital equipment in productive enterprises. Besides, businessmen who by nature are suspicious of say industrial ventures have not been educated nor are they

1. Cf., Table 19, Supra.

X interested in tying down their realized profits into bonds and shares of industrial or agricultural ventures.

If therefore business savings are considered conducive to overall growth, it is feared that they are helping preponderantly the growth of the trade sector thus confirming more and more such sector - with the rich growing richer - and automatically rendering the balanced growth of the various other sectors more and more difficult to achieve. In the second place is the question of capital inflows. It has already been shown that such capital is essentially "hot and transient" and serves, when in the country, to swell bank balances or, if and when invested, it usually is trapped in the real estate pit. The arguments advocating how unproductive such capital inflows have proved to be have already been stated. It suffices to say, however, that if such capital imports have proved instrumental in covering the balance of payments deficit, they have not added, relatively speaking, to the capital stock of the country.

How then did and will the foreign trade sector help future growth in the country? The answer to this question can be found by reviewing its contribution to various sectors.

X As for the agricultural sector, the trade sector help has taken two forms of: (a) It has earned enough foreign exchange to finance the purchase of agricultural

capital equipment; and, (b) through commercial contacts and the conclusion of bilateral trade agreements, it has found new markets for the increased agricultural production.

With regard to the industrial sector, the trade sector has helped its growth on the one hand and arrested its development on the other. It has helped the industrial sector by earning enough foreign exchange to finance its capital imports; it has arrested its development by sometimes allowing competing products to drive industrial production at levels below capacity. On balance however, it is believed that the foreign trade sector has caused the industrial sector more harm than good.

The remaining sectors have on balance benefitted from the activities of the trade sector through the latter's foreign exchange earnings that have met the import requirements of the sectors concerned.

In summary, therefore, the foreign trade sector has contributed to overall growth through two channels, namely: (a) It has through the foreign trade leakages helped arrest inflationary tendencies while the country was set on the path of development; and, (b) it has earned enough foreign exchange to allow the imports of capital goods needed for the growth of the various sectors.

As to the future it is hoped that the said sector will go on arresting inflationary tendencies while it will earn enough foreign exchange to keep on financing capital imports and meet interest charges if the country were to implement part of its development projects with the help of foreign loans.

CHAPTER VI

PUBLIC FINANCE

Introduction:

"The structure and classification of central government budget receipts and expenditures is an important problem for many countries. Effective government fiscal policy for an economy as a whole can be formulated only on the basis of actual information and current reporting of activities in the government sector. The budget must serve, in many countries as an instrument for the formulation of full employment targets and development programs."¹

The main purpose of this chapter is to present a descriptive analysis of Lebanon's ordinary public revenues and expenditures, appraising as the description develops, the main taxes and the direction of outlays.²

The emphasis in the forthcoming analysis will therefore be focussed on the Ordinary Budget. The reasons for this course of action are the following:

- (a) In the consolidated statement of the budgets in Lebanon, the heavy weight carried by the

1. UN Department of Economic Affairs, Budgetary Structure & Classification of Government Accounts, (New York: Feb 1951), p.3.

2. For an analysis of the Lebanese fiscal system, Vide: Raja S. Himadeh, The Fiscal System of Lebanon, M.A. thesis, (A.U.B.:1953).

Ordinary Budget is more or less conclusive. Besides, it is believed that the Ordinary Budget is the best reflection of the Government's fiscal policy and that it is primarily through measures adopted within its framework that inequalities in income distribution can be relatively levelled off and levels of savings consequently affected;

- (b) The Special and Municipal Budgets will be briefly treated at an overall level under the cursory description and analysis of the consolidated statement of the budgets in Lebanon; the realization that they account for around 15 per cent (cf., Table 76) of overall receipts and expenditures, together with the fact that information relating to them is not always available as to permit a trend analysis, defeats the purpose of this chapter. It is therefore believed that their separate and detailed treatment is not warranted hereunder;
- (c) The Extra-Ordinary Budgets fall under the second part of this dissertation that will be concerned with the various methods of financing economic development; their description and analysis will therefore be deferred thereto; and,

- (d) Relevant information on few Special Treasury Accounts, e.g. the Fuel Oil Account, the Small Currency Account, the Deposits Account, is altogether lacking. Their treatment has therefore been totally dropped from this chapter.

Bearing the above limitations in mind, the present chapter will start with a brief survey and analysis of the consolidated budgets in Lebanon and will then dwell at length on the Ordinary Budget. A last section will be devoted to an evaluation of the country's fiscal system and expenditure pattern.

1. Consolidated Statement of Budgets in Lebanon:

The Lebanese Government does not publish a consolidated statement of all its budgets. In attempting to reconstruct such a statement, the task can prove extremely difficult, and the results can be adopted only as approximate and never as conclusive for various reasons, namely (a) while information is available for parliamentary appropriations to the extraordinary budgets, actual expenditures are neither available in toto nor on specific projects; (b) information on certain special budgets is never released, e.g. the Beirut Water Service Budget; and (c) there exists among the various budgets a certain amount of duplication,¹ the elimination of which is

1. For example, beginning 1953, the Ordinary Budget shows an LL 1 million allocation to the Ministry of National Economy to cover salaries of the wheat office; this sum is also treated as an expenditure of the wheat office Budget. Hence, there arises a duplication of LL 1 million in reconstructing a consolidated statement of all budgets.

TABLE 75

CONSOLIDATED STATEMENT OF BUDGETS OF LEBANON
(LL. Millions)

	R E C E I P T S								E X P E N D I T U R E S							
	+Actual+						Estimates		+Actual+						Estimates	
	1950	1951	1952	1953	1954	1955	1956	1957	1950	1951	1952	1953	1954	1955	1956	1957
I. Ordinary Budget (b)	101.8	123.0	147.4	162.5	193.0	223.3	151.5	170.6	84.5	90.1	88.5	96.3	111.2	132.4	151.5	170.0
II. Special Budget, total	7.4	9.4	37.6	19.0	20.8	22.2	26.2	n.a.	6.7	10.6	31.7	18.6	20.2	23.1	26.2	n.a.
Wheat Office (a)	na	na	17.3	8.4	8.8	7.0	6.0	na.a	na	na	12.9	7.6	7.3	7.0	6.0	na.a
Telephone Service	4.4	5.4	8.3	5.2	5.5	9.2	12.1	na.a.	3.7	6.7	9.1	6.0	7.1	10.8	12.1	na.a.
Bureau of National Lottery	2.7	3.5	5.1	5.0	5.1	5.2	7.2	6.3	2.6	3.5	4.8	4.6	4.6	4.5	7.2	6.3
Beirut Water Service	-	na	na	na	na	na	na	na	-	na	na	na	na	na	na	na
Tripoli Water Service	na	na	na	na	.3	.3	.3	na	na	na	na	na.a.	.4	.3	.3	na
Common Electricity and Transport	-	-	-	-	na	na	na	na	-	-	-	-	na	na	na	na
Water Projects	na	.1	0.1	.1	.2	.3	0.6	na	na	0.1	.1	.1	.2	.2	0.6	na
Municipal and Town Planning Service	.3 ^x	.4 ^x	.5 ^x	.3 ^x	.2 ^x	.3 ^x	na	na	.3 ^x	.4 ^x	.5 ^x	.3 ^x	.2 ^x	.3 ^x	na	na
Customs Administration (b)	na	na	6.4	-	-	-	-	-	na	na	4.3	-	-	-	-	-
Department of Light-houses (c)	-	-	-	-	.6	-	-	-	-	-	-	-	.4	-	-	-
Commissariat of Tourism (d)	na	na	na	-	-	-	-	-	na	na	na	-	-	-	-	-
Explosives Department (e)	na	na	na	-	-	-	-	-	na	na	na	-	-	-	-	-
III. Municipal Budgets (f)	12.8	11.4 ^x	13.8 ^x	18.0	10.5 ^x	11.5	20.8	na	12.4	11.4 ^x	13.8 ^x	12.5	10.5 ^x	11.5	20.8	na
IV. Extraordinary Budget																
Appropriations, total (g)	15.0	24.1	2.5	6.2	64.4	23.6	56.4	98.0	15.0	24.1	2.5	6.3	64.4	23.6	56.4	98.0
A. Development Works Fund, Total	15.0	19.6	2.5	6.3	17.2	14.1	8.3	42.0	15.0	19.6	2.5	6.3	17.2	14.2	8.3	42.0
From Reserve Fund	(9.0)	(19.6)	(2.5)	(6.3)	(9.8)	(.8)	(8.3)									
From Interests																
Gommuns	(6.0)	(-)	(-)	(-)	(-)	(-)	(-)									
From Wheat Office Reserve	(-)	(-)	(-)	(-)	(2.9)	(-)	(-)									
B. Loans, total	-	4.5	-	-	47.2	9.4	48.1	56.0 ^{na}	-	4.5	-	-	47.2	9.4	40.1	56.0 ^{na}
1. Treasury loans;																
National Idani Service	-	-	-	-	5.0	-	(11.2)	-	-	-	-	-	5.0	-	(11.2)	-
Telephone Service (Special a/c)	-	-	-	-	-	(1.8)	-	-	-	-	-	-	-	(1.8)	-	-
2. Other Treasury Loans																
Beirut Water Service	-	(4.5)	-	-	(1.7)	(4.3)	-	-	-	(4.5)	-	-	(1.7)	(4.3)	-	-
Common Electricity and Transport	-	-	-	(-)	(33.5)	-	(2.0)	(12.0)	-	-	-	-	(33.5)	-	(2.0)	(12.0)
Telephone Service	-	-	-	-	(3.7)	(3.0)	(2.5)	(2.0)	-	-	-	-	(3.7)	(3.0)	(2.5)	(2.0)
Agricultural, Industrial and Real Estate Credit Bank Municipalities	-	-	-	-	(2.0)	-	-	-	-	-	-	-	(2.0)	-	-	-
Municipalities	-	-	-	-	(1.4)	(.3)	(.3)	(6.0)	-	-	-	-	(1.7)	(.3)	(.3)	(6.0)
3. IBRD loan to National Idani Service (h)	-	-	-	-	-	-	(14.1)	(10.5)	-	-	-	-	-	-	(14.1)	(10.5)
4. Loans from the Banque de Syrie et du Liban (i)	na	na	na	na	na	na	6.1	na	na	na	na	na	na	na	6.1	na

C. General Development Fund	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
D. Reconstruction Authority	-	-	-	-	-	-	12.0	18.0	-	-	-	-	-	-	12.0	18.0
V. Total (I, II, III, IV)	<u>136.9</u>	<u>168.0</u>	<u>201.4</u>	<u>205.8</u>	<u>288.6</u>	<u>280.6</u>	<u>254.8</u>	-	<u>118.7</u>	<u>136.2</u>	<u>136.6</u>	<u>133.7</u>	<u>206.2</u>	<u>190.5</u>	<u>254.8</u>	-
VI. Less Adjustments, total	<u>18.5</u>	<u>17.7</u>	<u>22.5</u>	<u>22.3</u>	<u>40.3</u>	<u>49.5</u>	<u>3.5</u>	<u>3.0</u>	-	-	-	<u>1.0</u>	<u>4.7</u>	<u>5.0</u>	<u>3.5</u>	<u>3.0</u>
1. Withdrawals from Reserve Fund to Ordinary Budget (j)	18.5	17.7	22.5	21.3	35.3	44.4	-	-	-	-	-	-	-	-	-	-
2. Duplications (k)	-	-	-	1.0	4.7	5.9	3.5	3.0	-	-	-	1.0	4.7	5.0	3.5	3.0
VII. Grand Total (V less VI)	118.4	150.3	178.9	183.5	248.4	231.1	251.3	-	118.7	136.2	136.6	132.7	201.5	195.5	251.3	-

Note: Ordinary, Special and Municipal Budgets for the years 1950 to 1955 are actual from closed accounts, except those (x0 which are estimates. All figures for 1956 and 1957 are estimates. Extraordinary Budget Appropriations are all estimates. (na) means not available, and (-) means none.

- (a) Beginning in 1953, the Ordinary Budget allocated LL 1 million to the Ministry of National Economy to cover salaries of the Wheat Office; and this sum is also treated as an expenditure of the Wheat Office. Hence, there is duplication of LL 1 million on both the receipts and expenditures sides of the Ordinary Budget and the budget of the Wheat Office in 1953, 1954, 1956, 1957 and LL 2 million in 1955. This duplication has been eliminated under V. Adjustments.
- (b) Special budget through 1952 with only net receipts (difference between receipts and expenditures) transferred to, and included in, Ordinary Budget. Customs budget included in Ordinary Budget, under Ministry of Finance, in 1953 and thereafter. No duplication of receipts and expenditures of Customs Administration with those of Ordinary Budget for the year 1952.
- (c) Private concession terminated 4 November 1953 and Department brought under Ministry of Public Works on March 9 1954. Budget of Department incorporated in Ministry of Public Works as of 1955.
- (d) Commissariat of Tourism incorporated in Ordinary Budget under Ministry of National Economy as of 1953.
- (e) Explosives Department incorporated in Ordinary Budget as of 1953
- (f) Budgets for 19 major municipalities only in 1950, 1951 and 1952. Budget of 1953 covers nearly all municipalities. Figures for 1954 and 1955 are budget estimates of the Municipality of Beirut only. 1956 figure covers 49 municipalities.
- (g) Appropriations are shown for years in which they are made. Information is not available on actual expenditure during each year. 1957 estimates of LL 42 million given by Joseph Chader; Vide (m) below
- (h) The \$ 27 million loan obtained from the IBRD will be withdrawn at the following rate (in \$ million):- 1955: 0.15; 1956: 4.20; 1957: 4.06; 1958: 5.18; 1959: 3.95; 1960: 4.93; 1961: 4.70
- (i) BSL loans to municipalities with Government guarantees : 1956: LL 2.5 million to Aley; LL 0.55 million to Shoueir; and LL 3.0 million to B.C.A.I.F.; 1957: LL 6.0 million to Tripoli
- (j) For supplementary appropriations, previous year's expenditure, etc.
- (k) Duplication between Wheat Office Budget and Ordinary Budget as of 1953 (Vide footnote a above), and between Budget of Telephone Service and Treasury loans to Telephone Service under extraordinary budget Appropriations (item IV B2) in 1954 and 1955.
- (l) Ordinary Budget receipts include withdrawals from the Reserve Fund.
- (m) Joseph Chader, in "Notes on 1957 Budget" in *Le Commerce du Levant*, February 9, 1957, estimated total loans at LL 30.0 million in 1957; to this were added LL 26.0 million, which are loans not provided for in his estimates, namely: LL 6.0 million to municipalities LL 18 million to the Reconstruction Authority and LL 2.0 million to the Telephone Service.

difficult but not impossible; however, one cannot be absolutely sure that all such duplications are duly taken care of.

Notwithstanding the above difficulties, it is believed that such an approximate reconstruction of a consolidated overall budget statement, as shown in Table 75, can serve a useful purpose. The table indicates that whereas total expenditures stood at over LL 118.5 million in 1950, they amounted to LL 186.5 million in 1955, or an increase of 57.3 per cent over 5 years. The LL 68.0 million increase is a composite of increases of LL 47.9 million in the Ordinary Budget, LL 11.4 million (~~LL~~ 15.4 million less LL 4.0 million adjustments) in the Special Budgets, LL 8.6 million in the Extra-Ordinary Budget appropriations, and a LL 1.0 million decrease in the Municipal Budgets.¹

In real terms, considering the fall in the wholesale price index (cf., Table 77), the increase is more pronounced. In real terms the 1955 expenditures stood at LL 310.8 million as compared to the LL 191.2 million 1950 level (1944 = 100); thus, per capita real expenditures increased from LL 150.8 in 1950 to LL 222.4 in 1955, or by approximately 50 per cent.

The percentage contribution of the various budgets to total consolidated receipts and expenditures, excluding Reserve Fund withdrawals and taking care of the adjustments, is given in Table 76 below.

1. The decrease in Municipal Budget expenditures is not a real one because the 1950 figure covers 19 major municipalities in 1950, whereas the 1955 figure is for Beirut only.

TABLE 76

PERCENTAGE CONTRIBUTION OF THE VARIOUS BUDGETS TO THE
TOTAL CONSOLIDATED GOVERNMENT RECEIPTS & EXPENDITURES

	1950	1951	1952	1953	1954	1955	1950-55 Average
A. RECEIPTS							
1. Ordinary Budget	70.3	70.1	69.8	77.0	63.4	77.1	71.3
2. Special Budgets	6.2	6.3	21.0	9.8	6.5	7.8	9.6
3. Municipal "	10.8	7.6	7.8	9.8	4.2	4.9	7.5
4. Extra-Ordinary Budgets	12.7	16.0	1.4	3.4	25.9	10.2	11.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
B. EXPENDITURES							
1. Ordinary Budget	71.2	66.1	64.8	72.6	55.2	71.0	66.8
2. Special Budget	6.7	7.7	23.2	13.3	7.7	10.2	11.4
3. Municipal Budget	10.5	8.4	10.2	9.4	5.2	6.2	8.3
4. Extra-Ordinary Budget	12.6	17.7	1.8	4.7	31.9	12.6	13.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source : Table 75, Supra.

The table indicates that on both the receipts and expenditures sides, the six-year average contributions of the various budgets to the total follow the same scale of importance, namely; the Ordinary Budget (71.3 and 66.8%), followed consecutively by the Extra-Ordinary Budgetary Appropriations (11.6 and 13.5%), the Special Budgets (9.6 and 11.4%), and the Municipals Budgets (7.5 and 8.3%). It is worthwhile noting that these figures must be used advisedly due to the lack of certain information; moreover, if one were able to dispose of all needed information for such a purpose, e.g. all municipal budgets and actual extra-ordinary expenditures year after year, etc., the above pattern might well prove different; however, one thing can be ascertained, namely, that the Ordinary Budget contributions will maintain a position way above the other items.

2. Ordinary Budget:

The Ordinary Budget derives its receipts mainly (between 84 and 90%, cf., Tables 78 and 80) from current taxes and fees, while its expenditures are directed primarily towards financing current operations of the ministries and department of the central government.

Table 77 shows Ordinary Budget revenues and expenditures ever since Lebanon achieved political independence.¹ The table calls for two interesting observations, namely:

1. Lebanon achieved independence on November 22, 1943.

TABLE 77
ORDINARY BUDGET, 1944 - 1957

Calendar Year	Receipts			Expenditure	Gross surplus (2 - 5)	Net Surplus (3 - 5)	Indices (1944 = 100)			
	Total (3 + 4)	Revenue	Withdrawals from Reserve				Revenue	Expenditure	Wholesale prices	Monetary (a) circulation
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1944	37,883	37,741	142	27,667	10,217	10,075	100	100	100	100
1945	59,195	55,232	3,963	35,921	23,274	19,311	146	130	109	118
1946	79,156	73,916	5,240	51,994	27,162	21,922	196	187	93	100
1947	102,840	85,988	16,852	60,722	42,118	25,266	227	219	87	112
1948	93,493	78,755	14,738	70,068	23,425	8,687	208	253	82	129
1949	108,993	87,367	21,626	83,402	25,591	3,965	234	301	67	117
1950	101,809	83,317	18,492	84,522	17,287	- 1,205	220	305	62	137
1951	123,049	105,307	17,742	90,051	32,998	15,256	279	325	78	145
1952	147,415	124,927	22,488	88,510	58,905	36,417	331	319	71	140
1953	162,518	141,232	21,286	96,309	66,209	44,923	375	348	64	143
1954	192,977	157,444	35,533	111,182	81,795	46,262	417	401	59	170
1955	223,273	176,863	44,410	132,377	90,896	46,486	474	478	60	185
1956	151,500	151,500	-	151,500	-	-	401	547	63	228
1957	170,000	170,000	-	170,000	-	-	450	614	-	-

Source: Republic of Lebanon, Budget Closed Accounts, 1944-1955; estimates for 1956 and 1957 from Budget Estimates, 1956-1957. All Ordinary Budget figures in this Chapter are from this source unless otherwise indicated. Indices are from Bulletin Statistique Trimestriel, op.cit. Discrepancies due to rounding.

(a) As of 31 December.

(a) The general trend of both receipts and expenditures has been steadily upwards for the past 13 years, with current revenues increasing 4.5 times and expenditures more than six-fold between 1944 and 1957. The increase in revenue can be partly attributed to the introduction of new taxes, e.g. the transfer tax in 1951, and to a more efficient tax administration and collection; however, the main reason for such an increase has been chiefly due to the general increase in the level of economic activity,¹ Government receipts have in fact risen more markedly than national income; this fact is directly ascribed to the heavy dependence on indirect taxation which enabled the government to capture a growing proportion of national income and thus increase its outlays.

Increasing expenditures reflect the general expansion of government activities and of its measuring up to certain of its sovereign responsibilities, such as foreign affairs, defence, memberships and effective participation in international organizations, etc., which had previously been the responsibility of the Mandatory Power. Besides, increased attention to and expenditures on economic development,

1. While (a) indirect tax rates have not increased appreciably in the last decade, (b) wholesale price levels are now lower than during the immediate post-war years, and (c) the yields of indirect taxes have increased greatly; then, the increased revenue must reflect primarily the rise in economic activity.

education and social welfare tend to be reflected in steadily growing government outlays.

(b) Except for 1950,¹ there have been continuing budget surpluses, owing to an intentional conservative underestimation of public revenue and to the slow rate of expenditures of appropriated funds. In this respect the Government's policy appears to have been aimed at scoring annual surpluses so as to feed the Reserve Fund.²

A. Ordinary Budget Receipts³

In its budgetary classification, the Government makes no distinction between public revenue and public

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1. The year the Customs Union with Syria was ended; the immediate impact of that event was a sharp decline in the level of economic activity.
 2. The Reserve Fund is a special Treasury Account fed by surpluses from the Ordinary Budget which are transferred to it when the accounts are closed each year. It is drawn upon in case of need to meet supplementary appropriations under the Ordinary Budget and to finance large capital expenditures under the Extra-Ordinary Budget.
 3. For information on Lebanon's tax laws, Vide: Baroud, Saleh and Hatem (editors), Al Majmu'at Al-Haditha Lil-Qawanin Al-Lubnaniyah, (Beirut: Sader Press, 1955), vol.IV.

receipts. Ordinary Budget receipts are classified under four main nomenclatures, namely: (i) direct taxes and similar duties; (ii) indirect taxes and fees; (iii) income from public domain and enterprises; and (iv) miscellaneous revenues. Following is an analysis of the principle sources of revenue:

(i) Direct Taxes and Similar Duties

As can be seen from Table 78, two subcategories are recognized under this nomenclature, namely: (a) the one relating to taxes, and (b) the one concerned with fees.

The table indicates that the combined fiscal weight of direct taxes is relatively light, especially when compared to that of indirect taxes on the one hand (cf., Table 80) and to that in more advanced countries on the other.¹ There are various reasons for this situation, chief among which is the potential opposition of the trade sector to any such legislation that may result in a heavy burden of direct taxation upon it; moreover, the inefficiency and underdevelopment of the tax administration system leaves a wide leeway for tax evasion before many taxpayers in general and the trade sector in particular. However, with more forceful means

1. In 1954-55, income and inheritance taxes per capita alone stood at \$2.84 in Lebanon as compared to: Egypt, \$2.73; Iraq, \$1.07; Jordan, \$0.60; Syria, \$1.55; Israel, \$38.65; U.K., \$116.25 (income tax alone); France, \$48.83 (direct tax on households and corporations); and, U.S., \$342.50. UNRWA Q.B.E.D. No. 13, op.cit., p.vi.

TABLE 78

ORDINARY BUDGET RECEIPTS: DIRECT TAXES & SIMILAR
DUTIES, 1950 - 1957

	<u>1950</u>	<u>1951</u>	<u>1952</u>	<u>1953</u>	<u>1954</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>
I. In LL Million								
<u>Direct Taxes</u>								
1. Built-up Properties	2.8	3.1	3.7	4.3	5.5	6.5	6.0	7.3
2. Land	0.7	0.6	0.6	0.5	0.6	0.3	1.5	0.9
3. Income	10.1	11.3	13.5	15.7	17.5	16.3	14.5	17.5
4. Inheritance	-	-	-	0.6	0.6	0.8	0.6	1.0
5. Private Vehicles	0.8	1.2	1.3	1.5	1.9	2.6	2.5	3.0
6. Others (1)	0.7	0.8	0.5	0.5	0.6	0.8	0.9	0.8
Total	15.1	17.1	19.7	23.1	26.8	27.3	26.0	30.5
<u>Similar Duties</u>								
Stamps and Registration	6.6	7.5	8.9	8.9	11.5	14.2	11.0	13.7
Others (2)	2.6	3.4	3.6	4.2	4.8	6.3	5.4	6.7
Total	9.2	10.8	12.6	13.1	16.3	20.5	16.4	20.4
Overall Total	24.3	27.9	32.3	36.2	43.1	47.8	42.4	50.9
II. Per Cent of Total(3)								
1. Direct Taxes of which (4)	18.1	16.2	15.8	16.4	17.0	15.3	17.2	17.9
Income Tax	(66.8)	(66.0)	(68.5)	(67.9)	(65.3)	(59.7)	(55.7)	(57.3)
Bldgs. Tax	(18.5)	(18.1)	(18.7)	(18.6)	(20.5)	(23.8)	(23.0)	(23.9)
2. Similar Duties of which (5)	11.1	10.3	10.0	9.2	10.4	11.4	10.8	12.0
Stamps and Registration	(71.7)	(69.4)	(70.6)	(67.9)	(70.0)	(69.3)	(67.1)	(67.1)
Total	29.2	26.5	25.8	25.6	27.4	26.7	28.0	29.9

(1) Includes: Forest and animal (Aghnam) Taxes.

(2) Includes: Legal, notarial, traffic, security and consular fees.

(3) Percentages calculated on basis of total revenues excluding Reserve Fund withdrawals.

(4) Percent of direct taxes.

(5) Percent of similar duties.

Note: Discrepancies are due to rounding.

Source: 1950-1955, Government Closed Accounts
1956-1957, Budgetary Estimates.

in tax collections and with the gradual increasing returns of newly enacted direct tax laws, direct taxes would almost certainly result in higher yields.

The four principal types of direct taxes are described hereunder:

(a) Tax on Built-up Property¹

The tax on built-up property is levied on all buildings used for dwelling, commercial or industrial purposes including the gardens or orchards adjoining them up to 1000 square meters² per building as well as non-agricultural lands that are used for commercial or industrial purposes.³

The building tax is ~~based~~^{based} upon the rental value as stipulated in the contract of rent or as assessed (in case of no contract, owner occupation or doubt) by a committee of three experts⁴. The tax rate amounts to

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1. Established under Legislative Decree No. 55 ET of June 24, 1943 and amended by Presidential Decrees No. K/2628 of December 29, 1945 and No. 3628 of November 28, 1950.
 2. Any excess over the stipulated 1,000 sq. meters is subject to the Land Tax. Ibid., Article 1.
 3. Ibid.
 4. Ibid., Articles 7 and 9.

one-twelfth of the gross rental value in addition to a surtax, not exceeding 3% of the rental value for the benefit of municipalities.¹ Payment of the tax is the responsibility of the property owner or the trustee or, in case of default, the tenant.²

Public proceeds from this tax more than doubled between 1950 and 1955 and is expected to contribute LL 7.0 million in 1957 (cf., Table 78); this fact presents a rough indication of the building boom in recent years.³

Apart from ineffective collection, the ~~land rent~~ ^{built-up property tax} suffers from one major drawback, namely, that it is discriminatory against old buildings; thus, (a) it being assessed on the gross rental value, with no regard to depreciation costs, maintenance and repair expenses, the owners of old houses are more hard hit than those of newer buildings; and (b) the rent restrictions laws that froze old rents at levels well below prevailing market rates sometimes result in rent proceeds that are short

1. Ibid., Articles 5 and 6.

Note: In Beirut the municipal surtax is 3%.

2. Ibid., Article 3.

3. Article 2 exempts wholly uncompleted buildings and uncompleted parts of buildings; buildings used for agricultural activities - farm houses, grain stores, stables, etc.; residences whose rental values do not exceed LL 30 per annum; buildings used solely for public interest; buildings used for religious and philanthropic purposes and property-owned and used by foreign nations.

of covering depreciation expenses, let alone repairs and other incurred costs of upkeep.

¹
(b) The Land Tax

Promulgated by Parliament under Law of December 29, 1951, the Land Tax with all of its major provisions came into force on January 1st, 1955. The tax is levied on all agricultural or potentially agricultural land with but a few exceptions.²

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1. Law No. 115 of September 8, 1933, instituted a "unified land tax"; it was superseded by Law No. 37 of March 26, 1940 and restored by Decree Law No. 335 of February 22, 1943. After the country achieved independence, it took 8 years before a new land tax was established and promulgated by Parliament under Law of December 20, 1951; the new law was to be operative starting January 1, 1953. However, by law of July 19, 1953 application of the law was postponed for one year when again application of the law by estimating agricultural income was postponed until January 1, 1955, and application of the law by calculating actual agricultural income was postponed until 1956. Thus, starting January 1, 1956, all agricultural income is levied on an estimated or actual basis as provided under Article 4 of the law of December 20, 1951.
 2. Article 2 of the Law exempts from the tax: public property; municipal lands devoted to public use; non-agricultural lands not suitable for building sites; gardens adjacent to buildings not exceeding 1000 sq.meters; lands belonging to schools, free clinics, hospitals for neurosis and tuberculosis; forests and pasture lands.

The law imposed three types of rates all of which are levied upon the land owner or in case of "long term lease" upon the leaseholder himself.¹ The three tax rates differentiate between three types of land, namely: (i) cultivated agricultural land; (ii) uncultivated agricultural land, and (iii) building lots.

(i) Cultivated Agricultural Land

A tax based on either the actual or estimated net annual income from cultivated agricultural land, according to the following schedule:²

<u>Taxable part of net annual income (In LL)</u>	<u>Annual tax rate Percent</u>
5,000 and below	2
5,001 - 15,000	3
15,001 - 25,000	6
25,001 - 35,000	8
35,001 - 50,000	10
50,001 - 75,000	15
75,001 - 100,000	20
100,001 - 200,000	25
200,001 and over	35

-
1. Ibid., Article 3
 2. Ibid., Article 38.

Before applying the above progressive rates, the law provides for certain deductions, namely: LL 1,800 for a bachelor, LL 2,400 for a married person, and LL 3,000 for a person with children; however, tax payers who take advantage of other deductions in the computation of any other direct tax are not entitled to the foregoing stipulated deductions.¹

The tax is compulsorily levied on the basis of actual net income only when such yield exceeds the LL 25,000 level per annum;² net actual income is assessed after deducting from gross actual income all operating expenses.

In the event where the net income falls short of the LL 25,000 level, the tax is calculated on the basis of estimated³ net returns, the government has (a) established 17 categories of land, each with a number of sub-categories; many criteria have been used as a yardstick for such classification, e.g. fertility, location, use, availability of labor and exploitation facilities in the district,

1. Ibid., Article 37

2. Ibid., Article 12; tax payers whose yield is less than LL 25,000 can, if they so require, be taxed on actual net yield if they can present corroborative evidence to substantiate such claim.

3. Ibid., Article 11.

crop rotation, etc.,¹ and (b) estimated net return per 1000 sq. meters for each sub-category. It is the responsibility of local land committees in each village to determine the specific sub-category into which falls any particular tract of land; once this is done the assessment of the tax turns out to be a simple matter of calculation.

To encourage development of agricultural lands, the law provides for: (a) a five-year tax exemption of swamps and marches drained for agricultural use; (b) a five-year tax levy at the unirrigated rate of such land that is brought under irrigation; (c) a two to fifteen years - depending upon the kind of trees planted - exemption of newly afforested land.²

(ii) Uncultivated Agricultural Land:

A tax of LL 0.25 is levied per 1,000 square meters on all such uncultivated agricultural land.³

-
1. Ibid., Article 8
 2. Ibid., Article 18
 3. Ibid., Article 38

(iii) Building Lots:

A 0.2% tax of the assessed market value is levied on empty building lots;¹ it is worthwhile noting that all land within the Beirut municipal boundaries are considered as such whether planted or not.

The Lebanese Land Tax is a novelty in land taxation; the fact that it is levied on income earned from working the land implies that it is not directed at land ownership, however, it being paid by the owner, whether he be the cultivator or not, cannot but make it a tax on income from land ownership. It seems that the legislators have intended to make of it a dual tax on both income from and ownership of land.

1. Ibid.

2. "Two facts however show that the Lebanese land tax is intended to tax at the same time both land ownership and income from agriculture. First, in the preamble of the tax project law there is the following statement: 'the Government did not want to divide the land tax into two taxes, one on property based on rental value, and the other on agricultural projects... but tried its best to find a tax that falls on the average income from land... 'Secondly, the land tax does not allow the deduction of the rent of land from taxable income in calculating the net actual return.' Himadeh, op.cit., pp.60-61.

Criticisms on the land tax can be made on two grounds, namely: (a) On the theoretical level the land tax has many drawbacks; (i) the tax can be justified only when the land is cultivated by the owner, it is absurd to tax the landowner on both ownership of and income from the land when such property is leased; (ii) if the leaseholder were to benefit of tax rebates or exemptions as a result of improvements made on the land, under the present tax law, the owner of the land benefits from such rebates or exemptions; (iii) in classifying the lands into various categories, the criterion of fertility is made use of only when considering irrigated "Salikh"¹ lands; it is not difficult to see how the same kind of tree can yield more or less in one place or another due simply to fertility considerations. "To neglect such considerations will result in a discrimination against the landowner or exploiter of less fertile lands and in favor of the owner or exploiter of more fertile estates"², and, (iv) the tax is made

1. Not planted with trees.

2. Ibid., p.62

progressive; the injustice that can materialize from the individual application of progressive taxes on income from various sources will be pointed out under the appraisal of the income tax laws.¹

(b) On the applied level, levying the tax on the landowner, who usually is in the case of big leased estates a politically influential absentee landlord, results in extreme difficulties in collection. The validity of such criticism is substantiated by the fact that in 1955, when the law became more or less fully operative, proceeds from this tax were 50% below the 1954 level and 58% below the 1950 level when the old land tax was still in force (cf., Table 78).

(c) The Income Tax²

The income tax law was promulgated under the law of December 4, 1944² to supersede the old Tamattu' tax. Except

1. Infra., pp.338-339.

2. The present discussion is based on the law of December 4, 1944 establishing an income tax in Lebanon, and as later amended by the provisions of articles 6,7,8,9 of the 1945 budget law of June 5, 1945 and article 7 of the 1946 budget law of February 4, 1946 and articles 6,7,8,9 of the 1947 budget law of March 19, 1947, and article 13 of the 1948 budget law of April 5, 1948, and articles 10-16 and 37 of the 1949 budget law of March 28, 1949, and articles 6-33 and 50 of the 1950 budget law of March 28, 1950

for income from lands and buildings which are subject to the already treated land and built-up property taxes, the income tax is levied on all other incomes. In this context, it differentiates between three types of incomes, namely: (i) incomes from industrial, commercial and non-commercial ventures; (ii) incomes from wages, salaries and pensions; and (iii) incomes from movable capital inclusive of interest and dividends. Each of the above categories is taxed separately and while the first two are subject to a progressive rate of tax levy, a flat rate applies to the third category.

Income tax proceeds fluctuated anywhere between 68.5% and 59.7% of direct taxes between 1950 and 1955 (cf., Table 78) and accounted for an average of 10.8 per cent of total receipts during the same period. Income tax collections increased by over fivefolds between 1945 and 1955, i.e. from LL 3,060 thousand¹ to LL 16,302 thousand. As there has been no change in tax rates, then the increased yield is directly imputed in part to relatively better collection methods but mainly to increased incomes; income tax per capita is higher in Lebanon than in any other Arab Middle East country but considerably lower than in Western countries.²

1. Recueil de Statistique de la Syrie et du Liban, 1945-1946, 1947, op.cit., p.175

2. Supra., p. ~~282~~, footnote 1.

The three categories of income recognized by the Income Tax Law and the rates applied to each are:

- (i) Income from industrial, commercial and non-commercial ventures.

The income tax is levied on the net, actual or assessed,¹ annual profits of industrial and commercial ventures and of handicrafts and the liberal professions,² whether real or legal persons, after deducting the legal specified exemptions; said exemptions amount to LL 1,500 for a single person, LL 2,400 if married, and LL 3,000 if

1. Income Tax Law, op.cit., Articles 11 and 12

Note: Net profit refers to gross profit less operating expenses.

2. (a) Ibid., Article 2 exempts from the provisions of this law educational institutions, certain hospitals and relief institutions, sanatoria and mental disease hospitals, non-commercial agricultural syndicates and consumer cooperatives, and farmers selling their produce on non-commercial sites;

(b) Also firms benefitting from the provisions of the Law of February 10, 1954, Supra.

he has children. Two schedules of progressive rates apply to this category and are as follows:¹

<u>Taxable part of net annual income</u> (In LL)	<u>Annual tax-rate percent</u>	
	<u>Commercial & industrial activities</u>	<u>Non-Commercial activities</u>
5,000 and below	5	4
5,001 - 15,000	7	5
15,001 - 25,000	9	7
25,001 - 35,000	13	10
35,001 - 50,000	17	13
50,001 - 75,000	22	17
75,001 - 100,000	27	22
100,001 - 250,000	32	27
250,000 - 500,000	37	32
500,000 and over	42	37

In addition to the above rates, a surtax of 10 per cent of the income tax rate is raised for the benefit of municipalities.³

-
1. 1949 Budget Law, op.cit., Article 12.
 2. In a memorandum submitted to the Minister of Finance, the association of industrialists has asked inter-alia for (a) a revision of the tax rate as follows: (all figures in thousands) below LL 10, 4%, LL 10-LL 25, 6% LL 25 - LL 100, 14%; LL 100 - LL 250, 20%; LL 250 - LL 500, 25%; and LL 500 and above, 30%; and (b) that the exemptions be LL 4.5, LL 7.2 and LL 9.0. Le Commerce du Levant, April 13, 1957.
 3. Law of January 22, 1951; Article 1.

(ii) Income from wages, salaries, pensions and amenities, etc.¹

The income tax on persons falling within this category is levied on their net returns,² i.e. after deductions from gross receipts of pension fund contributions and mission allowances³ in addition to stipulated exemptions⁴ - at the following progressive rates:⁵

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1. Income Tax Law, op.cit., Chapter II, Article 41.
 2. Ibid., Article 43.
 3. Ibid., Article 45.
 4. Similar to those under the first category, except for daily wage earners who get a flat LL 4.0 exemption per diem for actual work, Ibid., Articles 51 and 54.
 5. Ibid., Article 53.

Taxable part of net annual income (In LL)	Annual Tax-rate Percent
4,800 and under	2
4,801 - 8,400	3
8,401 - 12,000	4
12,001 - 24,000	5
24,001 - 36,000	6
36,001 - 48,000	7
48,001 and over	10

Payment of such taxes is the full responsibility of the employer or the disbursor.

(iii) Income from movable capital

Income from movable capital (unless it falls under the first category) inclusive of interest and dividends - irrespective of its being earned on Lebanese stock abroad¹ - is taxed at a flat 10 per cent of annual gross yields.²

"The income tax applied in Lebanon seems to be the result of an arbitrary attempt to make a simplified version of an income tax of the type applied in France".³

The methods of perception, the tax rate schedules and the differentiation between taxable categories, all render the Income Tax in Lebanon deficient on several grounds namely:

-
1. Unless it is earned from forfeitures resulting from lapse of time Ibid., Articles 64 and 85.
 2. Ibid., Article 61.
 3. Himadeh, op.cit., p.48.

(a) The main shortcoming is the levying of the progressive tax rate to separate incomes from various sources; such a tax loses the basic criteria for a just tax through lack of uniformity, thus discriminating against individuals who draw their income from a number of sources.

on the contrary

(b) The differentiation between various incomes, especially between the first and the third, and application of a relatively low flat rate to income whose yield is not contingent upon such effort, discriminates against one category of taxpayers in favor of another.

(c) The third defect stems from the fact that progressive rates are heavier on the lower brackets than on the upper ones; thus the progression in the taxable part of the income is more pronounced than the progression on the applicable tax-rate.

(d) A fourth defect "is that corporations are made subject to the progressive tax like real persons. Such practice makes the progression lose its purpose as a means to achieve equity in the distribution of the tax burden. For the real burden of the tax on the shareholder becomes the more heavy the bigger is the corporation and the smaller is the number of shares held per individual. Besides, the application of progressive taxation on corporations discourages their formation, and therefore the pooling of savings for investments in productive undertakings."¹

1. Ibid., p.51

(d) The Transfer (Inheritance) Tax¹

This tax is relatively new and applies to all transfers of rights, movable and immovable property that are acquired by a second person by way of inheritance, will, gift, wakf, or by any other way that does not necessitate any consideration in return; it covers all transfer in Lebanon, irrespective of the person's nationalities, as well as to transfer of Lebanese movable property abroad, unless such transfer has already been subject to a similar tax abroad.²

The basis of the tax levy varies with the different transfer e.g. the tax on heritance is levied on the global value of the transfer while that on wakf is levied on the share assigned to each person.

In the case of inheritance, the tax law distinguishes five types of heirs, as shown in the schedule below, and allows the first and second category heirs an LL 15,000 and LL 7,000 exemptions respectively, while the third and fourth category heirs are allowed LL 5,000. Wakf beneficiaries are allowed LL 1,000 and LL 10,000 exemptions depending on whether he is a person or a philanthropic, educational institution, a technical or sport society.

1. Established under the Law of December 21, 1951, the rates were amended (lowered) under the Law of July 19, 1954.

2. Ibid., Article 3.

The transfer tax-rates are given in the table below:

Table 79: Schedule of Rate of Transfer Tax

Amount received by beneficiary (In LL)

Category of taxpayer	25,000	25,001	50,001	100,001	200,001	Over
	and below	- 50,000	100,000	200,000	400,000	500,000
Tax Per Cent						
1. Descendants & spouse	1	2	3	4	6	8
2. Parents	2	4	6	8	10	12
3. Grandparents	3	6	9	12	15	18
4. Uncles, aunts, nephews nieces	4	8	12	16	20	24
5. Others	6	12	18	24	30	36

Source: Law of July 19, 1954

The yields of this tax have proved below expectations; estimated to yield LL 2,000,000 in 1952, the closed accounts for that year revealed that proceeds from this tax amounted to only LL 97,000. The reason for this "is that the law is the fruit of inadequate preparation and study and that it had not as yet entered the stage of execution in a comprehensive manner."¹ Besides, the law has two main weaknesses, namely: (a) in the first place it allows for tax evasion through the transfer of immovable property where there are no or very mild inheritance taxes; and (b) in the second place, the purposes of progressive taxation are defeated by the fact that whereas taxable income doubles,

1. Audit Court, Report submitted to the President of the Republic for Fiscal 1952 (Beirut: Sader Press, 1952), pp. 23-26.

the rate moves at a uniform rate (cf., Table 79).

Fees

The main items under fees falling under the second sub-section of the first tax nomenclature are registration and stamp fees; as a matter of fact, they come second only to income tax under this category and they contributed as much as 8.0% of total public receipts in 1955.

These fees consist of stamp duties on all sorts of securities and business documents, which explains their rise from LL 6.6 million in 1950 to LL 14.2 million in 1955 (cf., Table 78). The duties are either fixed or proportionate to the amount of money involved.

(ii) Indirect Taxes and Fees

Indirect taxes and fees can be grouped into two major categories, namely: (a) excise duties which are nothing more than consumption taxes; and (b) customs' duties. Between them these two categories accounted for anywhere between 57.2 per cent and 63.3 per cent over the period 1950-1955 (cf., Table 80). It is interesting to witness the growing importance of customs duties within this class of taxes; this is to be expected when one bears in mind the rise in imports over the same period (cf., Table 70).

(a) Excise Duties

Excise duties in general have not registered an appreciable increase between 1950 and 1955; from LL 30.2 million in 1950, excise proceeds stood at LL.34.8 million

TABLE 80 ✓

ORDINARY BUDGET RECEIPTS: INDIRECT TAXES AND DUTIES 1950 - 1957

A. In LL. Million	1950	1951	1952	1953	1954	1955	1956	1957
<u>Excise and Customs Duties</u>								
1. Duties on Inflammables	11.4	14.7	17.5	17.5	17.7	13.9	14.0	15.5
2. Duties on tobacco	15.8	15.3	16.8	16.6	16.7	17.5	15.5	16.0
3. Customs duties	20.5	33.5	36.7	45.8	55.5	67.6	54.6	59.7
4. Others (1)	3.0	3.1	3.0	3.2	3.1	3.4	3.3	3.9
TOTAL	50.7	66.7	74.0	83.1	93.0	102.4	87.4	95.1
B. <u>Per Cent of Total (2)</u>								
1. Taxes on Consumption (3)	(59.6)	(49.8)	(50.4)	(44.9)	(40.3)	(34.0)	(37.5)	(37.2)
2. Customs (3)	(40.4)	(50.2)	(49.6)	(55.1)	(59.7)	(66.0)	(62.5)	(62.8)
TOTAL (2)	60.9	63.3	59.3	58.8	59.1	57.2	57.7	55.9

Note: i) Except for 1956 and 1957, all other years are for actual receipts;
ii) Errors are due to rounding

(1) Includes excise duties on intoxicating liquors, salt and cement

(2) Percentage calculated on total revenues, excluding Reserve Fund withdrawals.

(3) Percent of total indirect taxes and duties

Source: Same as Table 78, Supra.

in 1955 (cf., Table 80). Although a more pronounced increase would normally have been expected, as such duties are nothing more than consumption duties, yet it is believed that certain factors have been successfully operative on the two main excise duties within this category as to result in a less substantial increase than would otherwise have been. Thus, (a) in the case of proceeds from duties on inflammables, the trend in yield has been gradually and smoothly upward between 1950 and 1954; the reason for this appears to have been the increased use of cars. In 1955 however there was a LL 3.8 million decrease in proceeds from this duty as compared to 1954; the main reason for this is the steady and heavy increase in the use of diesel engine cars. Besides, it is worthwhile noting that the rates levied on inflammables, fixed by decree in 1950 have not changed during the period under consideration; the rates are LP 18 per litre (LP 14 to Ordinary Budget and LP 4 to the Municipal Budgets) on benzine, and LP 6.5 per litre on kerosene (LP 4.5 go to Ordinary Budget and LP 2.0 to the Municipal ones);¹ (b) as for excise duties on tobacco and tombac, there also has been no change in the excessive excise duties levied on their sale.

1. Legislative Decree No. 1017 of January 28, 1950.

(b) Customs Duties

Customs duties by themselves contribute by far the most important single share to the Ordinary Budget; from 24 per cent in 1950, customs duties accounted for approximately 38 per cent of total public receipts in 1955. As a matter of fact in 1950 and 1955, customs receipts stood at 1.2 times and 1.4 times the level of all direct taxes and fees respectively.

As has already been mentioned in the foregoing chapter,¹ the customs duties are mostly ad valorem; since, however, such ad valorem duties are based on the official exchange rates, their burden is lighter than it appears on the face of it. Thus in 1955, customs duties were equivalent to 14.4 per cent of the total official value of imports when in fact they only were equivalent to 9.7 per cent of the real free market value of such imports.

It is obvious that the indirect taxes play the preponderant role in the country's fiscal system. Since most of such fees and duties are primarily levied on necessary consumption goods, their incidence tends to fall much more heavily on persons in the lower than in the upper income brackets. Such a regressive character renders the task of narrowing the gap in per capita incomes of the various population groups more hard to achieve.

1. Supra., pp.

(iii) Income from Public Domain and Enterprises

Income from public domain and public enterprises comprises all such accruals of proceeds from the sales or exploitation of state properties - lands and buildings - and enterprises. The main item under this category is the yield of the Ministry of Posts and Telegraphs. Table 81 below lists proceeds of this category in the Ordinary Budget.

Total contribution of Miscellaneous Revenues to the Ordinary Budget increased from LL 4.7 million in 1950 to LL 21.8 in 1955; thus they stood in 1955 at approximately fivefolds the 1950 level; the LL 17.1 million increase is mainly accounted for by increases in oil royalties (LL 7.5 million), revenues from the airport (LL 2.4 million) and pension receipts¹ (LL 2.0 million).

B. Ordinary Public Expenditures

A glance at Table 83 strikes the analyst with two main general observations, namely: (a) Ever since the country achieved its political independence, global ordinary public expenditure have been characterized by a

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1. "Pension Receipts are "pension discounts", that is deductions from employees pay for purposes of the pension fund. Disbursement of pensions to government employees are treated as "Ordinary Budget Expenditures". UNRWA, Q.B.E.D. No. 13, op.cit., p.227

Table 31: Ordinary Budget Receipts: Public Domain and Enterprises, 1950 - 1957

	<u>1950</u>	<u>1951</u>	<u>1952</u>	<u>1953</u>	<u>1954</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>
I. In LL millions								
1. Public Domain	0.9	0.6	0.6	0.5	0.8	0.6	0.5	0.6
2. Public Enterprises	<u>2.7</u>	<u>3.6</u>	<u>4.4</u>	<u>5.0</u>	<u>4.0</u>	<u>6.3</u>	<u>5.1</u>	<u>5.4</u>
Total	3.6	4.2	5.0	5.5	4.8	6.9	5.6	6.0
II. Per Cent of Total (1)	4.3	4.0	4.0	3.9	3.1	3.9	3.7	3.5

(1) Percent of total Ordinary Budget receipts, excluding Reserve Fund withdrawals.

Source: Same as Table 78, Supra.

Table 82:

Ordinary Budget Receipts: Miscellaneous Revenues, 1950-57

	<u>1950</u>	<u>1951</u>	<u>1952</u>	<u>1953</u>	<u>1954</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>
A. In LL millions								
1. Payments of Oil. Cos.	0.3	0.9	5.5	2.2	3.5	7.8	4.8	5.0
2. Payments of concessions	0.1	0.2	1.8	5.1	1.0	0.8	1.0	0.9
3. Others(1)	4.3	5.4	6.4	9.3	12.0	13.2	10.3	12.2
Total(2)	4.7	6.5	13.6	16.5	16.5	21.8	16.1	18.1
B. Percent of Total								
1. Oil Cos.(3)	(6.4.)	(13.8)	(40.1)	(13.3)	(21.2)	(35.8)	(29.8)	(27.6)
2. Concessionary Cos.(3)	(2.1)	(3.1)	(13.1)	(30.7)	(6.1)	(3.7)	(6.2)	(5.0)
3. Others(3)	(91.5)	(83.1)	(46.8)	(56.0)	(72.7)	(60.5)	(64.0)	(67.4)
Total(4)	5.6	6.2	10.9	11.7	10.5	12.2	10.6	10.6

Source: Same as Table 78, Supra.

(1) Includes: Pensions' discounts, revenues of hospitals, "Capitainerie du Port", fines and judgments, interests on monies, gambling fees, revenues of Exchange Control, quarantine dues, airport and Sundry revenues, and receipts for covering expenses.

(2) Errors are due to rounding.

(3) Percent of total miscellaneous revenues

(4) Percent of total ordinary Budget Receipts excluding withdrawals from the Reserve Fund.

marked rising trend. From approximately LL 36 million in 1945, public expenditures rocketed to approximately LL 133 million in 1955 or 3.7 times the 1945 level. The more marked increases have occurred mostly in branches of the government that had been the responsibility of the Mandatory Authorities prior to 1945; thus, foreign affairs stood at over six-fold its 1945 level, while over the same period expenditures on external security increased over eight folds, social services a little less than five-folds, and economic activities over three-fold (cf., table 83); and

(b) It is customary to expect, that actual expenditures would turn out short of the budgetary estimates by a sizeable margin. The recurrence of this phenomenon year after years seems to be more in line with public policy than the outcome of a pure coincidence. Thus underspending i.e. the discrepancy between budgetary appropriations and realised expenditures over a period, totalled LL 18.6 million in 1951, LL 28.3 million in 1952, LL 38.8 million in 1953, LL 12.2 million in 1954, and LL 4.1 million in 1955. On the face of it such a policy is quite commendable in the case of a country like Lebanon for two reasons, namely:

(i) a policy of underspending is deflationary in character (witness the fall in the wholesale price index from 100 in 1944 to 60 in 1955; cf., Table 77); and, (ii) with actual public receipts in excess of ordinary budgetary allocations, the country has been able to build up a sizeable Reserve Fund to feed its extra-ordinary budgets and implement

development programs. The shortcomings of such a policy are not to be found in the general principle but in the details of such expenditures. Underspending has been chiefly in ministries concerned with development and social ^{affairs} activities, thus in 1955 whereas budgetary appropriations to the Ministries of Public Works, Agriculture, Education, Social Affairs and Health totalled LL 54.8 millions, the 1955 closed accounts revealed that actual expenditures by such ministries fell short of the estimated expenditures level by LL 4.3 millions; on the other hand expenditures on external security were around LL 3 million in excess of original budgetary allocations.¹

The analysis will now cover expenditures by both ministries and economic category.²

Table 83 gives the individual Ordinary Expenditures by the various ministries regrouped on a functional basis into six main categories namely: (a) Administration, Finance and Justice; (b) Security; (c) Economic activities; (d) Social services; (e) other departments, i.e. posts, telegraphs and information; and (f) debts payable. ~~The~~

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1. "Ordinary Budget appropriations unspent during the year automatically expire at the end of it-as per the provisions of the Public Accounting Law of March 19, 1953 as replaced by the Law of December 29, 1954 - unless transferred to the following year by specific Acts of Parliament for individual items." Ibid.
 2. The forthcoming discussion will follow a similar line of analysis as that adopted in UNRWA's report on the Government Budgets of Middle East Countries. Ibid., pp.238-234.

TABLE 83

ORDINARY BUDGET EXPENDITURES, 1945 and 1950-1957
(LL. 1000)

Ministries and Departments	1945 Actual	1950 Actual	1951 Actual	1952 Actual	1953 Actual	1954 Actual	1955 Actual	1956 Estimates	1957 Estimates
1. <u>Administration, Finance and Justice</u> , total	7,273	11,448	12,479	12,756	17,227	19,212	20,693	24,810	26,855
Supreme Organs (a)	1,162	1,330	1,675	1,875	1,786	1,693	1,659	1,756	1,973
Interior (b)	720	839	1,190	1,071	1,395	1,774	1,818	1,894	2,362
Foreign Affairs	586	2,746	3,710	2,486	2,422	3,244	4,293	5,596	6,500
Finance	2,435	3,408	3,649	4,026	7,897	8,547	8,813	10,892	11,141
Justice	2,370	3,125	3,255	3,298	3,827	4,052	4,110	4,672	4,879
2. <u>Security</u> , total	11,393	25,092	28,747	27,797	32,790	34,423	40,531	45,584	51,809
External (Defence)	3,238	14,561	17,986	17,611	21,177	21,710	26,734	30,003	35,180
Internal (c)	8,155	10,531	10,761	10,186	11,613	12,713	13,797	15,581	16,629
3. <u>Economic Activities</u> , total	8,546	22,041	20,864	19,021	13,709	19,003	29,533	26,232	38,171
Public Works	6,970	18,013	15,485	15,600	9,653	13,798	23,272	27,393	28,527
Agriculture	910	3,520	4,860	2,974	2,366	3,033	3,937	6,171	6,390
National Economy	666	508	519	477	1,690	2,172	2,087	2,245	2,762
Ministry of Planning	-	-	-	-	-	-	-237	430	492
4. <u>Social Services</u> , total	5,099	12,676	14,345	15,022	16,478	18,872	23,337	28,517	33,808
<u>T o t a l</u>	3,096	7,857	9,763	9,995	11,688	13,052	16,276	19,290	22,331
Education	2,003	4,819	4,582	4,666	4,352	4,491	5,324	6,697	8,608
Health	-)	(d)	(d)	361	438	1,329	1,737	2,530	2,869
Social Affairs	-)	(d)	(d)	-	-	-	-	-	-
5. <u>Other Departments</u> , total	1,504	3,048	3,327	3,232	3,255	3,710	3,978	4,883	6,361
Post and Telegraph	1,504	2,476	2,703	2,644	2,712	3,116	3,191	3,959	4,511
Information	-	572	624	595	543	594	787	924	1,850
6. <u>Debts Payable</u> , total	2,104	10,217	9,289	10,675	12,750	15,860	13,846	10,835	12,363
Pensions and compensation	2,104	3,263	3,971	4,431	5,060	5,445	7,431	6,600	6,700
Debts and Obligations	-	(e)3,454	(e)4,685	(e)3,460	4,162	1,552	50	1,550	3,000
Treasury Bills	-	-	-	2,082	2,104	4,460	3,999	2,685	2,664
Fines, restitutions & dbets of previous years	-	3,500	633	702	1,424	4,403	2,366	-	-
7. <u>Reserves for Contingencies</u>	-	-	-	-	-	-	-	631	632
GRAND TOTAL	35,919	84,522	90,051	88,510	96,309	111,182	132,377	151,500	170,000
	<u>PERCENTAGES</u>								
1. Administration, Finance and Justice	20.2	13.5	15.0	14.4	18.0	17.4	15.7	16.4	15.8
2. Security	31.7	29.7	31.9	31.4	34.0	31.0	30.7	30.1	30.5
3. Economic Activities	23.8	26.1	23.2	21.5	14.2	17.1	22.4	23.9	22.4
4. Social Services	14.2	15.0	15.9	17.0	17.1	17.0	17.7	18.8	19.9
5. Other Departments	4.2	3.6	3.7	3.6	3.4	3.3	3.0	3.2	3.7
6. Debts payable	5.9	12.1	10.3	12.1	13.2	14.3	10.5	7.2	7.3
7. Reserves for Contingencies	-	-	-	-	-	-	-	0.4	0.4
GRAND TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(Note: Closed accounts for all years but 1956 and 1957 which are estimates. Minor discrepancies are due to rounding)

(a) President, Parliament and Cabinet

(b) Only administration

(c) Includes Police, Prisons and Gendarmeries

(d) The Department of Social Affairs was included in the Ministry of National Economy until January 1, 1952 and thereafter it became a separate Ministry

(e) Does not include LL. 714,000 yearly instalment of the purchase price of Tripoli-Nakoura, railroad, which until 1952 came under the regular Ministry of Public Works

The information given covers 1950-1957 in addition to 1945 which has been included to allow comparison with the first year of untrammelled sovereignty.

(a) Administration, Finance & Justice

Expenditures under this category are directly associated with handling the government's ordinary administrative functions; it is gratifying to point out that despite the fact that the Ministry of Foreign Affairs falls under this heading, total expenditures have increased less markedly than any other major category on the one hand, and than total Ordinary expenditures on the other.

With the imminent increase (1957) in the civil servants salary scale, this category will definitely show an abrupt increase in 1957.

(b) Security includes expenditures incurred by the Ministries of Defence and the Interior (police, gendarmerie and prisons); such expenditures increased from LL 11.3 million in 1945 to LL 40.5 million in 1955. It is worthwhile noting that out of the LL 26.7 million defence outlays in 1955, LL 17.1 million or 64 per cent were in the form of salaries and wages.

(c) Economic Activities: Under this classification fall Ministries of Public Works, Agriculture, Economy, and Planning that are directly concerned with development planning policy and administration; the concrete task of

implementing a major part of development works financed through the Ordinary Budget falls to the former two ministries.

Most of the Public Works' expenditures are taken up by roads; thus, in 1955 of the LL 23.3 million spent by this ministry LL 14.6 million or 62.7 per cent represented expenditures on roads. It is worthwhile noting that in addition to carrying out such projects, it falls to these two ministries to supervise and implement other projects financed through extra-ordinary budgets; this is in part reflected in the high administrative overheads of these ministries. Table 84 gives the expenditures of all such ministries.

(d) Social Services: The bulk of such expenditures are taken up by the Ministry of Education, which accounted for 70 per cent of the total in 1955. Per capita expenditures on social services have expanded steadily between 1945 and 1950. From LL 4.4 in 1945 such expenditures stood at LL 16.7 in 1955, or approximately fourfolds the previous level.

(e) Other Departments: This category includes the Ministries of Posts and Telegraphs and Information. Returns from the first appear in the Ordinary Budget under "Public Domain and Exploitation Services," the net operations of this Ministry have yielded a net surplus to the government year after year, e.g. in 1955 the surplus amounted to LL 1.7 million. The Ministry of Information is chiefly

TABLE 84

ORDINARY BUDGET EXPENDITURES OF MINISTRIES CONCERNED WITH ECONOMIC ACTIVITIES

(LL 1000)

Ministry	1945	1950	1951	1952	1953	1954	1955	1956	1957
	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Estimates	Estimates
Ministry of Public Works, total	6,970	18,013	15,485	15,600	9,653	13,798	23,272	27,393	28,527
General administration	717	1,451	1,499	633	659	778	716	543	989
Roads and buildings	5,756	14,494	10,870	9,039	4,470	8,178	14,571	20,898	20,073
Communications	54	-	-	1,348	320	422	375	827	960
Civil Aviation	-	592	1,131	1,827	2,085	2,456	2,846	3,127	3,814
Water and minerals	443	1,476	1,211	1,823	1,242	1,017	3,102	1,799	2,471
Control of Concessionary Companies	(a)	(a)	(a)	101	151	203	171	199	220
Previous "years" expenses	-	-	774	829	726	744	1,130	-	-
Ministry of Agriculture, total	910	3,520	4,860	2,974	2,366	3,033	3,937	6,171	6,390
Administration	315	803	889	2,194	1,711	2,223	3,069	5,090	5,341
Agricultural guidance	-	400	668	658	602	704	789	1,081	1,049
Agricultural works	595	2,317	3,244	-	-	-	-	-	-
Previous Years expenditures	-	-	59	122	53	106	49	-	-
Ministry of National Economy, total	666	508	519	447	1,690	2,172	2,087	2,245	2,762
National Economy	666	508	519	447	741	1,204	1,284	1,421	1,593
Commissariat of Tourism	-	(b)	(b)	(b)	891	881	803	824	1,169
Council of Economic Development	-	-	-	-	58	87	(c)	430	492
Ministry of Planning	-	-	-	-	-	-	237	-	-
Total of above	8,546	22,041	20,864	19,021	13,709	19,003	29,533	36,239	38,171
% of Ordinary Budget Expenditure	23.8	26.1	23.2	21.5	14.2	17.1	22.3	23.9	22.5

(a) Included in budget of Ministry of National Economy until 1952.

(b) The Commissariat of Tourism had a separate budget before 1953.

(c) Included in budget of Ministry of Planning.

Source: Closed Accounts, 1945, 1950-55; and Ordinary Budget 1956-1957.

concerned with broadcasting services. The sudden increase in budget expenditures in 1957 is due to the proposed construction of a new broadcasting station.

(f) Debts Payable: These include (i) pensions and other compensations disbursed to government employees; and (ii) various other public debts.

As far as pension payments are concerned, in the absence of special pension fund for civil servants, deductions for and payment of pensions are treated as current receipts and expenditures respectively under the Ordinary Budget. Deductions for pensions consist of: (a) one half of the first month's salary; (b) 5 per cent of the monthly salary if up to LL 500, or 7 per cent if over LL 500; and (c) the first monthly increment.¹ Pensionable age for civil servants is 60.² Pensions are paid at the rate of 1/55 of the average salary during the last two years of service for every year of service.³

1. Decree Law No.14 of January 7, 1955; article 136.

2. Ibid., article 123. Judges however are pensionable at 63.

3. UNRWA, op.cit., p.232.

With respect to loans, they consist of: (a) one major foreign loan from the IBRD amounting to \$ 27 million, contracted on August 25, 1955 and ratified by Parliament on December 30 of the same year; and, (b) few internal loans; classified under this category of internal loans are: (i) the yearly deficits in operating the privately owned Damas, Hama and Prolongement Railway Company which the Government is bound to make good; (ii) the yearly instalments due for payment on the purchase price of the recently (1953) nationalized Compagnie d'Electricite et de Tramway of Beirut; and (iii) amortization and interest payment on Treasury Bills in the note cover;¹ at the end of 1955 LL 9,908,000 had been redeemed and LL 2,417,169 paid in interest.²

In January, 1956 the value of Treasury Bills outstanding stood at LL 69,363,000.³ These were made up of the

1. "This debt arose in consequence of the devaluation of the French Franc in September 1949. The Government undertook to replenish the note cover, which being mainly composed of french francs had depreciated in value vis-a-vis the dollar, by issuing Treasury Bills wholly taken up by the B.S.L. The amount of these bills was LL 58,732,000 redeemable with interest in 30 yearly instalments." Ibid., p.233.

2. Government Closed Accounts. 1950-1955.

3. Zuhayr Mikdashi, The Monetary System of Lebanon, unpublished M.A. thesis, (AUB: 1956), p.141.

balance of the LL 58,732,000 noted above, plus the amount of a new issue made in 1954 to cover the unrepatriated part of the Syrian currency held since the change in Syrian currency in 1949.¹

In summary the pattern of expenditures in relation to the total by the various categories (cf., Table 83) seems to have been maintained; thus except for a slight relative fall in the expenditures on administration, finance and security and a more or less corresponding increase in expenditures on social services, the other categories' share seems to have been stationary.

Evaluation of the Lebanese Fiscal System

Before any attempt is made at evaluating the Lebanese fiscal system, one general opinion can be here formulated, namely: In spite of the fact that the basic criterion underlying the government's tax policy remains essentially a means of raising revenue and notwithstanding the basic economic laissez-faire philosophy, government intervention is gradually assuming a more tangible, direct and important role in the economic and social life of the country.

1. UNRWA, loc.cit.

Table 95: Ordinary Budget Expenditure Estimates, by Economic Category

	1955 - Actual			1956 - Estimates			1957 - Estimates			
	Part I	Part II	Part III	Part I	Part II	Part III	Part I	Part II	Part III	
	Total	Capital	Defence	Total	Capital	Defence	Total	Capital	Defence	
Presidency of the Republic	522	-	-	522	405	-	405	432	-	432
Parliament	786	5	-	791	892	29	921	996	5	1,001
Prime Minister's Office	351	-	-	351	430	-	430	539	-	539
Ministry of Justice	4,110	-	-	4,110	4,672	-	4,672	4,864	15	4,879
Ministry of Foreign Affairs	4,230	63	-	4,293	5,510	86	5,596	6,500	-	6,500
Ministry of Interior	14,127	1,143	-	16,070	15,563	1,912	17,475	16,995	1,996	18,991
Ministry of Finance	8,421	393	-	8,814	9,887	1,005	10,892	10,462	689	11,141
Ministry of Defence	-	-	26,735	26,735	-	30,003	30,003	-	35,180	35,180
Ministry of Education	14,146	2,129	-	16,275	17,483	1,807	19,290	19,951	2,374	22,331
Ministry of Health	4,404	920	-	5,324	5,446	1,251	6,697	6,768	1,840	8,608
Ministry of Social Affairs	1,586	152	-	1,738	2,313	217	2,530	2,676	193	2,869
Ministry of Information	154	33	-	787	704	220	924	830	1,020	1,850
Ministry of Public Works	5,679	17,533	-	23,272	6,669	20,724	27,393	7,608	20,919	28,527
Ministry of Agriculture	2,862	1,075	-	3,937	3,510	2,661	6,171	4,034	3,356	6,390
Ministry of National Economy	1,651	436	-	2,087	1,744	501	2,245	1,854	908	2,762
Ministry of Posts and Telegraphs	3,121	10	-	3,191	3,811	148	3,959	4,233	278	4,511
Ministry of Planning	236	-	-	236	430	-	430	493	-	493
Debts Payable	9,847	-	-	9,847	8,150	-	8,150	9,700	-	9,700
Redemption of Treasury Bonds	3,999	-	-	3,999	2,685	-	2,685	2,664	-	2,664
Reserve for Contingencies	-	-	-	-	631	-	631	632	-	632
Total	80,832	24,810	26,735	132,377	90,937	30,560	30,003	151,500	32,582	170,000
Percent of total	61.1	18.7	20.2	100.0	60.0	20.2	19.8	100.0	19.2	100.0

Source: 1955: Closed Accounts 1955. 1956 & 1957 from Republic of Lebanon Budget 1956-1957. Discrepancies are due to rounding.

1. Evaluation of the Tax System

In attempting a rough appraisal of the Lebanese tax system the first striking objection can be levelled at the regressive character of the system due to the overwhelming predominance of indirect taxation. This had led Dr. Badre to advance the following opinion on indirect taxes: "Such methods of taxation have for an immature government obvious and compelling advantages. They probably require much simpler government machinery and are easier to collect than does the income tax which calls for more satisfactory tax morality than seems to prevail in many under-developed countries such as Lebanon."¹

The regressive nature of indirect taxes is, in general equally true of most direct taxes. Thus, while the building tax is discriminatory against old buildings, which usually are owned by persons in the middle income brackets, the particular structure of the progressive rates of both the income and inheritance taxes, tends to make the burden of such taxes weigh more heavily on the shoulders of the lower income brackets; the land tax, as is true of nearly all other taxes,² leaves a wide leeway for tax evasion before

1. Badre, Monograph No. 5, op.cit., p.24

2. Joseph Chader estimated that around LL 22 million due in taxes had not been paid in 1956. Le Commerce du Levant, Feb. 9, 1957.

influential landlords.

Considering the above, one can conclude that the extreme regressiveness of the tax system in Lebanon, accentuates the discrepancies in the distribution of income, a fact that is conducive to exercise an adverse effect on the level of savings.

absolutely wrong

Another important drawback of the taxation system in Lebanon stems from the fact that, indirect taxes being mainly composed of taxes on consumption, diminishes the already narrow expendable marginal income of the working population; it reduces: (a) their inducement to invest, and (b) their expenditures on their basic commodity requirements thus reflecting adversely on their efficiency and consequently on levels of production.

In appraising the fiscal system of Lebanon R. Himadeh writes: "As it is, the fiscal system in Lebanon should be considered inflexible for three reasons:

First, indirect taxes, largely on necessities, form the main source of public revenue. The inelasticity in the demand for necessities makes the money burden of indirect taxes vary substantially less than variation in national income.

Secondly, since direct taxes are, on the average, only mildly progressive, variation in the money burden of these taxes are only slightly more pronounced than variation in national income. Consequently direct taxes fail to compensate for the adverse effects of indirect taxes on economic stability.

Thirdly, no legislation provides for changing any tax rate when unemployment, or economic activity in general reaches a certain minimum or attains a certain maximum one. And though the rate of some taxes can be changed, up to a certain limit, by executive action alone, this power does not seem to have been used by the executive body as a means to affect stabilization in the activity of the private sector."¹

The above concessus of opinion on the inequitable set up of taxes in Lebanon does not seem to be the monopoly of expert, independent, personal opinion only; expressing constructive views on the subject, the Parliamentary Finance Committee stated:

"We may say that an equitable tax system does not exist in Lebanon, because almost three quarters of government revenue comes from the common people.... Direct taxes become more equitable if the rates are made progressive. We must, therefore, replace flat rates of certain direct taxes by progressive ones.

... We will point out from among these the tax on built-up property, which has a flat rate of 1/12 of gross rental value, plus 3% for the municipality. This

1. Himadeh, Loc.Cit.

limitation is neither equitable in itself nor in relation to the rest of the taxpayers. In the first place, it is unfair to let small landlords pay 11.33% on rent of LL 1,000 and let big landlords pay the same percentage on LL 100,000. In the second place, nothing justifies such a discrimination in favor of big landlords, against their fellow merchants industrialists, professionals, employees and workers who pay progressive taxes.

... Lastly it is necessary to point out that in order to arrive at a more equitable tax structure we must apply a progressive rate to the whole taxpayer's income (commercial, agricultural, industrial etc...) and not on each income separately. This last point is one of the most important reforms which must be adopted in order to arrive at a good tax system in Lebanon. We hope that the financial administration will study the principles of a unitary progressive tax in order that it might be implemented in the near future."¹

2. Evaluation of Public Expenditures

In evaluating Public Expenditures in Lebanon it would seem commendable: (a) to view it as a whole rather than be bogged down by details, for the effect of one expenditure may neutralize or compensate for the effect of

1. Parliamentary Reports, 1953, p.400.

another; and (b) to evaluate the expenditures of the consolidated budgets rather than limit the observations to the trend in Ordinary Budget expenditures. For this purpose Table 86 is here adapted.

The table indicates that the most impressive feature in Lebanon's global expenditure pattern has been the overwhelming and steadily rising expenditure on social and economic activity; thus actual expenditures on such items rose from approximately LL 69 million in 1950 to over LL 130 million in 1954 or an increase of 89 per cent over the said four year period (cf., Table 86).

Public expenditures on social - education, health, etc. - activities on the one hand and economic ones - public works, irrigation etc. - on the other partly compensate for the regressive effects of the tax structure in the country; besides the mere fact that such expenditures have been progressive tends to somehow remedy the inequalities in income distribution.

One other advantage of the witnessed increase in public activity is the fact that inspite of the large bulk of expenditures that are accounted for by salaries and wages, yet looked upon from a different angle such expenditures have tended to increase employment opportunities.

The main objection to the Government's expenditure policy is that it is not so directed as to contribute to economic stability. Writing about this specific point, R. Himadeh voices his criticism as follows: "Management of

TABLE 86

EXPENDITURE PATTERN OF CONSOLIDATED LEBANESE GOVERNMENT BUDGETS
(LL. 1000)

	1950	1951	1952	1953	1954	1955	1956
A. Ordinary Budget, Total	84,522	20,051	88,510	96,202	111,182	127,500	151,500
(1) Economic activities (a)	22,041	20,864	19,021	13,709	19,003	31,423	36,239
(2) Social activities (b)	12,676	14,345	15,022	16,478	18,872	26,107	28,517
(3) Security	25,092	28,747	27,797	32,790	34,423	38,387	45,584
(4) Other	24,713	26,095	26,670	33,332	38,884	41,583	41,160
B. Special Budgets (c)	6,707	10,581	21,621	12,565	22,240	23,242	23,000 (h)
C. Extraordinary Budgets (d)	15,000	24,090	2,503	6,280	64,281	23,577	28,322
(1) Development Works Fund	15,000	19,590	2,503	6,280	17,176	14,155	8,250
(2) Other Extraordinary expenditures	-	4,500	-	-	47,205	9,422	30,082
D. Municipal Budgets (e)	12,427	11,441	12,846	12,500	10,471	11,477	12,000
E. Grand Total (f)	118,656	126,162	126,550	122,654	202,527	192,461	222,222
Economic and social activities	68,851	81,321	82,083	67,532	130,230	112,491	135,588
Security	25,092	28,747	27,797	32,790	34,423	38,387	45,584
All other	24,713	26,095	26,670	33,332	38,884	41,583	41,160
		PERCENT					
Economic and social activities	58.0	59.7	60.1	50.5	64.0	58.4	61.0
Security	21.1	21.1	20.4	24.5	16.9	19.9	20.5
All other	20.9	19.2	19.5	24.9	19.1	21.6	18.5
Grand Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

F. Index of Wholesale prices

Beirut 1944 = 100
Beirut 1950 = 100

62 78 71 64 59 60 63
100 126 114 103 95 96

Note: Discrepancies are due to rounding
(b) Ministries of Education, Health, Social Affairs (a) Ministries of Public Works, Agriculture, National Economy, Planning
(c) Capital expenditures (c) Chiefly Public utilities
(d) Eliminating duplications (see Table 1) (e) Chiefly social and economic services of municipalities
(f) As reported in Al Jarida, 7 October 1955, the Bud- (f) Total of items A 1 and 2, B, C and D, with duplications eliminated
(g) Ministry of Finance, when presenting the Budget for 1956 to Parliament stated that LL 23 Million would be spent under the special budgets in 1956
(h) See Footnote (f)

public expenditures in a way to compensate the fluctuations of economic activity in the private sector is not used by the Lebanese Financial Authorities. On the other hand public expenditures do not include any outlays with a built-in-flexibility (such as unemployment benefits) to mitigate automatically economic fluctuations. On the contrary they may be considered to accentuate fluctuations. For in a period of prosperity, when public revenue is abundant, the Government is likely to become extravagant, and conversely, in time of depression."¹ Thus when in 1953, notwithstanding all the tangible omens of slackening economic conditions that deteriorated later in the year into a serious business recession, public expenditures by falling from the LL 82.1 million in 1952 to LL 67.5 million in 1953, accentuated such a tendency instead of redressing it.

(1) Himadeh, loc. cit.

PART II

CHAPTER VII

INVENTORY OF MAJOR PUBLIC ECONOMIC DEVELOPMENT PROGRAMS & PROJECTS

Introduction

Part I of this dissertation, concerned with a structural analysis of the Lebanese economy, has brought into focus certain main and general characteristics of the Lebanese economy. Foremost among these is the prevalence of a laissez-faire philosophy that has been staunchly upheld in both the private and public sectors. This policy has been commended as being instrumental in achieving the present satisfactory rate of growth that has made possible the scoring of a distinct lead over the various other Middle East economies; however, if on the overall level one cannot but applaud such a policy, it must still be pointed out that this policy has been conducive to an unbalanced growth of the various sectors on the one hand, and to the confirming of the discrepancies in income distribution on the other. The only solution to the problem seems to impose itself, namely, a public development of the retarded sectors.

The objective of this chapter is to describe the major public economic development programs and projects now being carried out or planned, and to summarize their current status.

The discussion first dwells on the Government Agency

whose task it is to coordinate governmental and private plans for economic development and on the newly established semi-public Agricultural, Industrial and Real Estate Credit Bank. Secondly, the discussion moves on to cover the major irrigation, power and roads programs.

I. Government Agencies Connected with Planning & Development

A. Ministry of Planning

The Lebanese Government created a Ministry of Planning under Legislative Decree No. 2 of November 30, 1954, to coordinate governmental and private plans for the economic development of the country. Prior to the establishment of this Ministry, centralized economic planning was the responsibility of the Board of Economic Planning and Development;¹ the new law abolished² the said Board and established³ instead a new Board of Economic Planning and Development within the cadre of the new Ministry.

The main functions of the Ministry, in addition to the running of a Statistics Office, (yet to be established) an Office for the supervision of Oil Companies and refineries, and a Minerals and Public Domain Office, are to assess through its Development Board, the country's economic resources and possibilities, to establish an overall program of the

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1. Created under Law No. 32 of February 17, 1953.
 2. Law of No. 2 of November 30, 1954, article 31.
 3. Ibid., Article 2

country's economic development and to suggest financing procedures.¹ Once the program is completed and approved by the Council of Ministers, the Board will prepare detailed plans of execution for each project. The ministry, however, does not execute projects itself; execution is left to the various other ministries and public departments. The ministry, through the Board, allocates funds to these ministries and departments and supervises the execution of the projects.

An autonomous "General Development Fund" was established² to finance studies and projects proposed by the Ministry. No appropriations have so far been made to this Fund whether from the Ordinary Budget or other sources.

The ministry received an allocation of LL 372,000 in 1955, LL 430,000 in 1956 and LL 492,000 in 1957 under the Ordinary Budget;³ such amounts were earmarked for purely administrative expenditure.

When under the Ministry of National Economy, the Board had formulated two major projects; the first "The National Electricity and Water Company" was defeated by Parliament and instead the Litani National Authority was

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1. According to P.J. Klat, Development Board member, the Ministry of Planning is presently working on a major "Five-Year Plan, but no details of this plan have as yet been made public.
 2. Ibid., Article 22
 3. Ordinary Budget, 1955, 1956, 1957.

created; the second, "The Industrial Agricultural and Real Estate Credit Bank" received certain minor modifications before meeting with Parliamentary approval; its description follows hereunder.

b. Agricultural Industrial and Real Estate Credit Bank 1

The purpose of the Bank is to encourage and develop agricultural, industrial and touristic development projects. Of a total capital of LL 5 million the government subscribed of LL 2 million, while the rest was raised by private subscription.

The Bank is empowered to borrow from the B.S.L. up to LL 25 million at 2 per cent per annum with a government guarantee extending over its forty years of operation. Available loanable funds will be divided among agriculture, industry and real estate in the ratios of 2:2:1 respectively.

The Bank grants short, medium and long term loans; real estate or personal guarantee is accepted for short term loans, but only real estate for the medium and long term loans.

Short term or seasonal loans granted for up to one year are designed to help current yearly expenditures in (a) agriculture, e.g. purchase of seeds and fertilizers;

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1. Created by Law of July 16, 1954 the Bank started operations as of June 1955.
 2. During 1956, the Bank had borrowed LL 13 million: Information privately secured.

(b) small industry e.g. purchase of raw materials; and (c) hotel and touristic developments, e.g. purchase of furniture.

Medium term loans limited to an 8-year period, are granted to extend and improve projects; they must be amortized in one or eight instalments, interest, however, is due annually.

Long term loans serve to develop natural resources, agriculture in general and major industrial and touristic undertakings; they are limited to 20 years and amortization should start after eight years, provided interest is settled annually.

Short term agricultural loans are limited to LL 6,000, medium term loans to LL 30,000,¹ and long term loans to LL 60,000,¹ while short term industrial and real estate loans are limited to $\frac{1}{2}$ of the estimated net earnings of the enterprise. In the case of medium and long term loans, the law provides for no such ceiling, the only limitation being that it should not exceed 35 per cent of the real market value of the mortgaged property.

Irrespective of the duration, amount, or purpose of the loan the Bank charges all beneficiaries a flat rate of 5 per cent² per annum.

Between June 1st 1955, the date the Bank started its

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1. LL 60,000 and LL 150,000 in the case of an agricultural cooperative society.
 2. $4\frac{1}{2}$ per cent in the case of agricultural cooperatives and societies.

loaning operations and August 31, 1956, outstanding loans stood at LL 13,621,085 divided as follows: (a) agricultural loans: short term, LL 377,850; medium, LL 5,941,435; and long term, LL 466,400; (b) industrial loans: short, LL 80,500; medium, LL 2,578,900; and long, LL 1,900,800; and (c) real estate: short, LL 211,000; medium, LL 164,500; and long, LL 1,899,800.¹

II. Inventory of Projects

A. Water Projects

Water projects encompass a variety of projects, namely: (a) irrigation projects; and (b) potable water supply projects.

1. Irrigation Projects

Irrigation projects already started, or under study but not yet started, would if completed add an additional 56,730 ha of irrigated land or more than double the irrigated areas in the country. The increase in irrigated areas in the various districts will be divided as follows: North Lebanon, 9,200 ha; Mount Lebanon, 3,870 ha; South Lebanon, 18,200 ha; and the Bekaa, 25,100 ha. (cf., Table 25).

The following survey will describe the various projects, their present status and the estimated costs involved in implementating them.

a. Akkar Plain

The Akkar Plain in North Lebanon is watered by four

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1. Chamber of Commerce & Industry of Beirut, The Economy of Lebanon and the Arab World, (Beirut: Al-Bayan Press, Nov.1956), No.49, pp. 19-20.

main rivers, namely: Nahr-el-Kebir, Nahr Oustouene, Nahr Arka and Nahr el Bared. The area is particularly suited to the irrigated cultivation of oranges, fruits and vegetables.

The present canal network irrigates 2,800 ha - 2,000 ha in the Akkar plain proper and 800 ha in the Minnie Gardens to the North of Tripoli. To implement such works, the government appropriated between 1944 and 1955, LL 1,126,500 but only LL 906,500 were actually spent.¹

The proposal is for the Ministry of Public Works to expand the presently irrigated area by 9,200 ha, thus bringing the total to 11,000 ha.

The necessary surveys regarding the execution of the works have until recently been the result of guess-work and in the nature of very rough proposals. Recently however, upon the specific request of the government, the Natural Resources Division of USOM/L undertook the job.² Reports on Nahr-el-Bared, Oustouene and Arka have been completed the results of the findings are summarized in the Table below:

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1. Information privately secured from Mr. Amassian, Op.cit.
 2. As per the project agreement of Oct. 1st 1953 as modified on June 10, 1954 and March 31, 1955.

Table 87

Proposed Irrigation of Part of the Akkar Plain

<u>River</u>	<u>Rises at m. above sea level</u>	<u>Length</u>	<u>Drainage sk. km.</u>	<u>Flow</u>		<u>Proposed Irrigation ha</u>
				<u>Average</u>	<u>Minimum</u>	
				<u>M.C.M.</u>		
El Bared	2,500	38	277	257.1	130.0	2,005 ¹
Oustouene	1,480	44	160	74.7	38.3	2,100
Arka	<u>1,225</u>	<u>27</u>	<u>153</u>	<u>76.3</u>	<u>39.2</u>	<u>3,400</u>
	--	-	590	408.1	207.5	7,505
	=====	==	===	=====	=====	=====

1. Of which 525 are in the Minnieh Gardens.

Source: Summarized from articles in Le Commerce du Levant of February 20, 23 and 27, 1957.

The harnessing of the rivers will involve the repair of the old canals together with the construction of a new canal network and the construction of a diversion dam along the lower course of the Bared; a diversion dam at Beit-el-Hadj to channel the Oustouene waters into a proposed canal system starting at Darine and Halba; and, the erection of a dam at Hantra to store the Arka waters.

When started, probably in 1965¹, the project would require between 4 and 5 years for completion; the Government has allocated under the Fifth Development Plan LL 10 million for the Akkar Plain proper and LL 2 million for the Minnieh

1. Amassian, Op.cit.

1
Gardens.

b. The Litani Project

The Litani multi-purpose power project envisages seven separate irrigation units using water available from the development of the Litani and Bisri Rivers. The separately developed Kasmieh irrigation scheme uses Litani waters and already irrigates around 4,500 ha of the coastal plain near the mouth of the Litani river. The five irrigation units are:

(i) The Saida-Beirut unit² commands an area of 3,870 ha lying mostly at elevations between 200 and 400 meters above sea level; the system will make use of water from the Karaoun Reservoir that will be directed through tunnels and canals to the headworks of the Joun power plant, whence it will feed the main irrigation canal; the canal branching from the surge tank of the power plant will thus divert 2.2 cubic meters per second. The canal will be 55 kms long and will reach the suburbs of Beirut. The works will involve 21 major syphons, 65 to 635 meters long, with operating pressures up to 130 meters along with 9 bridges for main roads and about 50 minor structures.

Originally scheduled to be started in 1956, works will not commence until August 1959, to be completed in

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1. Not ratified by Parliament as yet.
 2. Information based on the I.B.R.D. Litani Report, Op.cit., pp. 3-4 and 10-15.

October 1961;¹ it will cost an estimated LL 6.5 million.²

(ii) The upper Nabatiyeh Unit³ will irrigate about 5,000 ha⁴ between the Litani and Zahrani Rivers at elevations between 300 and 500 meters above sea level.

The development will be served by a tunnel 16 kms long starting at the outlet of the Markabi Tunnel and crossing the Lebanon mountain range near Jezzine, whence it will proceed in a southwesterly direction before the water is stored at the Qanane Reservoir.

The original plan recommended that works be initiated in 1957; however implementation of the project has been deferred until 1962 when the first phase would have been completed; works will be completed in 1970 and will require an estimated LL 7.5 million.

(iii) Lower Nabatiyeh⁵. The Lower Nabatiyeh project will utilize water from the Khardaleh Reservoir and

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1. Le Commerce du Levant, January 16, 1956.
 2. Statement of President of Litani authority, "Parliamentary Reports", December 2nd, 1955. Note: I.B.R.D.'s estimate stood at LL 5.62 million.
 3. The information on this project and the following ones connected with the Litani is mainly based on the information privately secured from the Litani authority.
 4. Original Point IV plan provided for only 3,500 ha. Vide footnote 3 above.
 5. Vide footnote 2, Supra, p.

is therefore dependent upon the construction of this dam, the Zaiye Tunnel and canal, and the Zrariyeh Tunnel and canal; water will be conveyed north to irrigate about 3,700 ha of land lying above the Kasmieh Main Canal and below 200 meters elevation. The land in this area is mediocre.

The main canal running northward to the Zahrani River will be about 37 kms long and will require one short tunnel, 16 siphons; a 7.5 kms long canal will branch off the main canal and run in a southwesterly direction and will require 3 other siphons.

Works are scheduled to start in 1962 and to end in 1969; the project will cost an estimated LL 7.0 million.

(iv) The Bekaa Gravity Unit. This project will command 5,700 ha; it will utilize water from the Anjar and Chamsine Springs near Terbol in the southern part of the Bekaa.

Below each spring, a low diversion dam will be built and the two small reservoirs thus formed will be interconnected by a 1.5 kms feeder canal; two main canals will be built, the first starting from the Anjar Spring and extending in a southerly direction will be 23 kms long, while the other taking off at Chamsine Spring will extend in a southerly direction for 21 kms.

Works started in 1957 and are scheduled for completion in 1959; estimated cost is LL 6.9 million.

(v) Bekaa Pumping Unit. The Bekaa Pumping Unit will irrigate 4,700 ha; water from the Karaoun Reservoir will be pumped to a maximum of 95 meters from the minimum water elevation of the reservoir and will be conveyed in a northerly direction for 38 kms along the lower slopes of the anti-Lebanon Range. At about 14 kms from the pumping station a branch canal will cross through a 2.2 km long siphon to the west bank of the Litani and continue for about 15 kms in a northerly direction.

(vi) and (vii) Al Kharrub & Tyre-Jwaya Projects. Information on these two projects is very scanty as they did not originally form a part of the overall Litani Project; it is believed that they were adopted in the plan to ensure ratification of the first phase of the project by Parliament.

Al-Kharrub project covers an area of 3,500 ha, is tentatively scheduled for implementation in 1965 and will probably be completed by 1968; it is roughly estimated to cost LL 4.0 million.

Tyre-Jwaya project will irrigate 6,000 ha, between the coast near Tyre and an elevation of 250 meters, the level of Jwaya village; again works are tentatively scheduled to start in 1964 and to end by 1970; the cost will probably be around LL 6 million.

The following table summarizes certain available information on the districts covered by the first five projects.

Table 87 (a)

<u>Project</u>	<u>Number of Vil- lages</u>	<u>Population</u>		<u>Total</u>	<u>Area ha</u>		
		<u>Summer</u>	<u>Winter</u>		<u>Culti- vated</u>	<u>Irrigated Present</u>	<u>Pro- posed</u>
Beirut-Saida	18	87,105	102,000	15,696	8,869	4,415	3,870
Upper Nabatiyeh	16	29,645	25,795	10,290	6,100	400	5,000
Lower Nabatiyeh	14	14,070	13,289	9,458	7,035	1,166	3,700
Bekaa Gravity	10	16,670	na	10,720	10,720	3,500	5,700
Bekaa Pumping	<u>7</u>	<u>7,490</u>	<u>6,940</u>	<u>11,535</u>	<u>6,900</u>	<u>1,070</u>	<u>4,700</u>
TOTAL	67 ==	154,980 =====	--	57,699 =====	39,624 =====	10,551 =====	22,970 =====

Source: U.S.O.M. Litani Report, Op.cit.

c. Yammouneh Irrigation Project

Yammouneh Lake presently irrigates 3,300 ha, 2,500 ha by spring and 800 ha by summer irrigation. The plan is for the Ministry of Public Works to expand this area to a total 10,000 ha for spring and 1,000 for summer irrigation.

The present work consists of an exit-tunnel, from Yammouneh Lake, 2,17 kms long leading to a canal 1.4 kms long which carries an average annual flow of 6 cubic meters per second. Water flowing from the canal has a total head of 250 meters before it accumulates in the distribution reservoir. These works were completed in 1938. Six canals lead the water from the distribution reservoir northward and southward through the Baalbeck Plain. 30 kms of the canal were completed in 1948, but no work has been done on the project ever since because of conflicting claims of ownership.

Expenditure on the project between 1944 and 1948¹ amounted to LL 1,230,375.

The plan of development consists in completing the canal network by extending it to a total of 60 kms in addition to the completion of certain minor works. It is estimated that the canal system would cost LL 3 million and the minor works LL 2 million.

If the Fifth Development Plan would meet with Parliamentary ratification minor works would be expected to start soon, as LL 2 million are earmarked under the said plan for this purpose, in addition to LL 0.5 for studies and minor works on the Yammouneh Lake itself; work on the project, if and when - probably 1965 - started, would require six years for completion²

d. Irrigation of El Qa'a, Hermel and Baalbeck districts³

The area of the irrigated lands in the el Qa'a, Hermel and Baalbeck districts does not exceed 1,000 ha at present in view of the state of the present water distribution network, while the cultivable area in the Qa'a plain is estimated at about 10,000 ha.

The present work consists of a canal and a tunnel to draw water from the Orontes River. The Orontes has an average annual flow of 13.5 cm. per second but the rate falls to 6 cm.

1. Amassian, Op.cit.

2. Ibid.,

3. Information privately obtained from Mr. Badi-el Khazem, Director of Water & Electricity Division at the Ministry of Public Works.

per second in the summer months when the water is also needed downstream in Syria.

The present proposal is to expand the present area by 6,700 ha; this will cost an estimated LL 6 million and will require five years for completion.¹

Because of certain water rights granted to Syria under the Mandate, it does not seem likely that Lebanon will implement this project soon; a rough guess is 1970.²

2. Potable Water Supply³

The government passed a law effective March 16, 1953, known as the "Fourth Development Plan" under which LL 22 million were appropriated for the development of a number of domestic water supply systems for individual or groups of villages. To initiate the project, the government signed an agreement with Point IV on June 30th, 1954, under which the latter contributed \$ 2 million. No information is presently available on the status of this project.

It is known however that the government started in 1956 an LL 62 million expenditure program stretching over 10 years for the same purpose.

1. Amassian, Op.cit.

2. Ibid.

3. Information relative to this project based on notes taken by IBRD experts on a mission to Lebanon in September 1956; the figures were made available to the mission by the Ministry of Finance.

B. Power Projects¹

1. The Litani Project

The Litani River rises near Baalbeck at 1,000 meters above sea level; it flows slowly in a southwesterly direction through the Bekaa plain, runs swiftly through deep gorges, turns west through the mountains near Beaufort Castle and empties into the sea, approximately 8 kms north of Tyre. The Litani River is 170 kms long, falls 850 meters in the last 100 kms of its course and drains an area of 216.8 sq. kms of which 80 per cent is 800 meters above sea level. Its annual average flow is estimated at 701 m.c.m.

The Litani watershed is Lebanon's largest developmental possibility. The project makes use of another river, known in its upper reaches as the Barouk River, in its middle as the Bisri River, and in its lower course as the Awali River; the river is 50 kms long and follows a course somewhat parallel to the Litani River, but closer to the sea. It drains a very rugged area of about 300 sq. kms. and falls 400 meters in the last 25 kms of its course. Its annual average flow is estimated at 114 m.c.m.

Definite information is available only on the first phase of the Litani power project;² it involves the construction of:

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1. Note: Please note that this chapter is exclusively confined to public projects only. All power projects have already been covered under Part I, Chapter 5, Section II.
 2. The latest information on the Project has been privately secured from the Litani Authority on May 13, 1957.

a. A multi-purpose reservoir which will be formed on the Litani River at the southern end of the Bekaa by the construction of a dam 42 meters high and 900 meters long at Karaoun. It will have usable content of about 60 m.c.m. when constructed to a water surface elevation of 840 meters.¹

b. A major diversion dam at Markabi on the Litani and about 9 kms downstream from the Karaoun Dam; it will divert water for both power generation at the Markabi Power Plant and for irrigation of the Upper Nabatiyeh Unit.

c. A free flow canal and pressure tunnel will interconnect the Markabi Diversion Dam with the Karaoun Dam; it will have an average discharge rate of 18-20 cubic meters per second.

d. Water flowing out of the Markabi tunnel and into a surge chamber will have a head of 175 meters before flowing through a penstock to generate power at the Markabi Power Plant; the latter plant will have an initial installed capacity of 24,000 kw.²

e. Diversion of the Litani waters into the Awali system will start at the Markabi Diversion Dam; from that point water will flow through a tunnel 16 kms long, running through the Lebanon Range, and empty into the Qanane Reservoir,

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1. In the second stage of development, it will be raised to 58 meters above stream bed and will have a usable content of 195 m.c.m. Estimated cost is LL 18.25 million.
 2. It will be raised in the second phase of development to 26,000 kw.

with a storage capacity of up to 100,000 cubic meters.

f. Water from the Qanane Reservoir will have a head of 400 meters and will generate power at the Awali Power Plant; the Awali Plant will have an initial installed capacity of 77,000 Kw.¹

g. After the Awali Power Plant, water will flow through a canal leading to the proposed site of the Joun Power Plant and hence through the Joun Diversion Dam into the Saida-Beirut irrigation canal system.

h. Various transmission lines and receiving stations.

The table below summarizes the major works involved in the first phase of the Development of the Litani-Bisri River system, inclusive of the two proposed irrigation units.

It is to be noted that no definite plans exist with regard to the second phase of development of the Litani Project; it has however been tentatively estimated that the installed capacity of the existing plants would be increased and new plants added as follows: Markabi Power Plant: 2,000 kw; Awali Power Plant I: 29,000kw; Awali Power Plant II: 15,000 kw; Joun Power Plant: 40,000 kw; and Zrariyeh Power Plant: 9,000kw; thus bringing the total installed hydro capacity to 196,000 kw.

1. Proposed Capacity under the second phase of development is 106,000 kw.

Table 88

Works on the First Phase of the Litani-Bisri
River System

<u>Description of Works</u>	<u>Works Schedule</u>	<u>Estimated Cost Th. LL.</u>
1. Karaoun Dam and Reservoir	October 57 - October 60.	18,100
2. Markabi Diversion Dam and Canal	April 1958 - March 1960	20,000
3. Markabi Power Plant.	November 58- June 1960	9,100
4. Markabi-Jezzine-Qanane Tunnel & Reservoir	May 1957 - Oct. 1961	65,300
5. Awali Power Plant	October 59 - Dec. 1961	22,000
6. Transmission Lines & Receiving Stations	July 1958 - June 1960	13,000
7. Bekaa Gravity Unit	July 1957 - March 1960	6,900
8. Saida-Beirut Unit	August 1959 - Oct. 1961	6,500
9. Awali-Joun Canal	June 1959 - Dec. 1961	<u>3,000</u>
TOTAL	Oct. 1957 - Dec. 1961	163,900 =====

Source: Information privately secured from the Litani Authority on May 13, 1957.

1
2. Chamoun Power Plant

A thermal unit at Zouk Mkhael, north-east of Beirut, is being built by the Common Electricity and Transport Service,

1. Information privately secured from Mr. Omar Ajam, Op.cit. and the Litani Authority, Op.cit.

in order to make up for the deficiency in the total supply of electricity in the country, especially the Beirut Load Area.

There are four stages of construction, namely:

(a) The first stage begun in September 1954, was completed by the end of 1955 and officially inaugurated on January 18th, 1956. It has a generating capacity of 15,000 kw, operating under an 11 kw tension; (b) the second stage, presently under construction and scheduled for completion by the end of 1958 or early 1959, involves the bolsting up of present capacity to a total of 30,000 kw at an estimated cost of LL 8.5 million, and (c) the third and fourth stages of construction consist of the installation of power capacity of 30,000 kw in each.

The last two stages will be made to fit into an overall development plan for the whole country; the second stage has already been incorporated into the first phase of development of the Litani River. Total production of this plant when completed, probably by 1975, would amount to 400 million kwhs per annum.

3. Rural Electrification of Lebanon¹

This project has been formulated by the Ministry of Public Works and aims at providing electric current through a system of interconnections among various load centers to

1. Information on this project is based on the text of Decree No. 12068 of May 2nd, 1956.

606¹ villages with a total population of around 450,000.

The plan provides for the installation of 400 kms of 69 KV and 368 kms of 35 KV transmission lines; (b) 211 kms of 15 KV and 1062 kms of 5.5 KV distribution cables; and, (c) 610 transforming and step down stations.

Work on the project is estimated to cost LL 30 mil-² lion; expenditures are to be equally spread over 6 years. Implementation of the project is the responsibility of the Ministry of Public Works. Started in 1957, the project is³ scheduled for completion in 1961.

C. Transportation and Communication

This section proposes to consider envisaged developments of harbours, airports and roads on the one hand, and broadcasting and telephone developments on the other.

1. Harbours

a. Tripoli Harbour⁴

The project to improve Tripoli Harbour is to be carried out in three stages. Definite plans on the overall project are not available as the decision to carry on with the latter two stages is mandatory on the success of the first one; however, the overall project is estimated to cost

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1. Villages are distributed among the four districts as follows: N. Lebanon: 151; Mt. Lebanon: 224; Bekaa: 120; and S. Lebanon: 111.
 2. Law of August 24th, 1956.
 3. Ibid.
 4. Information on this project has been privately obtained from Mr. Ibrahim Abd-el-Al, Director General, Ministry of Public Works.

LL 30 million.¹

Plans for the first phase were drawn by the Department of Concessionary Companies in the Ministry of Public Works; tenders were then invited and contract was awarded to the Italian Firm of G. Viannini and C. Comastra.²

The contract provides for the construction and completion of phase "A". This would involve: (a) the construction of a breakwater 1,250 meters long; a pier 150 meters wide to accommodate vessels drawing between 8 and 10 meters of water; and, five warehouses covering an area of 16,000 sq. meters;³ (b) the dredging of 1,100,000 cubic meters for the 1,700 meters long and 150 meters wide entry channel and two berthing basins; the excavation of 31,000 cubic meters for pier foundations, 1,051,000 c.m. of enrockment and stone fillings; the furnishing and bedding of 36,000 concrete blocks in addition to 6,000 c.m. of concrete superstructures; (c) the paving of 38,400 sq. meters of roads and the building of 1,400 meters of rail tracks, in addition to another 601 meters of tracks for two 3-ton cranes; and, the installation of 2,700 meters of pipe for the water network.

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1. Le Commerce du Levant, June 15th, 1955.
 2. It is to be noted that this was not the lowest bid; the decision to award the Italian Firm the contract was taken in the light of technical considerations.
 3. The firm is to build the five warehouses in the future against a supplementary remuneration.

The work was started in October 1955 and is scheduled for completion by March 1958.

The project was incorporated into the "Fourth Development Plan"¹. The Government allocated LL 10 million² to the Development Works Fund for the first phase; the contract was awarded for LL 9.8 million, the remaining LL 0.2 million were earmarked for direct administrative expenses.

The breakdown of the costs is as follows:

	<u>Thousand LL</u>
1. Dredging Works	2,365
2. Enrockment Works	2,354
3. Concrete Works	2,671
4. Stone Fillings	1,106
5.. Excavation and other Works	201
6. Roads and Rail Tracks	667
7. Equipment	314
8. Water Works and Lighting	<u>122</u>
	9,800
	=====

Source: Ibrahim Abd-el-Al, Op. cit.

b. Extension of Beirut Harbour³

The Council of Ministers adopted a resolution, in

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1. Promulgated by Decree No. 9977 of August 3, 1955.
 2. Law of April 5, 1954.
 3. Information on this project is based on articles that appeared in Le Commerce du Levant of 18.1.56; 14.4.56; 12.5.56; and, 12.2.57.

principle only, on 23rd May 1956, to nationalize the Port Company of Beirut. In view of this fact and in the event that such decision would be implemented, the task of extending Beirut Harbour will fall to the Government. It is solely in the light of these considerations that this development, until now in the hands of a private company, is treated hereunder.

The proposed extension is already in its early (2 months) stages of implementation; the development envisaged aims at building a third basin. The works comprise: (a) the extension of the present breakwater eastward for 525 meters, and the construction of a central core of rock-fill covered by a shell of natural blocks and a concrete super-structure; the deep water basin thus formed will be 250,000 sq. meters in area; (b) the construction of a 500 meter long berthing-quay; (c) the filling of 360,000 sq. meters in St. George Bay; and (d) the construction of a protective jetty at the eastern extremity of the berthing quay.

Work will be spread over four years and is estimated to cost LL 27 million, of which LL 20 million will be for the infra-structure and LL 7 million for the super-structures.

2. Beirut International Airport

Works on the Beirut International Airport aim at

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1. Information on this project is based on an article that appeared in Chamber of Commerce and Industry of Beirut, Op.cit., February 1957. No. 52, p. 7.

keeping pace with modern developments in aviation, in addition to making certain minor proposed developments, e.g. doubling of the parking areas for planes, building of a new workshop and garages, purchase of ultra-modern electronic equipment. The present program mainly aims at extending one of the runways from 2,380 meters to 3,200 meters. This will allow the landings and take-offs of jet planes like the D.C. 8 and Boeing 707 that will start operations in 1959.

Parliament voted LL 1.9 million¹ and Point IV earmarked LL 1.5 million for this purpose; an additional LL 9,947,800 credit was earmarked in the Development Works Fund for the same purpose.² The work started in January 1957 and will be completed in 1959; total appropriations (Government and Point IV) to date amount to LL 13.3 million.

3. Roads Program.³

The Ministry of Public Works formulated in 1954 a "Five Year Public Roads Program" to improve the internal and international highway system. Although the original aim was to have this program submitted as an integral whole to Parliament for approval, nothing of the sort was done, and consequently work on road construction proceeded on a year to

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1. Law of August 24, 1956.
 2. Law of February 11, 1957.
 3. Information on these projects is based upon an interview with Mr. Emile Yared, Head of the Building and Roads Division in the Ministry of Public Works, published in the Al Jarida, May, 14th, 1957.

year basis. U.S. economic aid was sought and obtained for constructing the coastal highway from Beirut via Tripoli to the Syrian border, and the Beirut - Dahr el Baidar - Syrian border highway; the two said highways were envisaged under the "Five Year Road Program" and their description will be taken up later.

Economic aid from Point IV has been sought to make possible the implementation of the whole program. Proposed allocations under the "Five Year Road Program" are as follows:

Thousand LL

A. International Highways

1. Beirut - Saida - Nakoura	12,235
2. Beirut - Tripoli - Syrian Frontier	17,915
3. Beirut Suburbs	2,000
4. Road leading to Beirut Harbour	9,700
5. Beirut-Wadi el Harir (Syrian Frontier)	9,945
6. Zahrani - Baniyas - Syrian Frontier	4,095
7. Chtaura - Baalbeck - Syrian Frontier	5,970
8. Chtaura - Saghbine - Marjayoun	3,300
9. Machghara - Jezzine	1,080
10. Masna' - Rachaya - Marjayoun	<u>2,750</u>
TOTAL	68,990

B. Touristic Roads

1. Mountain - Crests Roads

a. Abou el Asouad - Nabatiyeh - Jezzine	3,940
b. Moudairege-Safa-Beit el Dine-Jezzine	5,800
c. Moudairege-Hammana-Khoumbara-Biskinta-Akoura-Laklouk-Hadath-Bcharre-Cedars-Ainata-Baalbeck-Koubiat-Ehden-Kammou'a	10,440

2. Various other roads	<u>5,640</u>
TOTAL	25,820
C. <u>Administrative Expenses</u>	9,320
D. <u>Equipment</u>	<u>35,870</u>
GRAND TOTAL	140,000

Should Point IV prove agreeable to the proposition, the Government would undertake to put up LL 47.5 million while the balance of LL 92.5 million would have to be met from Point IV sources.¹

a. Beirut-Wadi el Harir-Syrian Frontier International Road

This will be a four-lane highway between Beirut and Dahr el Baidar, and a two-lane one thence on until the Syrian Frontier.

Parliament approved an LL 10 million for this purpose in June 1956, and an agreement was signed with Point IV, whereby the latter contributed \$ 3.2 million. The work started in the summer of 1956, and is scheduled for completion by the end of 1959.

b. Beirut-Maamaltein Highway

Already 6.2 kms of the 14.2 kms Beirut-Maamaltein Highway have been completed, at a cost of LL. 6.5 million (of which Point IV contributed LL 5.0 million); the remaining section will cost LL 4.5 million and will require 2 years for completion.

1. Ibid.

c. Batroun-Bint Jebeil-Akkar Road¹

This project is not included under the "Five Year Road Program", it is being financed from extra-budgetary appropriations; the estimated cost is LL 3 million. Work started in 1956 and is scheduled for completion by 1959.

4. Tele-communications

There are two projects under this category, namely:

a. Public Telephones Project

This project aims at the installation of public telephone booths in all villages; this will cost LL 3.7 million and will be financed from the Ordinary Budget.² Work started in 1957 and will be completed in 1960.³

b. Broadcasting Station

This project involves the construction of a modern broadcasting station between 1957 and 1961.⁴ The project is estimated to cost LL 5 million;⁵ the 1957 Budget earmarked LL 1 million for this purpose.

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1. Information privately secured from the IBRD Mission, Op.cit.
 2. Law of February 14, 1957
 3. Ibid.
 4. Chamber of Commerce and Industry of Beirut, Op.cit., p. 9.
 5. Ibid.

D. Others

1. Popular Housing Scheme

The "Popular Housing Scheme" has until recently been more within the realm of fantasy than actual planning. As it stands at present, the scheme envisages the building of 1,000 to 1,500 low cost workmen's houses.

On April 26, 1957, the Government signed an agreement with Point IV whereby the latter is committed to contribute \$ 1.5 million to help finance the project. The Government on its part allocated LL 6 million to the Development Works Fund to cover expropriation expenditures.² The whole project is estimated to cost LL 70 million.³

The preliminary studies are expected to start very soon by a firm of specialized consultants.⁴ No information is presently available on the time required for implementation.

2. Overall Development Project

The Ministry of Planning together with all other specialized departments in the various ministries, have worked out a general overall plan covering the broad lines of envisaged developments in the country. The plan was to serve as

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1. Information on this project is based on relevant articles in Al Jarida, on December 28, 1956; and, Le Commerce du Levant, April 27, 1957.
 2. Law of February 2, 1957
 3. Le Commerce du Levant of March 6, 1957
 4. Most probably the Greek Firm of Doxiades Associates.

a basis for future economic aid negotiations under the "Eisenhower Doctrine". The plan does not cover individual projects nor does it set a time limit for their implementation. The plan is reproduced hereunder:

<u>Project</u>	<u>In Thousand LL</u>
1. Cadastral Survey and Real Estate Improvements	4,200
2. Survey of Water Resources	800
3. Geological Surveys	2,050
4. Roads Program	182,000
5. Popular Housing Scheme	70,000
6. Agricultural Experimentation Station	970
7. Building of Silos and Packing Centers	11,000
8. Agricultural Education Centers	4,350
9. Afforestation Programs	34,000
10. Rural Sanitation and Hygiene	50,500
11. Water Resources Development, (including Litani)	278,000
12. Overall Planification Surveys	<u>5,000</u>
TOTAL	642,870 =====

Source: Le Commerce du Levant, March 6, 1957.

Going over the proposed development expenditures as outlined in this chapter, the figures submitted in the above overall plan seem to be underestimated; from the description attempted in the present chapter, it becomes clear that if all the outlined programs were to be implemented any time between now and 1975, total expenditures involved would

amount to LL 575.7 million as follows:

In LL Millions

1. Water Projects		
a. Irrigation	74.5	
b. Potable Water	<u>62.0</u>	316.5
2. Power Projects		206.0
3. Transportation & Communication		196.3
4. Housing Project		<u>70.0</u>
	Total	608.8
Less		
1. Amounts already spent	11.2 ¹	
2. Point IV contribution	<u>22.9</u> ²	<u>33.1</u>
	Total	575.7 =====

1. In LL Millions: 6.2 on potable water supply; 2.0 on Tripoli Harbour; 1.5 on Beirut Maamaltein Road; and, 1.5 on Batroun-Akkar road.
2. In LL Millions: 6.4 on potable water supply; 5.0 on Beirut-Maamaltein road; 10.0 on Beirut International Airport; and 10.0 on the Beirut-Damascus Road.

It is to be noted that the above plan totally excludes LL 310 million of sundry projects incorporated into the LL 643 million Government Plan, (e.g. surveys, silos, minor roads, rural sanitation, etc.). Besides, the other projects seem to be under-stated (i.e. Government Plan: LL 333 million, as against LL 576 million). The difference is probably due to the fact that the works envisaged in the present chapter extend until 1975, whereas the Ministry of Planning estimates cover a 10-year period only.

Taking the above factors into consideration and including the implementation costs of the second phase of the Litani Project, the estimated overall development expenditures would amount to LL 1,060¹ million between now and 1957.

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1. LL 576 million (estimated from present survey)
+ LL 310 million (sundry projects) + LL 175
million (Litani, second phase).

CHAPTER VIII

PUBLIC FINANCING OF CAPITAL WORKS AND THE IMPACT OF DEVELOPMENT EXPENDITURES ON THE ECONOMY

The purpose of this chapter is two-fold; it aims, on the one hand, at examining current public financing of capital works in Lebanon and, on the other at assessing the effects of such capital expenditures on the economy.

The chapter is divided into two sections: The first section, concerned with public financing of capital works, is divided into three parts; the first dwells on present financing procedures and past experience in this context; the second attempts an assessment of proposed future expenditures in the light of the previous chapter; and, the third assesses the adequacy of present financial resources to meet development expenditures between 1957 and 1965.

The second section is concerned with the impact of envisaged development expenditures on the economy. The section assesses the effects on investment, foreign trade and balance of payments, and the standard of living.

I. Public Financing of Capital Works

This section is first concerned with the methods and main sources of financing capital expenditures and with the autonomous public agencies responsible for their implementation; it then assesses future public expenditures on definite projects and determines the adequacy of future funds to cover

the financial requirements of the proposed projects.

A. Past and Present Financing Procedures of Public Capital Works

Ever since the country achieved independence, Lebanese economic development has been mainly financed from two major sources, namely: (a) the Ordinary Budget; and, (b) the Extra-Ordinary Budgets.

1. The Ordinary Budget

Ordinary public expenditures on economic and social activities have been discussed at length in the chapter concerned with Public Finance, and is therefore treated only briefly hereunder:

Actual ordinary public expenditures on capital works, inclusive of the cost of their administration and supervision, have increased over three folds in the eleven year period 1945-1955; thus from LL 7.9 million in 1945, development expenditures totalled LL 27.1 million in 1955 (cf., Table 89). It should be noted that in real terms, considering the fall in the wholesale price index from 109 in 1945 to 60 in 1955 (cf., Table 77) the increase has been much more impressive; in real terms development expenditures were to the tune of LL 45.2 million in 1955 as against LL 7.2 million in 1945 or an increase of over six-folds.

Table 89 calls for another two interesting observations relative to the expenditure pattern, namely: (a) Actual expenditures on capital works as a percentage of total ordinary budget expenditures have not, on the whole, changed

TABLE 89

ACTUAL EXPENDITURE ON CAPITAL WORKS ACTIVITIES IN ORDINARY BUDGET
(1945-56) CAL. YEARS
(LL THOUSANDS)

I T E M	Total 1945-1956	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	Estimates 1956
Administration of Public Works	36,080	898	1,168	1,469	1,763	1,782	2,104	2,880	3,684	4,253	4,362	5,286	6,431
Water supply, irrigation and drainage	12,389	315	505	779	872	1,203	1,415	1,070	1,376	773	547	2,640	894
Roads, ports, buildings and other works	137,331	5,757	8,578	13,082	14,145	13,343	14,494	10,722	9,611	4,136	8,092	15,323	20,048
Administration of agriculture	13,615	315	568	564	603	623	803	1,295	1,241	1,498	1,710	1,951	2,444
Agricultural activities	19,117	615	585	699	953	1,255	2,341	3,557	1,407	845	1,238	1,917	3,705
Total	218,532	7,900	11,404	16,593	18,326	18,206	21,157	19,524	17,319	11,505	15,948	27,117	33,522
Percentage of total expenditures of Ordinary Budget		22.9%	21.9%	27.4%	26.1%	21.8%	25.1%	21.7%	19.6%	11.9%	14.3%	20.5%	22.1%

Source: Raja S. Himadeh: The Fiscal System of Lebanon, MA Thesis, American University of Beirut 1953, p.98, for years 1945-50 inclusive;

Figures for 1951-1955 inclusive, from Ministry of Finance closed Accounts Statements and for 1956 from Budget.

appreciably during the period under review, and have claimed a more or less constant portion of global expenditures; varying slightly from year to year, the ups and downs have generally fallen within the 20 to 25 per cent brackets; and (b) the scale of importance within the expenditure pattern has been on the whole maintained all through the period; thus, roads, ports and buildings head the list, followed by administrative expenditures, agricultural activities and, water supply, irrigation and drainage (cf., Table 90).

Table 90

Expenditure Pattern on Capital Works Activities in Ordinary Budget, 1945-1956

<u>Year</u>	<u>(Per Cent)</u>			
	<u>Administration</u>	<u>Roads, Ports & Buildings</u>	<u>Water Supply Irrigation & Drainage</u>	<u>Agricultural Activities</u>
1945	15.4	72.8	4.0	7.8
1946	15.3	75.1	4.4	5.2
1947	12.2	78.8	4.7	4.2
1948	12.9	77.1	4.8	5.2
1949	13.2	73.3	6.6	6.9
1950	13.7	68.6	6.7	11.0
1951	21.3	55.0	5.5	18.2
1952	28.4	55.5	7.9	8.2
1953	50.0	36.0	6.7	7.3
1954	38.1	50.7	3.4	7.8
1955	26.9	56.4	9.7	7.0
1956	26.5	59.7	2.8	11.0
1945-56	22.7	62.9	5.7	8.7

Source: Table 89, Infra.

2. Extra-Ordinary Budgets

In order to meet the financial requirements of capital works, the Government has in addition to the ordinary budget, four extra-ordinary budgets, namely: (i) The Development Works Fund, (ii) the General Development Fund, (iii) the National Litani Authority Fund; and (iv) the National Reconstruction Authority Fund.

a. The Development Works Fund.

The Development Works Fund is a special fund created under Law of 5 April 1944, to finance major capital works in the country. Appropriations to it must be made by special Acts of Parliament and for specific projects. Information on parliamentary allocations to the Development Works Fund for each project is regularly published in the Official Gazette; but inspite of the specific stipulation of Article 7 of the above Law that requires the government to submit with the Ordinary Budget closed accounts a yearly statement of actual revenues and expenditures of the Development Works Fund, no such statement has been published to date.

Appropriations to the Development Works Fund for yearly expenditures totalled LL 183,210,000 in the 13 year period 1944-1956; these were chiefly for irrigation, water supply and drainage (32%), airports (26%) and communications (23%). In order to ensure continuity of project implementation, unexpended appropriations at the end of each year are automatically carried over into the following year. In the

TABLE 91

APPROPRIATIONS BY PARLIAMENT TO THE DEVELOPMENT WORKS FUND

Year during which Appropriations were made	Port of Tripoli	Roads	Irrigation Water supply and drainage	Airport	Schools	Hospitals	Other public buildings	Miscellaneous	Total
1944	-	9,000	3,630	-	515	-	500	100	13,745(a)
1945	-	-	950(b)	-	-	-	-	-	950(b)
1946	-	14,298	5,023	-	80	-	-	-	19,401(c)
1947	-	7,712	10,395	5,550	155	1,650	2,523	515	28,500(d)
1948	-	-	-	-	-	-	-	-	-
1949	-	-	-	8,500	-	-	-	-	8,500(e)
1950	-	-	-	10,000(f)	-	-	-	5,000(g)	15,000
1951	-	-	1,260	16,500	-	980	850	-	19,590(h)
1952	-	-	-	2,000	-	-	-	503	2,503(i)
1953	-	-	6,000	-	-	-	280	-	6,280(j)
1954	2,000	-	8,500	2,236	500	-	250	3,690(k)	17,176(l)
1955	2,450	-	8,130	-	2,000	-	1,375	200	14,155(m)
1956	2,000	4,600	15,110	2,100	-	-	7,400	6,200	37,410(n)
Total	6,450	35,610	58,998	46,886	3,250	2,630	13,178	16,208	183,210

Source: Raja S. Himadeh, The Fiscal System of Lebanon, 1953, p.104, for years 1944-52. Years 1953-55 compiled by UNRWA, Economics Division from Official Gazette.

(a) Laws of 5 April and 30 October 1944

(b) Laws of 30 June 1945

(c) Laws of 11 March, 14 March and 18 September 1946

(d) Laws of 10 May, 4 June, 12 November 1947

(e) Law of 27 June 1949. Appropriation is a Treasury loan to be repaid from proceeds of sale of oil airport of Beirut.

(f) Law of 27 March 1950. Of this total, LL6,000,000 financed by withdrawals from Conseil Supérieur des Interets Communs and LL 4,000,000 by withdrawals from Reserve Fund.

(g) Law of 10 June 1950, for army equipment.

(h) Laws of 10 February, 4 August, 6 September, 17 September, 1951.

(i) Laws of 7 February, 29 November and 9 December 1952.

(j) Laws of 16 March and 19 February, 1953

(k) Of which LL2,940 is financed by withdrawals from the Wheat Office.

(l) Laws of 16 March 1953; and of 5 August, 31 March, 7 May, 4 August, 5 August, 25 August, 30 November, 1954.

(m) Laws of 16 March 1953; 5 August 1954; and 26 April, 25 May, 14 March, 10 August and 13 September 1955.

(n) Laws of 16 March 1953; 5 August 1954; and 15 March, 14 May, 27 and 31 July, 5 and 24 August, and 14 September 1956.

absence of the necessary information, assuming that all funds appropriated have been spent, this would represent an average LL 14 million of capital expenditures a year.

Table 91, gives a tabulation of appropriations by special acts of Parliament to the Development Works Fund.

The Reserve Fund - a special Treasury Account fed by Ordinary Budget surpluses when the accounts are closed each year - is by far the most important source of funds¹ for the Development Works Fund.

Table 92, presents the position of the Reserve Fund as of December 31, 1955, and the movement in and out of the Reserve Fund between 1943 and 1955.

The Table indicates that in the 13 year period, 1943-55, the Ordinary Budget yielded LL 507.4 million in gross surpluses, of which LL 224.9 million were transferred back to the Reserve Fund, while LL 124.5 million were appropriated to the Development Works Fund and LL 1.96 million were used to cover the deficit of the Telephone Service by the end of 1951, thereby raising the Reserve Fund Balance from LL 9.2 million in 1943 to LL 165.1 million at the end of 1955.

The LL 165,133 thousand Reserve Fund Balance at the end of 1955 was however, not an unencumbered sum because many obligations had been incurred against it. The real

1. The Development Works Fund obtained around LL 17.44 million from sources other than the Reserve Fund (cf., Table 91) during the period under review.

Table 92
The Reserve Fund

Year (a)	: Cross surplus : of Ordinary : Budget	: Transfer from : Reserve Fund : to Ordinary : Budget	: Transfer from : Reserve Fund : to Development : Works Fund	: Balance carried : forward in Reserve : Fund at end of : year
1942				9,170
1943	7,508	2,413	5,572	8,692
1944	10,217	142	950	17,817
1945	23,274	3,963	10,031	27,097
1946	27,162	5,240	20,370	28,650
1947	42,118	16,852	-	53,916
1948	23,425	14,738	18,500	44,103
1949	25,591	21,626	9,000	39,068
1950	17,287	18,492	19,590	18,273
1951	32,998	17,742	-	33,529
1952	58,905	22,488	2,503	67,443(b)
1953	66,209	42,145(c)	12,680	76,866
1954 (d)	81,715	14,673	7,836	136,152
1955	90,896	44,410	17,505	165,133
Total	507,385	224,923	124,537	

Source: Ministry of Finance, Budget Closed Accounts 1943-1955

- (a) Gross surpluses from Ordinary Budget, and transfers from Reserve Fund to Ordinary Budget, are for calendar years shown here. However, transfers from the Reserve Fund to the Development Works Fund, and balances carried forward in Reserve Fund at end of year include transactions made in the period between the end of fiscal year and the date on which the accounts are closed for that year. Thus on appropriation made to the Development Works Fund at the beginning of 1951 before accounts for 1950 are closed would appear in closed accounts for 1950, as can be observed in a comparison in Tables 91 and 92.
- (b) Out of which LL.1,961,000 was withdrawn to cover the deficit of the Telephone Service by the end of 1951. Thus the Reserve Fund balance at the end of 1952 was really LL.65,482,000.
- (c) Of which LL.21,286,000 was transferred to the 1953 Ordinary Budget during 1953, and LL.20,859,000 was transferred to the 1954 Ordinary Budget at the end of 1953.
- (d) The balance carried forward in the Reserve Fund is as of 31 December 1954. The 1954 Budget Closed Accounts however, gives the figure LL.88,659,195. For an explanation of this discrepancy, see footnote (a) above.

position of the Reserve Fund as of December 31, 1956 was as follows:

	<u>In Thousand LL</u>
<u>Credits, Total</u>	217,133 =====
1. Balance of Reserve Fund at end of 1955	165,133 ¹
2. Reserve of the Wheat Office at end of 1956	7,000 ²
3. Estimated surplus of the Ordinary 1956 Budget	45,000 ³
 <u>Debits, Total</u>	 180,555 =====4
1. Amounts practically irrecoverable	33,143
a. Deficit in the account of Palestine Refugees	6,501
b. Payment for war damages & (casualties (1941)	647
c. Loans to Ministries (Defence & Foreign Affairs)	9,207
d. Loan of 1 month salary to Govt. employees (1947)	2,436
e. Purchase of telephone system (1946)	4,700
f. Deficit of the Telephone Service, 1952 & 1953	1,652
g. Obligations incurred by Govt without prior appropriations (approximate)	8,000
 <u>Amounts earmarked as</u>	
2. <u>I.M.F., I.B.R.D., I.F.C. Contributions</u>	<u>12,503</u> ⁵
3. <u>Outstanding Treasury Loans by end of 1956</u>	<u>88,751</u> ⁶

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1. Table 92, Supra
 2. Table 75, Supra
 3. Joseph Chader, "Notes on 1957 Budget", Le Commerce du Levant, 9.2.57.
 4. UNRWA, QBED No. 13, Op.cit.
 5. Ibid., and Official Gazette
 6. Ibid., and Table 75, Supra, and Table 93, Infra.

a. Telephone Service	8,549
b. Agricultural, Industrial & Real Estate Bank	2,000
c. Beirut Water Service	10,492
d. Common Electricity and Transport	35,500
e. National Litani Authority	16,210
f. Municipalities	2,000
g. Defence Ministry	2,000
h. Reconstruction Authority	12,000
	¹
4. <u>Outstanding Loans that might be written off</u>	<u>8,748</u>
a. Mira Board (now wheat office)	2,725
b. To SCAIL	4,023
c. Government guaranteed Loans by B.S.L. to some Municipalities	2,000
5. <u>Appropriations to Development Works Fund during 1956</u>	<u>37,410</u>
	²
Net Surplus	36,578
	=====

Thus the above statement reveals that if all commitments against the Reserve Fund are accounted for, the unencumbered part of the LL 165, 133,000 at the end of 1956 was LL 36,578,000 only.

Moreover, it must be noted that future earnings of the Reserve Fund have in part been already obligated by laws passed since 1954 to date. Table 93 gives such future obligations upon the Reserve Fund until 1965.

c. The National Litani Authority

The National Litani Authority is an autonomous public agency which was created in 1954 ³ to supervise and execute the Litani multi-purpose project; once the project is completed

-
1. Ibid.
 2. Table 91, Supra.
 3. Law of August 14, 1954.

FUTURE OBLIGATIONS UPON THE RESERVE FUND, 1957 - 1965

	(In LL Thousands)					
	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962-65</u>
A. Existing by Law						
1. Tripoli Harbour (5.8.54)	2,000	1,550				
2. Beirut Damascus Road(24.8.56)	3,000	3,000	3,000			
3. Rural Electrification (24.8.56)	5,000	5,000	5,000	5,000	5,000	
4. Roads (11.1.57)	100					
5. Irrigation (25.2.57)	1,600					
6. Beirut International Airport(11.2.57)	3,347	3,301	3,300			
7. Kileat Airport (11.2.57)	400					
8. Athletics City(10.1.57)	2,500					
9. Popular Housing Scheme (.2.2.57)	6,000					
10. Potable Water Supply (2.9.56)	6,200	6,200	6,200	6,200	6,200	24,800
B. Loans						
1. Litani Authority(30.12.55)	9,114	11,560	8,360	10,240	9,436	
2. Common Electricity & Transport(25.1.57)	6,000	6,000				
3. Reconstruction Authority (17.1.57)	10,000					
Total	<u>55,261</u>	<u>36,611</u>	<u>25,860</u>	<u>21,440</u>	<u>20,636</u>	<u>24,000</u>

Source : Official Gazettes

it falls to the said Authority to operate it.

A special Fund has been created for financing the project to be fed from Treasury loans (chiefly from the Reserve Fund) and private loans and by the proceeds of property sales.

The Treasury advanced LL 6 million to the Authority in 1954 to cover administrative expenses and to start operations. The Litani Authority negotiated and obtained a loan from I.B.R.D. amounting to \$ 27 million at 4.75 per cent interest, redeemable in 25 years. First instalment of amortization of \$ 428,000 is scheduled for payment on August 1, 1961 and the last on August 1, 1980. In order to cover the local currency component of the first phase of the project, the Treasury, by Law of 30 December 1955, advanced the authority an LL 60 million free of interest loan (cf., Table ⁹³ 84). The loan is to be redeemed starting 1962, by equal yearly instalments of LL 3 million.

d. The National Reconstruction Authority Fund.

The National Reconstruction Authority was created under Law of April 9, 1956, to reconstruct: (a) flood damaged areas in Tripoli and North Lebanon; and (b) areas damaged by the earthquakes in 1956. The Authority is an autonomous government agency having a special autonomous Fund.

The autonomous National Reconstruction Authority Fund is fed from various sources, namely:

1. Contributions and grants

2. Treasury Loans
3. Internal Loans contracted by Law.
4. Various excise duties and taxes.

Since its institution the Government has extended three loans to the said Authority totalling LL¹22 million. No time limit has been set for redemption of either of the three loans; but it can be assumed that it will not be later than 1961, the time limit of the Authority's autonomous Fund.

B. Assessment of Proposed Future Capital Works Expenditures.

This section proposes to cover the required capital expenditures on definite development projects as outlined in the previous chapter and exclusive of the second phase of the Litani Project for the period 1957-1965.

1. Litani Power and Irrigation Project

The first phase of the Litani power and irrigation will cost an estimated LL 172,4 million divided as follows:

(in LL Millions)

	<u>Total</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>
Bekaa Gravity Unit	6.9	1.4	3.5	2.0		
Saida Beirut Unit	6.5			1.1	3.2	2.2
Karaoun Dam & Res.	18.1	1.5	6.0	6.0	4.6	
Markabi Diversion Dam and Canal	20.0		7.5	10.0	2.5	
Markabi Power Plant	9.1		0.9	5.5	2.7	
Markabi-Jezzine-Qanane Tunnel & Reservoir	65.3	12.5	18.6	18.6	15.6	

1. Law of November 2, 1956: LL 2 & LL 10 million; & Law of February 17, 1957: LL 10 million.

	<u>Total</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>
Awali Power Plant	22.0			2.4	9.8	9.8
Transmission System	13.0		3.2	6.5	3.3	
Awali-Joun Canal	3.0			0.9	1.5	0.6
Chamoun Power Plant	<u>8.5</u>	<u>4.0</u>	<u>4.5</u>	—	—	—
	172.4	19.4	44.2	53.0	43.2	12.6

The proposed method of financing the project is as follows:

1. I.B.R.D.	88.3	14.1	29.9	12.9	16.1	15.3
2. Government Loan	<u>60.0</u>	<u>11.2</u>	<u>20.7</u>	<u>8.4</u>	<u>10.2</u>	<u>9.5</u>
TOTAL	148.3	25.3	50.6	21.3	26.3	24.8
	=====	=====	=====	=====	=====	=====

The fact that scheduled expenditures over one year are more than earmarked amounts for the same year should cause no worry as such unspent balances will be automatically carried over into the following year. In toto however, available amounts for the project are LL 24.1 million short of what it is expected to cost.

Once the project is completed in 1961, interest and instalment payments will fall due as follows:

(IN LL Million)

	<u>Total</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>
I.B.R.D. Loan	35.0	14.0	7.0	7.0	7.0
Treasury Loan	<u>12.0</u>	<u>3.0</u>	<u>3.0</u>	<u>3.0</u>	<u>3.0</u>
TOTAL	47.0	17.0	10.0	10.0	10.0
	=====	=====	=====	=====	=====

These payments are expected to be met by the Authority from the gross yields of the project itself, without

1. Parliamentary Reports, Op.cit., pp. 472-473.

recourse to the Treasury or any other source. The project's¹ financial statement is expected to be as follows:

(In LL Million)

	<u>Total</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>
Gross Receipts	83.5	33.1	14.9	16.9	18.6
Operating Expenses	15.8	10.9	1.4	1.4	2.1
Payments due	<u>47.0</u>	<u>17.0</u>	<u>10.0</u>	<u>10.0</u>	<u>10.0</u>
Net Balance	20.7 =====	5.2 ===	3.5 ===	5.5 ===	6.5 ===

Thus to finance the LL 24.1 million deficit, the authority could contract an internal loan having as collateral the expected LL 20.7 million net yields between 1962 and 1965.

On the whole therefore the Litani Project should offer no financing difficulties.

2. Potable Water Supply and Rural Electrification Projects.

The Potable Water Supply and Rural Electrification Projects are estimated to cost LL 92 million of which LL 11.2 million have already been spent in 1956; proposed expenditures are as follows:

(In LL Million)

	<u>Total</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>
Potable Water Supply (Law 7.9.56)	55.8	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
Rural Electrification (Law 24.8.56)	<u>25.0</u>	<u>5.0</u>	<u>5.0</u>	<u>5.0</u>	<u>5.0</u>	<u>5.0</u>	_____	_____	_____	_____
	80.8	11.2	11.2	11.2	11.2	11.2	6.2	6.2	6.2	6.2

1. Ibid.

Expenditures on these two projects are expected to be forthcoming from already made appropriations to the development Works Fund from the Reserve Fund.

3. Communications Projects

a. Tripoli Harbour and Beirut International Airport

The proposed development of the Tripoli Harbour and the Beirut International Airport will cost an estimated LL 23.3 million of which LL 8.3 have been spent to date.

Work is scheduled for completion by 1959; yearly expenditures will be as follows:

(In LL Million)

	<u>Total</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>
1. Tripoli Harbour	3.6	2.0	1.6	-
2. Beirut International Airport	<u>11.4</u>	<u>4.8</u>	<u>3.3</u>	<u>3.3</u>
TOTAL	15.0	6.8	4.9	3.3

Funds to meet the above expenditure requirements will be drawn from the following sources

(In LL Million)

	<u>Total</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>
1. Development Works Fund				
a. Tripoli Harbour	3.6	2.0	1.6	-
b. Airport	9.9	3.3	3.3	3.3
2. Point IV (Airport)	<u>1.5</u>	<u>1.5</u>	-	-
TOTAL	15.0	6.8	4.9	3.3

Thus the Government has to raise locally LL 13.5 million for the two projects; these will take the form of

transfers from the Reserve Fund to the Development Works Fund.

b. Roads Program

The Roads Program as envisaged by the Ministry of Public Works would cost an estimated LL 143 million; of this LL 9 million have already been spent. Expenditures will be spread over seven years and will be at the rate shown below:

(IN LL Million)

	<u>Total</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>
1. Various Proposed Roads	109			21.0	22.0	22.0	22.0	22.0
2. Beirut-Maamaltein	4.5	2.5	2.0	-	-	-	-	-
3. Beirut-Damascus	19.0	7.0	7.0	5.0	-	-	-	-
4. Batroun-Akkar	<u>1.5</u>	<u>0.5</u>	<u>0.5</u>	<u>0.5</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
	134.0	10.0	9.5	26.5	22.0	22.0	22.0	22.0

Financing of these roads projects will come from various sources, as shown below:

(In LL Million)

	<u>Total</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>
1. Various Roads								
a. Ordinary Budget	31.5			5.5	6.5	6.5	6.5	6.5
b. Point IV Contributions	77.5			15.5	15.5	15.5	15.5	15.5
2. Beirut-Maamaltein								
a. Ordinary Budget	4.5	2.5	2.0					

<u>Cont'd.</u>	<u>Total</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>
3. Batroun-Akkar								
a. Dev. Works Fund	1.5	0.5	0.5	0.5				
4. Beirut-Damas-cus								
a. Dev. Works Fund	9.0	3.0	3.0	3.0				
b. Point IV Sources	<u>10.0</u>	<u>4.3</u>	<u>3.0</u>	<u>3.0</u>				
Total	134.0 =====	10.0 =====	8.5 =====	27.0 =====	22.0 =====	22.0 =====	22.0 =====	22.0 =====

Thus of the total of LL 134 million, Point IV would contribute LL 87.5 million, while LL 36 million would be forthcoming from the Ordinary Budget and LL 10.5 million from the development Works Fund.

C. Telecommunications

The two telecommunications projects would require six years for completion and would cost an estimated LL 8.7 million; funds will be appropriated for both projects in the Ordinary Budget as follows:

(In LL Million)

	<u>Total</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>
1. Public Telephone Booths	3.7	1.0	1.0	1.0	0.7		
2. Broadcasting Station	<u>5.0</u>	—	<u>1.0</u>	<u>1.0</u>	<u>1.0</u>	<u>1.0</u>	<u>1.0</u>
	8.7 ===	1.0 ===	2.0 ===	2.0 ===	1.7 ===	1.0 ===	1.0 ===

4. Popular Housing Scheme

No definite plans have been worked out as to the time over which the LL 70 million popular housing scheme will be completed. The government has appropriated in 1957 LL 6 million for expropriation expenses and Point IV has earmarked \$ 1.5 million for the same purpose. Thus expenditure on the project in 1957 is estimated to be LL 10.8 million.

C. Proposed Future Methods & Financing (1957-1965)

The above discussion reveals that if the projects are to be carried out on schedule and if the estimates of implementation costs are more or less correct, then about LL 410.5 million will be required between 1957 and 1965.

Table 94 summarizes the yearly and global expenditures on such projects.

Table 94

Proposed Future Expenditures on Development Projects, 1957-1965

(In LL Million)

	<u>Total</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>
<u>Project</u>										
1. Litani	161.2	8.2	44.2	53.0	43.2	12.6				
2. Water Supply	55.8	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
3. Rural Electrification	25.0	5.0	5.0	5.0	5.0	5.0				
4. Tripoli Harbour	3.6	2.0	1.6							
5. Beirut Airport	11.4	4.8	3.3	3.3						

<u>Cont'd.</u>	<u>Total</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>
6. Roads	134.0	10.0	9.5	26.5	22.0	22.0	22.0	22.0		
7. Telecommu- nications	8.7	1.0	2.0	2.0	1.7	1.0	1.0			
8. Popular Hou- sing Scheme	<u>10.8</u>	<u>10.8</u>								
TOTAL	410.5	48.0	71.8	96.0	78.1	46.8	29.2	28.2	6.2	6.2
	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

Source: Text of Present Chapter

To finance the above projects the Government will have recourse to four different sources, namely: (a) the I.B.R.D. loan of LL 88.3 million to the Litani Authority; (b) The Development Works Fund, appropriations to which will be forthcoming from the Reserve Fund; (c) the Ordinary Budget; and (d) Point IV sources (or American financial assistance).

Table 95 summarizes the amounts of the various financial sources.

D. Adequacy of Financing of Present Financing Procedures

From the following tables (cf. Tables 94 and 95), the following opinion can be expressed with respect to the various sources of funds. The I.B.R.D. loan presents no problems as the project once implemented is expected to prove self-financing. The Ordinary Budget expenditures on roads and telecommunications can be easily taken care of as they are far below yearly expenditures on such projects (cf. Table 89). American contributions are outside the scope of influence of

TABLE 95

METHOD OF FINANCING FUTURE DEVELOPMENTS PROJECTS 1957-1965

	(In LL Millions)									
	<u>Total</u>	<u>1957</u>	<u>1958</u>	<u>1959</u>	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>
I. I.B.R.D. Loan	<u>88.3</u>	<u>14.1</u>	<u>29.9</u>	<u>12.9</u>	<u>16.1</u>	<u>15.3</u>	-	-	-	-
II. Reserve Fund	<u>159.6</u>	<u>35.1</u>	<u>31.2</u>	<u>26.4</u>	<u>21.4</u>	<u>20.7</u>	<u>6.2</u>	<u>6.2</u>	<u>6.2</u>	<u>6.2</u>
1. Litani Loan	48.8	9.1	11.6	8.4	10.2	9.5	-	-	-	-
2. Water Supply	55.8	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
3. Rural Electrification	25.0	5.0	5.0	5.0	5.0	5.0	-	-	-	-
4. Tripoli Harbour	3.6	2.0	1.6	-	-	-	-	-	-	-
5. Beirut Airport	9.9	3.3	3.3	3.3	3.3	3.3	-	-	-	-
6. Roads	10.5	3.5	3.5	3.5	3.5	3.5	-	-	-	-
7. Popular Housing Scheme	6.0	6.0	-	-	-	-	-	-	-	-
III. Ordinary Budget	<u>44.7</u>	<u>3.5</u>	<u>4.0</u>	<u>7.5</u>	<u>8.2</u>	<u>7.5</u>	<u>7.5</u>	<u>6.5</u>	<u>-</u>	<u>-</u>
1. Roads	36.0	2.5	2.0	5.5	6.5	6.5	6.5	6.5	-	-
2. Telecommunications	8.7	1.0	2.0	2.0	1.7	1.0	1.0	-	-	-
IV. Point IV	<u>93.8</u>	<u>10.3</u>	<u>3.0</u>	<u>18.5</u>	<u>15.5</u>	<u>15.5</u>	<u>15.5</u>	<u>15.5</u>	<u>-</u>	<u>-</u>
1. Beirut A/P	1.5	1.5	-	-	-	-	-	-	-	-
2. Roads	87.5	4.0	3.0	18.5	15.5	15.5	15.5	15.5	-	-
3. Popular Housings	4.8	4.8	-	-	-	-	-	-	-	-

Source : Text of Present and Previous Chapters

financial authorities; however, LL 16.3 million have been already been earmarked for expenditures in 1957; besides, it can also be said that in the event where future American aid is suspended there is no reason why the government should not be able to finance, over a certain number of years, the roads program from Ordinary Budgetary appropriations. In conclusion therefore, the only source of funds that is liable to be of serious concern to the government in the future is the Reserve Funds.

Table 96 summarizes the estimated future Reserve Fund position between 1957 and 1965.

Tables 95 and 96 reveal that present envisaged sources for financing future development are adequate; besides, other things being equal, the Development Works Fund will in addition to the above projects, be in a position to finance other projects to the tune of around LL 7.5 million a year.

II. Impact of Proposed Development Expenditures on the Lebanese Economy

This section attempts to gauge the impact of proposed development expenditures on the Lebanese economy by assessing the effects that such expenditures are likely to exercise on levels of investment, foreign trade and balance of payments, and the standard of living.

TABLE 96

ESTIMATED FUTURE RESERVE FUND POSITION, (1957-1958)

(In LL Millions)

	1957	1958	1959	1960	1961	1962	1963	1964	1965
1. Uncommitted Reserve Fund Balance 31.12.56	36.6	-	-	-	-	-	-	-	-
2. Estimated Ordinary Budget Surpluses (1)	30.0	25.0	15.0	5.0	-	-	-	-	-
3. Loans due: (2)									
1. Various Loans	30.0	74.0	-	-	-	-	-	-	-
2. Litani Authority	-	-	-	-	-	3.0	3.0	3.0	3.0
3. Reconstruction Authority	-	-	-	-	-	5.5	5.5	5.5	5.5
Cumulative Total	96.6	195.6	210.6	215.6	215.6	224.1	232.6	241.1	249.1
Cumulative Exp.	35.1	66.3	92.7	114.1	134.8	141.0	147.2	153.4	159.6
Less	61.5	129.3	117.9	101.5	80.8	83.1	85.4	87.7	90.0
1. Earmarked 1957 Loans O.E.T.C.	6,000	6,000	-	-	-	-	-	-	-
2. Reconstruction Authority	10,000	-	-	-	-	-	-	-	-
	45.5	107.3	-	-	-	-	-	-	-
Cumulative Balance	45.5	107.3	95.9	79.5	58.8	61.1	63.4	65.7	68.0

1. Joseph Chader "The 1957 Budget" in Le Commerce du Levant, February 9, 19572. Ibid.Source: Tables 94 and 95 supra and Text of Present & Previous Chapters

A. Effects on Investment

The impact of future development expenditures on the level of investment can best be determined by a comparison of proposed public physical investment to proposed overall physical investment expenditures; in this context, it is believed that unless a radical change is brought to bear on both the size and pattern of present investment outlays, there would likely be no appreciable impact on the economy. For that purpose, public investment should be so devised in the future as to achieve two aims, namely: (a) First, public physical investment expenditures should be so increased as to account for a more pronounced proportion of overall investment; and (b) Second, such public investment should exercise a radical influence on the pattern of private investment outlays as to induce a shift from one kind of private investment to another. E.g. a decrease in real estate investment should be compensated for example by a corresponding and parallel increase in industrial or agricultural investment.

It is in the light of the above two criteria, that the assessment of the impact of proposed future development expenditures on overall investment is proposed for discussion hereunder:

1. Prospective Growth of Overall Investment

Table 97 below gives Lebanese physical investment between 1948 and 1954.

TABLE 97

NET PHYSICAL CAPITAL INVESTMENT IN LEBANON 1948-1954

Sector	(In LL Millions)						
	1948	1949	1950	1951	1952	1953	1954
Public	25	24	30	18	22	23	25
Private Bldg. & Contracting	56	48	74	56	69	69	71
Industry	15	14	23	15	15	15	15
Agriculture	6	8	12	14	15	17	20
Services, Finance & Trade	13	13	13	14	14	15	16
Transportation	7	8	8	14	15	16	18
Total	<u>122</u>	<u>115</u>	<u>160</u>	<u>131</u>	<u>150</u>	<u>155</u>	<u>165</u>
Public	20.5	20.9	18.8	13.7	14.7	14.8	15.1
Private Bldg. & Contracting	45.9	41.7	46.3	42.7	46.0	44.5	43.0
Industry	12.3	12.2	14.4	11.5	10.0	9.7	9.1
Agriculture	4.9	7.0	7.5	10.7	9.3	11.0	12.1
Services, Finance & Trade	10.7	11.2	8.0	10.7	10.0	9.7	9.7
Transportation	5.7	7.0	5.0	10.7	10.0	10.3	11.0
Total	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>

Source: IBRD Litani Report, op.cit

Note : Apparent inconsistencies with Tables 89 and 91 are due to the different natures of these accounts especially that the above table relates to net investment only.

Table 97 calls for two interesting observations, namely: (a) Public physical investment accounts for a relatively low share of overall investment; as a matter of fact real estate investment alone accounts for between two and three folds total public investment; (b) from 20.5 per cent in 1948, public investment accounted for 15.1 per cent of overall investment in 1954.

The question that imposes itself at present is the following: will public investment in the future account for a different share of total investment so as to exercise a stronger influence on the economy? The answer to this question necessitates an assessment of proposed future investment from both ordinary and extra-ordinary budgetary sources.

a. Proposed Investment from the Ordinary Budget

It has already been mentioned that actual Ordinary Budget investment expenditures have since 1945 accounted for a more or less constant share of total budgetary expenditure; in other words, rarely have such expenditures deviated appreciably from the 1945-1955 21.2 per cent average (cf., Table 89). In the absence of indicators to the contrary, it would seem safe to assume that this pattern would be maintained between 1956 and 1965. With this provision in mind estimated Ordinary Public investment expenditures would be as follows:

Table 9

Estimated Ordinary Public Investment Expenditures,
1957-1965

(In LL. Million)

	¹ <u>Total Ordinary Budget Expenditures</u>	<u>Gross Ordinary Investment Expenditures</u> ²
1957	170	36
1958	185	39
1959	205	43
1960	225	48
1961	240	51
1962	255	54
1963	270	57
1964	285	60
1965	<u>300</u>	<u>64</u>
Total	2135 =====	452 ===

Source: 1. 1957: Ordinary Budget
1958-1961: Chader, op.cit.
1962-1965: Assumed to increase at an
average LL 15 million per
annum.

2. Assumed equal to the 1945-1955 average
rate of 21.2 per cent of total expen-
ditures .

b. Proposed Expenditures from other sources

Proposed gross investment expenditure from sources
other than the Ordinary Budget in the period 1957-1965 are
expected to be as follows:

TABLE 99

PROPOSED GROSS INVESTMENT EXPENDITURES FROM
SOURCES OTHER THAN THE ORDINARY BUDGET

	IBRD (1)	(In LL Millions)				Pt. Total IV (1)
		Development Works Fund (1)	Reconstruction & O.E.T.C. Expenditures(2)	Reserve Fund(3)		
1957	14.1	35.1	8.5	6.1	10.3	74.1
1958	29.9	31.2	8.5	6.0	3.0	78.6
1959	12.9	26.4	8.5	6.0	18.5	72.3
1960	16.1	21.4	8.5	6.0	15.5	67.5
1961	15.3	20.7	-	-	15.5	51.5
1962	-	6.2	-	-	15.5	21.7
1963	-	6.2	-	-	15.5	21.7
1964	-	6.2	-	-	-	6.2
1965	-	6.2	-	0	-	6.2
	<u>88.3</u>	<u>159.6</u>	<u>34.0</u>	<u>24.1</u>	<u>93.8</u>	<u>399.7</u>

Source :

1. Table 95 Supra.
2. Table 96 Supra; the LL 12 million difference is equal to the Reconstruction Authority loan contracted at end of 1956.
3. The LL 24.1 million consist of the balance of funds required for financing the first phase of the Litani and which will most probably be forthcoming from the Reserve Fund.

Thus, total gross investment expenditures during the period under ^{review} would be to the tune of LL 852 million.

In the period 1948-1954 total public net and gross investments totalled LL 167 million (cf., Table 96) and LL 191 million (cf., Table 89 and 91) respectively. Assuming that the ratio of net to gross applies to the 1957-1965 period, this would result in a net total investment of LL 746 million or around LL 83 million per annum.

It may therefore be concluded that the change in public investment expenditures from the 1948-1954 average of LL 24 million to the 1957-1965 average of LL 83 million will have a twofold effect, namely: (a) a corresponding average annual increase of LL 59 million on the average overall level of investment in the period 1957-1965;¹ and (b) a positive but less pronounced change in overall net private investment.

Thus, on balance the increase in public physical investment will result in a higher level of overall investment on the one hand and in a relatively more substantial share of public investment to overall investment on the other.

2. Prospective Composition of Overall Investment

The various private sectorial investments are likely to be affected by the increase in public investments; although the magnitude of the change cannot be assessed in numerical terms yet some light can be thrown on the intensity of the

1. The regression formula, namely: Total Investment = 19.97 + 1.033 Private Investment, reveals that under present conditions, total investment is definitely dependent on private investment.

change in the various sectors.

The primary consideration that is likely to prove conducive to a change in the volume of the various private investments is the proposed future pattern of public investment expenditures.

A glance at the pattern of proposed expenditures in Table 95 reveals that potable water supply, rural electrification, housing schemes and roads projects account for around 60 per cent of total envisaged expenditures. The emphasis on such public utility projects, although extremely commendable as such, will unfortunately prove mainly conducive to increased private investment in buildings and real estate. It is true that future public expenditures are apt to have their impact felt on such sectors as agriculture, transportation and industry; however, the magnitude of induced investments in sectors other than the real estate sector are not likely to prove particularly impressive. This is because public investments are not so directed as to solve the essence of the problems besetting the growth of the various sectors; they are nothing but partial remedies to certain drawbacks that have hereto hindered investment in those sectors. For example, developing hydro-power resources to ensure industry a cheaper, more abundant and regular current will not solve the problems that have impeded the growth of industry in the country.

In conclusion, it would be safe to state that increased public investments will definitely prove instrumental to the continuity of the witnessed impressive overall rate of growth in the country; however it is feared that by their nature such investments will not be conducive to correct the present tendency of unbalanced sectorial growth.

B. Effects on Foreign Trade & Balance of Payments

The implementation of public development projects is likely to exercise an unfavourable effect on the country's terms of trade.

It has already been shown that the preponderant share of income arising from trade activities can be traced to the foreign trade section (cf., Table 54). The question that arises therefore is what will be the impact of development projects on the various components of foreign trade, namely: commodity imports and exports, transit and the entrepot trade?

1. Commodity Imports

Public development expenditures are definitely likely to have two complementary effects; in the first place, increased expenditures are conducive to a rise in national income, and second, since they are preponderantly aimed at investment in social overhead, they may result in some inflationary tendencies. The forces thus generated (given a relatively high income elasticity of demand), will likely increase demand for imported commodities and will

tend to intensify the foreign exchange problem.

2. Exports

With regard to the effects of development expenditures on the country's exports, it has already been shown that the prospects and potentialities of agriculture and industry to step up production exports or reduce imports, are not at all impressive.

The reason for this is that under the present pattern of sector distribution - when between 1948 and 1954 income from the trade sector alone nearly measured up to the income of the agricultural and industrial sectors combined (cf., Table 14), and when only a minor part of the product of these two sectors was exported - implementation of development projects will have to be reflected in a high absolute rise in order to result in a relative rise in the product of agriculture and industry; again such a relative rise will have to prove exceptionally high as to result in a moderate absolute increase in that part of the agricultural and industrial product available for export. An exceptionally high relative increase in agricultural or industrial production is not believed likely between now and 1965 for two reasons, namely: (a) the emphasis in the proposed development expenditure pattern is not aimed at these two sectors; and, (b) problems besetting both agricultural and industrial developments are not solely confined to public capital expenditures.

On balance therefore, the net effect of development expenditures is more likely to create an increase in demand for imported goods than an increase in exports of agricultural and industrial products.

3. Transit and Entrepot Trades

The impact of development projects on both the entrepot and transit trades is most likely to prove negligible; the reason for this lies in the triangular nature of such trades and consequently their development, other things being equal, is not contingent upon the interplay of internal factors but primarily on the decisions of two or ~~more~~ outside countries.

Since development projects may have an unfavourable impact on the country's terms of trade; ipso facto the effect on relative balance of payments items is expected to be likewise.

One main consideration is apt to have a direct impact on the balance of payments' position of the country, namely, the magnitude of the foreign exchange component of the individual projects. In spite of the fact that one does not dispose of relevant information, it is however believed that, at least during the period under review, such impact will not be quite pronounced for the following reasons: (a) The IBRD loan will take care of the foreign exchange component of the Litani project; (b) the other projects, in view of their nature, are not believed to have

a high foreign exchange component; besides, part of the foreign exchange requirements is expected to be forthcoming in the form of American grants; and (c) implementation of some projects, eg. airport, communications, water supply and rural electrification, etc., are likely to increase certain invisible exports that may more or less offset the increased demand for foreign exchange as outlined above.

On balance therefore, the impact of development projects on the country's balance of payments, whether positive or negative, is not likely to produce fundamental disturbances or gains.

C. Effects on the Standard of Living

Having established in the course of the above discussion that the implementation of development projects will increase both overall and private levels of investment, it can be therefore concluded that such projects will be conducive to an increase in the country's national income; as long as this rate of growth is to be higher than the net rate of increase in population, the net result will have to be reflected in a higher per capita income.

However, implementing development programs so as to exercise a favourable impact on the standard of living is by no means the crux of the problem; the problem is not just one of increasing per capita incomes year after year. It is also one of correcting the presently prevalent discrepancies in income distribution so as to affect both the

levels and types of savings. In this connection, presently envisaged development expenditures can be criticized on grounds that they are apt to be conducive to increased investments in real estate instead of contributing to a more pronounced growth of the commodity producing sectors.

In other words, development expenditures are more or less likely to contribute to overall growth rather than to correct the deficiencies in the components of growth; such a situation will not solve the problem retarding a fairer distribution of income; on the contrary it may tend to accentuate it. It is feared, therefore, that under present conditions, development programs will not be effectively instrumental in bettering the welfare position of the majority of the working population.

The core of the problem therefore is one of scientific planning; what Lebanon needs is an overall, integrated development plan, aimed at pulling up the levels of performance of the retarded sectors to that of the developed ones. To be successful in bettering living standards such a development plan must be elaborated concomitantly with reforms in the country's fiscal policy, social legislation and administrative organization.

Measures for development, unless implemented within the above framework, may well defeat the purpose of development as outlined throughout this dissertation, namely the correction of the wide discrepancies in the distribution

of income in the country so as to lead to better living conditions for the majority rather than **the** minority of the Lebanese population.

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