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**THE LEATHER INDUSTRY IN LEBANON:**

**A CASE STUDY**

By

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LEATHER INDUSTRY IN LEBANON

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### ABSTRACT

The problem examined in this thesis is excess capacity in the Lebanese leather industry. This problem is truly faced by the industry, which is revealed not only by the tanners' claims and attempts to find a solution, but also by the author's investigations which all point to this fact. The essence of the problem is that the industry has accumulated capacity in various periods of intensive demand, and that this capacity cannot be operated at full at the present time because existing sales outlets cannot absorb the resulting output.

Investigations have shown also that the actual output of leather has been expanded under the pressure of existing idle capacity to an extent that supply exceeded demand at the price level which yields a rate of profit compatible with rates in other business enterprises. Consequently, the rate of profit in this industry is found to be low in comparison with rates acceptable in other business activities. Such low rate is usually a symptom of excess capacity in a free market.

In dealing with a problem of this kind, the general tendency is to adapt output to demand. This approach has been taken by interested leading groups in the industry who sought to put an end to the critical situation. Thus, by taking demand and the quality of output both as given, the solution was conceived in restricting supply to the level of demand, and keeping this supply flexible and responsive to changes in demand. The mechanism of such control would

be a form of monopolistic ownership and management of the whole industry which, if materialized, would reaffirm and even increase idle capacity which in the long run will have to be scrapped or withdrawn in some other way. Apart from the impracticality of such monopoly, and viewed from a general welfare angle, there can hardly be any benefits from restricting leather output under monopolistic controls. The resulting smaller output would generate less income, and in the absence of competition, stagnant and even degraded qualities would probably characterize such output.

The author's view of the problem differs from the foregoing theory in that it interprets excess capacity in this industry as the failure to expand output so as to occupy total capacity. His solution is then based on the assumption that demand is not given as such, and that it could be expanded to cope with an expanded output. However, this expanded output, to be salable, should be of a superior quality, and should be produced by a reorganized industry which can utilize the economies of modern technology as well as managerial techniques. The solution then, as offered in this thesis, calls for the revolutionizing of the industry, and its reorganization in the light of modern science so that it may fight its way with much more chances of success.



TABLE OF CONTENTS

	<u>Page</u>
Abstract	iv
Table of Contents	vi
Introduction	1
<u>Chapter</u>	
I. Excess Capacity in the Leather Industry	4
1. What is excess capacity?	4
2. Signs of excess capacity in the leather industry	7
3. Development of excess capacity	15
II. Factors Underlying Excess Capacity in the Leather Industry	25
1. The tanning process	25
2. Nature of leather producing units in Lebanon	31
3. Cost structure	38
4. Competition	47
III. Internal Market	51
1. Estimates of leather production in Lebanon	51
2. Size of local market	53
3. Imports and protection	61
4. Substitutes	70
5. Possibilities of expanding local market	76
IV. External Markets	80
1. Analysis of leather exports	80
2. The position of leather in trade agreements	88
3. Possibilities of expanding leather exports	94
V. Attempts to Solve the Problem of Excess Capacity	100
1. The tanners' solution	100
2. Attempts of the Industry Institute	105
VI. Suggestions	112
1. The problem recapitulated	112
2. Proposed reorganization of the industry	113
Conclusion	131
Appendix I Contents of Tariff Numbers Used in the Thesis	132
Appendix II Tables	136
Bibliography	182

## INTRODUCTION

In the last quarter of 1957, the Tanners' Union in Lebanon held a number of meetings to study a serious problem faced by their industry. This problem was summed up in two words, namely, excess capacity. The industry seemed to be producing more than it could sell at the prevailing prices and within the existing selling means. Stability of prices could not be maintained, and price competition developed into an almost cutthroat competition which is the expected theoretical outcome of the existence of excess capacity in a free market.

Tanners have been long worried about the existence of idle capacity in their plants. They cannot make full use of their equipment and in most tanneries a sizeable amount of equipment is partially, and in many cases, entirely unutilized. This burdens their costs, and because of keen competition, it cuts into their profits. The problem as presented by the tanners may be summarized in the following words: The leather industry in Lebanon has grown over an unplanned scheme and in response to certain peak demand periods. Too much capital investment was thus attracted to be found later in excess of what normal demand requires. On the other hand, outside markets do not seem encouraging sales outlets. The neighbouring Arab countries are building their own leather industry and protecting it effectively. In other markets, Lebanese leather seems to have very little chances to displace leather from more advanced countries. With this gloomy outlook, the problem of excess capacity remains unsolved.

The purpose of this thesis is to examine the problem as set above, and to find out how much truth there is in it, and the extent to which the tanners' fears are justifiable. Besides, in case our findings show that the problem, or some aspects of it, truly exist, then our concern would be to study the attempts so far forwarded in the way of solving it, and to suggest any possible remedies.

The leather industry is not a major industry in the Lebanese economy with respect to the number of people it engages, and to its share in the national income. With its seventy-eight officially registered firms, it occupied in 1955 (census year) a little above 824 persons, or about 2.4 per cent of the total number of persons engaged in industrial activity<sup>1</sup>. Value added generated by the industry in the same year amounted to a little above L.L. 2.7 million, or about 1.8 per cent of total value added generated by the industrial sector covered by the census<sup>2</sup>. The industrial sector in the Lebanese economy contributes a rather small share to the national income<sup>3</sup> which again reveals the small significance of the leather industry when viewed from a national income standpoint.

However, the leather industry is a well rooted industry in the Lebanese economy with a highly specialized capital equipment, labor force, entrepreneurship, and even social communities. A high

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1. Economic Research Institute - A.U.B., Industrial Census of Lebanon: 1955, V. 2: Classification by Industry (Beirut 1958), p. 8 and 123.
  2. Ibid., p. 10 and 123.
  3. This share was computed by the Economic Research Institute of the A.U.B. at 13% of total national income in 1950 (See: Badre, A.Y., "The National Income of Lebanon", Middle East Economic Papers, 1956, p. 13), and it is believed that there was no great departure from this ratio in 1955.

degree of immobility characterizes its factors of production. Besides, it supplies almost all the needs of local consumption regularly and at relatively low prices, which may be regarded in itself as some form of income to the community. The same is also true with respect to its exports to a number of neighbouring Arab countries and other remote countries.

In choosing leather industry as topic to a thesis, apart from its academic value, there are many justifying elements to be found in what has just been mentioned above. Besides, a thorough study of the problem of excess capacity such as faced by the leather industry, may throw light on other industries facing the same problem or on the way of getting into it. In an underdeveloped country such as Lebanon, where capital scarcities cannot afford the luxury of acquiring excess capacities, such an analysis may be of practical help to authorities engaged in economic planning and guidance.

The subject is treated in six chapters of which the first two present the problem with the factors, both internal and external, which led to its rise. Chapters three and four study the nature and size of the existing market for Lebanese leather both locally and abroad, and the possibilities of expanding this market were considered. Chapter five presents and evaluates the remedial solutions which were attempted so far. The author's opinion of the problem and its solution is presented in Chapter Six. Two main proposals are offered there for the reorganization of the industry, and it is the author's belief that those proposals provide a workable solution to the problem.

## CHAPTER I

### EXCESS CAPACITY IN THE LEATHER INDUSTRY

#### 1. What is Excess Capacity?

Excess capacity in an industry under perfect competition has been defined in economic theory as the condition where the plants forming that industry produce more than the industry can sell at a price which covers average total cost including a margin of normal profit. Hence, an industry in perfect competition is said to have excess capacity when its profits are below normal as compared with other industries. Owing to excess capacity, the supply curve of such an industry would be shifted to the right so as to cross the demand curve at a lower point causing price to fall below the level which yields normal profit.

It is quite evident that not all firms in the industry referred to above are of equal efficiency. It is thus expected that while the least efficient firms cannot make normal profits and may not even cover their average variable costs in some instances, the more efficient ones may still enjoy normal profits although prices might have fallen. This analysis leads to what has been called "marginal firms", i.e., those least efficient firms whose marginal revenue, or price, can cover only a part of their total average cost (including normal profit).

Now suppose that we abandon our perfect competition assumption momentarily by assuming that the above industry restricts its

output in one way or another, then its supply curve would shift to the left, and price would rise. By restricting its production, this industry develops what is known as "unused capacity", i.e., an idle productive capacity. This should imply, of course, that no fixed equipment has been scrapped. Some writers have distinguished excess capacity from unused capacity in that the former is measured by the amount of production which, if restricted, would bring price up to the level which raises profits to normal. Whereas the latter is measured by the difference between the physical productive capacity and actual production.<sup>4</sup> While excess capacity is said of an industry as a whole, unused capacity may characterize a single plant as well as an industry.

It is thus clear that the existence of excess capacity does not necessarily mean the existence of unused capacity. An industry, while having excess capacity, may be producing at full capacity, i.e., with no unused capacity. On the other hand, an industry may have unused capacity but no excess capacity in the sense that its profits are normal. Of course this does not seem to be likely under perfect competition since it is hardly possible to find in a competitive industry stocks of idle equipment while output is voluntarily restricted by individual firms to the volume where profits are made normal. Producers are tempted to make use of all their equipment, and unless there is a concerted action, unused capacity, once developed as in a demand peak for instance, turns into excess capacity.

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4. Dean, Joel, et al. *Managerial Economics* (New York 1951), p. 60.

However, under imperfect competition, and especially when the number of producers is small as in an oligopoly, excess capacity and unused capacity may both exist in one industry. In an oligopoly where the action of a single producer may effect price and the actions of other producers, it may happen that a producer (or a number of producers) restricts voluntarily his production only to an extent where price still remains below the normal profits level, and thus leaving part of his capital idle. When a substantial number of producers in such an industry do the same thing so that average profits remain below normal, it can be said then that there is excess capacity and unused capacity in this one industry. It is assumed again that idle equipment is not being scrapped. The size of unused capacity would depend, in this case, on the margin below normal profits which producers are willing to accept, or in other words, on the minimum size of subnormal profits which keeps them in business. The restriction of production in developing a monopoly is of a different nature. Output here is restricted in order to raise profits above normal; i.e., to attain "monopoly profits".

In studying the problem of excess capacity in the leather industry in Lebanon, the author's findings show that this industry has followed the pattern analysed above. The market structure of this industry, in general, is far from being oligopolistic since the existing firms in the industry do scarcely follow, at least explicitly, any concerted decisions or policy with regard to price or output. On the other hand, it cannot be classified under perfect competition due to the imperfections of the real world competition which has rendered the former form of competition a matter of theoretical analysis. It

can be concluded thus that leather market in Lebanon is mainly of the imperfect competition structure, where the product is not entirely homogeneous although very little differentiated, where obstacles hinder the mobility of capital and other factors delay elimination. With regard to producers' behaviour, price to them is not entirely given, and each does not feel free to expand his output to the point where his marginal revenue equals his marginal cost. The actual situation is that each producer has acquired to himself a share of the market beyond which he cannot go very far. If he does, then it would cost him large price cuts and losses to dispose of his output. His competitors may respond with similar price cuts, but not to the same extent, and in any case, the movement of customers among those competing producers would not be entirely parallel to price cuts made.

Thus, leather producers are put in a position where each can adjust his output, more or less, to his share of the market, with a persisting tendency to exceed that share due to the existence of unused capacity which has been developed by certain conditions of output and markets to be studied below. This tendency has made it possible for both unused and excess capacity to exist in the leather industry in the manner analysed above.

## 2. Signs of Excess Capacity in the Leather Industry.

Underdeveloped countries usually suffer from shortages in capital equipment, or what we may call "bottlenecks" in the means of production. The problem of excess capacity is expected to be uncommon in such countries. In Lebanon, however, leather industry



has passed through historical conditions of demand and supply, to be studied in the following section, which have led to the accumulation of capacity in excess of the needs of actual demand. The signs of this excess capacity will be studied below.

In the first place, the rate of profits in the leather industry seems to be much below that acceptable in other enterprises. The secrecy with which Lebanese business men in general keep their accounts prevents us from drawing accurate conclusions about the rate of profit yielded by their businesses. However, the interviewed owners of tanneries established or reequipped recently<sup>5</sup>, and particularly in Beirut and its suburbs, almost all agreed that their rate of net profit does not exceed 10 per cent of their capital investment. To be of relevance for our comparison purposes, the above estimated ratio was based on the accounting capital, i.e., total assets of the balance sheet less total liabilities. It is to be noted that almost all firms concerned do not hold in their balance sheets any assets not engaged in their tanning business; i.e., their assets consist of working capital (cash, inventories and short-term receivables) in addition to their fixed assets (equipment, buildings, land, and the like). The same principle also rules in their liabilities.

Besides, the purpose of choosing recently established or reequipped tanneries is to arrive at net worth at values very close to current prices. In the case of older tanneries, and especially those of Mashghara<sup>6</sup>, fixed assets had already been written-up for income

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5. During the post-World War II period.

6. A town in western Beka'a known as an important leather tanning center.

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tax purposes . This new assessing of fixed assets was made in 1945 on the government's request for the purpose of assessing income tax properly, and the basis for writing-up was replacement cost at that time with some allowance for physical conditions of equipment or buildings already in service. Since that year depreciation charges have been charged regularly to income statements at two rates, one for buildings and another for equipment, while depreciation reserves have been kept in most balance sheets on the liabilities and net worth side, thus leaving depreciated assets at their full assessed costs for further depreciation charges, although some of them must have already been entirely depreciated. Assessed costs of 1945 for equipment are inflated in comparison with those of today, whereas in the case of land and building the opposite is true as prices of both moved almost in opposite directions during the last 13 years. At any rate, profits in the above mentioned tanneries for the last few years have been below the 10 per cent ratio of accounting capital stated above.

In Lebanon commercial banks pay interest on demand and time deposits at rates reaching 4 and 5 per cent respectively. Interest on bank loans and discount rates ranges between 6 and 12 per cent, whereas many lenders charge even higher rates exceeding 12 per cent and reaching in many cases as high as 20 per cent. <sup>8</sup> The author was informed by dealers in real estate mortgage, both individuals and banks, that interest rates on such mortgages when held by individual lenders range

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7. For higher depreciation charges.

8. Information was supplied by several banks and money lenders.

between 12 and 18 per cent, whereas bank rates usually do not exceed rates charged on loans. Under these conditions it is well expected that the "normal rate of profit" of business enterprise should be somewhere above those rates already mentioned due to well-known factors such as greater risk, more efforts and the like.

However, the "rate of normal profit" is more meaningful under perfect competition than it is under conditions of imperfect competition. While a normal rate of profit is a true outcome of perfect competition, it is improbable that such a unique rate may exist under imperfect competition, or better, under actual conditions, due to such factors as immobility of factors of production, monopoly, and other imperfections of the market. Furthermore, in an underdeveloped country such as Lebanon, it is hardly possible to speak of a "normal rate of profit". Owing to the scarcity of capital, the existence of bottlenecks in various economic sectors, immobilities, different degrees of risk, and the like, wide ranges of profit rates are expected to be yielded by different enterprises to an extent that no single rate can be considered as normal. It would be more convenient, in this case, to speak of a minimum rate of profit which keeps an entrepreneur in business or attracts new entrepreneurs. Looking into the matter from this angle, and taking into consideration opinions of a number of businessmen already in business or prospective ones with whom the author held some talks, it seems that an average business-man in Lebanon considers a concern with a minimum yield of 20 per cent on capital investment as profitable and worthy of undertaking the risk. This ratio, after reviewing the above mentioned rates of interest returns, seems quite feasible.

Now referring to our initial problem, we may conclude safely that the average rate of profit in the leather industry—in the sense determined above - is quite below that minimum acceptable in other enterprises. This industry, as will be seen later in this section, has accumulated a sizeable amount of equipment which, if operated at full capacity, would produce a large output which cannot be disposed of probably except at dumping prices. Thus, individual tanners have voluntarily restricted their output to amounts which match more or less with their shares of the market. However this should not imply that the aggregate output has been restricted to the size which raises the normal rate of profit in the industry to the minimum accepted in other enterprises. On the contrary, under the pressure of idle equipment, individual tanners have been tempted to expand their output beyond their presumed share of the market. Such expanded outputs could be sold only at price-cuts and keen price competition which together brought down the rate of profit in the industry, although the volume of profits in the industry as a whole might not have fallen to the same extent. In this sense then, the low rate of profit may be explained as resulting from conditions of excess capacity prevailing in the industry.

Furthermore, low returns in the industry are implied by its unattractiveness to new capital investment for the last few years except for some limited expansion and replacements in few tanneries. It is true that low returns have not yet forced any significant number of entrepreneurs to quit the industry, but they have already forced a lot of productive capacity to be retired and laid in idleness.

In investigating the problem of profit with different tanners, it was observed that profit in their industry is more of the nature of economic rent on the assets they hold in business. Their equipment is highly specialized, and because of the depressed conditions in the industry, it cannot be sold at a reasonable price. Scrapping it, is too risky as they still hope that conditions may improve. The only thing they can do then, once they are in business, is to accept any revenue which covers their total costs and leaves them any reasonable margin of profit. In Mashghara town, even a further interpretation to the kind of profit made by small producers may be observed. Small tanners in this town work with their own hands jointly with the few workers they hire. A tanner of this category is usually contented with a small margin of profit which does not exceed his daily wage were he to work for others as a skilled tanning worker. The attractiveness of his business is psychological, or social, rather than economic. There is much social prestige in being self-employed in addition to other conveniences.

Secondly, the observer is struck by the volume of unutilized equipment and space in the majority of tanneries to which mention was made previously. This is definitely unused capacity in the sense referred to above. This unused capacity is apparent in two ways:

a. Completely idle equipment and space. Almost all tanneries visited utilize only part of their equipment and space simply because their output is too small to occupy all their productive capacity.

Tanneries in Mashghara which produce the major part of heavy leather<sup>9</sup> output in Lebanon, use from 1 to 3 mixing drums only and leave their remaining drums idle. In these tanneries one can count several idle drums, reaching 5 or 6 in number in some of them. Of the batteries of vats used for processing hides before moving them into the mixing drums, 3 or 4 vats are used in most tanneries out of a dozen or more. Idle space is another striking example. Most tanneries are equipped with large drying spaces of which they use only a portion and leave the rest empty.

b. Partially idle equipment and space. Another aspect of this unused capacity is the partial use of machinery and space. This is true particularly in upper leather<sup>10</sup> tanneries which are highly equipped with machines for different functions. It is very seldom to find in those tanneries a machine which is operated for a full work day. Some machines are operated 2 or 3 hours a day only and then left idle for the rest of the day. Others are operated for one full day and then stopped for few days waiting for a new stock of work in process. It is to be noted that economies of large scale production are of little benefit here, and efficiency derived from the use of machinery is counteracted by this kind of idleness.

The size of this unused capacity is difficult to estimate. Tanners interviewed by the author gave different estimates about their

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9. Leather used for shoe-soles, industrial belts, and the like. See Chapter II, Section 1.
  10. Flexible and soft leather used for uppers in shoes; some types are used in garments and gloves. See Chapter II, Section 1.

unused capacity. <sup>here</sup> The answers they gave show that they are working at 50 to 65 per cent of full capacity in sole leather production and a little below this in upper leather production.<sup>11</sup> A prominent sole and upper leather tanner informed the author that if he increases his capital investment by 10% he can triple his capacity. This need is for drying space and not machinery in order to expand his capacity to that level. Taking the industry as a whole, all indications show that, with its present capital equipment, it can at least double its actual production. Assuming the average output of leather in Lebanon for the last 5 years at 2000 tons<sup>12</sup> of sole leather and 6 million sq. ft. of upper leather,<sup>13</sup> we may conclude that the size of unused capacity is at least equivalent to the two above figures.

A word should be said, however, of this unused capacity. Some experts in the field believe that unused capacity would not be of that size if tanners allowed to the tanning process the proper amount of time required for good tanning.<sup>14</sup> With the existing means and techniques in the industry, the length of the tanning cycle should be about 45 days, which is the period needed for raw hides to be converted into finished leather. This period is a little shorter in upper leather tanning due to the chrome tanning process now in use. This period is needed to give sufficient time to tanning materials to react fully on processed hides and change them to good leather. Under the rush

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11. Sole leather (used in soles) is the main type of heavy leather produced in Lebanon, upper leather (for uppers) is the chief light leather produced.
  12. The unit "ton" used throughout the thesis is the metric ton.
  13. See Chapter 3, Section 1.
  14. This information was given by Mr. A. Solomon, the Solomon's tannery technician in Mashghara, and Mr. O. Sa'ab, the Industry Institute Leather expert.

of competition, and in order to reduce their costs, most tanners reduce this period to about 30 days, so as to finish their started lots earlier with less efforts and to start new ones. This produces an inferior kind of leather at lower costs, but consumers can hardly distinguish this inferiority as they make their purchases. If those tanners were to give the tanning cycle its optimum length, then a greater part of their equipment should be used to produce the same output they make at present, and thus a much smaller capacity would be left unused. Of course this should assume that the improved product would be sold at higher prices so as to cover additional costs incurred in lengthening the tanning cycle. According to this theory, it is believed that only three upper leather tanneries would have unused capacity, whereas the remaining ones would<sup>15</sup> be operated at full capacity.

Our above estimates of unused capacity, in order to remain valid, should assume that the same quality of leather of actual production would be produced at full capacity and with the same reduced length of the tanning cycle.

### 3. Development of Excess Capacity.

It has been already pointed out that excess capacity in the leather industry developed sometime in the past during a period of peak demand and optimism with regard to the prospects of the industry. It will be of much benefit for our analysis to trace the development of this industry so as to understand the nature of its excess capacity and the period during which it grew. However, before going any further, a remark should be made here with regard to the use of the term

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15. From an interview with Mr. N. Ghantous, head of the Tanners' Union.



excess capacity. It has been already emphasized<sup>16</sup> that excess and unused capacity are two different aspects of the condition where an industry is overcapitalized in relation to existing demand and marketable output. For simplicity sake, the term excess capacity will be used in this Chapter and throughout the rest of this thesis to cover both aspects in their economic sense.

Tanning in Lebanon as an industry, started in Mashghara in western Beka'a. Tradition says that a boy by the name of Faris Hab-boush, escaped during 1860 rebellion to Egypt where he worked in a tannery and learnt the secrets of the trade. Upon returning to his town he established a small tannery there. In the course of time, others in Mashghara learnt the trade and more tanneries were established, of course all operating with primitive means. Tanning thus grew in Mashghara which became almost the only tanning center for both Lebanon and Syria until a little after the First World War. After that more tanneries, mainly for upper leather, appeared in Beirut and its suburbs. Nevertheless, Mashghara remains today the major supplier of sole leather.

Two reasons made of Mashghara an important tanning center. The one is the abundance of water which is the first requisite for tanning. The second is the abundance of oak and pine trees in the past, the bark of which was used for extracting tanning materials. Although the second reason is not important today due to the use of imported tanning materials, the first one is still of major importance.

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16. Sections 1 and 2, supra.

A third reason may be added here, namely, the availability of hides from cattle raised in the Bekā'a plain and those proceeding from Syria.

The first attempt to mechanize the industry was made in 1928. This was through introducing rotating drums in which hides were soaked in tanning liquors after being soaked in vats for a number of days. The purpose of drumming is to speed up the tanning process and therefore to increase the productive capacity. Whereas the tanning cycle took about six months under the old still vats system, the period was shortened to about 45 days after the introduction of rotating drums. Capacity was thus expanded, enhanced by the protection policy started at that time by the customs authorities under the French Mandate. Expansion went on steadily until the break of the Second World War.

It is to be noted here that the Lebanese leather industry used to supply the Lebanese as well as the Syrian market, plus few exports to Palestine, Jordan and Cyprus. Syria up to 1950 had a very small leather industry which supplied a negligible fraction of its needs. Thus it depended almost entirely on the Lebanese industry (Appendix II, Tables 3 and 4).

War presented a period of expansion to the industry in order to satisfy an increased demand. Firstly, imports to Lebanon and Syria were nearly shut off because of war restrictions. Secondly, the industry had to supply a portion of the needs of the Allied Forces in Lebanon and Syria. The U.K.C.C. (United Kingdom Commercial Corporation), a British war agency, supplied tanneries with quotas of hides and chemicals. Hides from the military slaughter houses in Damascus were controlled by British authorities and yielded to the tanneries.

The war period was truly a peak demand period. The sole leather industry, particularly in Mashghara, expanded largely by adding locally made drums, vat yards and space. The upper leather industry expanded also with similar additions and by acquiring new machinery whenever possible. Meanwhile, new tanneries were constructed.

During those years, tanners reaped large windfall profits, and in spite of the losses they incurred right after the close of the war due to a sharp fall in leather prices, they went on expanding their tanneries and renewing their equipment.

Three important incidents came after the war which led to excess capacity in the industry. The first was the withdrawal of the Allied Forces from Lebanon and Syria which caused an immediate shrinkage in the demand for leather. The second was the break down of the Customs Union between Lebanon and Syria in 1950, and the third was the advent of imports when war barriers were removed (Table 6). The two countries formed one customs area under the French Mandate and during the first seven years of independence. In March 1950 this Customs Union was suspended, and the markets of the two countries were separated with tariff barriers. The leather industry, as mentioned above, used to supply both markets, but after separation leather "experts" from Lebanon to Syria had to face tariff barriers on the frontiers.

The separation of markets would not have been the cause of trouble to the Lebanese industry were it not to the Syrian resolution after separation to build their own leather industry and dispense

with Lebanese leather. Thus right after the rupture of Customs Union, the Syrian leather industry grew at an amazing speed, even helped with Lebanese efforts. Exports to Syria fell steadily, and in the course of three years, they fell to a very small volume. As the Syrian market started to shrink, fears from excess capacity became more realistic, and the problem seemed quite acute. However, the impact was mainly felt in sole leather tanneries whose productive capacity at that time was much higher than that of upper leather. Thus the immediate effect of the shrinkage of the Syrian market on sole leather tanneries was the migration of about 150 skilled labourers from Mashghara center most of whom went to Syria where they participated in the expansion of the industry either in partnership with the new entrants who lacked skill, or merely as wage earners.<sup>17</sup> Few others moved to Beirut and joined the upper leather tanneries, which in spite of the effects of the separation of the two markets, kept growing steadily in capacity. This growth was based on the possibility of expanding local market by replacing imports as better quality leather is produced, and the expansion to markets other than Syria. In addition to tanning labor migration to Syria, two branch tanneries were established in Syria by Lebanese tanners, one of which has a productive capacity of about 1.5 million sq. ft. per year.<sup>18</sup> This helped organizing the industry in Syria quickly, as pointed above.

Reference to Table 1 shows that the number of tanneries in Lebanon<sup>19</sup> almost doubled between 1929 and 1938. During the War, five new tanneries were established, and in the post-War period (1946-55)

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17. Information was supplied by a group of tanners in Mashghara.  
18. From an interview with the owner, Mr. K. Tchatalbachian.  
19. The total 36 covers only those tanneries which employ an average of five workers and above.

six new ones were established of which three were completed in 1953 and the rest before that. Of those recently built, five produce mainly upper leather. One of them has a yearly capacity of 1 million sq. ft., three have a capacity of 600,000 sq. ft., and the fifth one has a capacity of 400,000 sq. ft. It is thus clear, as mentioned previously, that capacity in upper leather grew rapidly after the War (the three tanneries built in 1953 were all for upper leather).

The growth of capacity in sole leather tanning was effected primarily, as it was mentioned above, by additions of rotating drums, vat yards, and space. Two new tanneries specialized in sole leather were built during the war. However, almost all of the newly established tanneries, whether specialized in upper leather or in processed sheep and goat skins, have productive capacities for sole leather reaching in some of them about 300 tons a year. Most of them produce sole leather along with their other products. Highly equipped upper leather tanneries regard sole leather as a necessary by-product for their operations. Some of their hides may be spoiled during processing, or, some of their purchased hides may be too heavy or, for some other reasons, inconvenient to be processed into upper leather. Instead of throwing them into the scraps destined for the manufacture of glue, they are converted into sole leather. As a matter of fact, sole leather and upper leather, although made from different categories of hides, are both processed nearly through the same processes and equipment to a certain point after which upper leather needs more finishing processes and more specialized equipment. This is why every upper leather tannery

can produce sole leather provided it has enough space and a sole leather roller.

Having traced the rise of capacity in the industry, it is necessary to follow up conditions of demand after the War with more reliance on available figures. Tables 3 and 4 show the role played by Lebanese tanneries as main suppliers of War needs of leather in Lebanon and Syria. Added to this, Tables 5 and 6 show that imports during the War could not satisfy any significant portion of demand. The effect of terminating Customs Union in 1950 is reflected in Table 7. The first two columns of this Table for the year 1950 titled "Before Separation" represent imports and exports of the Lebanese-Syrian market up to March, whereas the other two columns represent imports and exports of Lebanon alone for the rest of the year. The sudden rise in the Lebanese exports of leather after separation is explained by the fact that shipments of leather sold from Lebanon to Syria after separation were then registered as exports, which thus magnified exports. However, this outlet was only temporary because Syria, as mentioned above, established its own leather industry and thus rendered the problem of excess capacity in the industry more acute.

Now assuming the War period with the few years following it up to 1950, as a period of full capacity in the industry, let us try to find how it compares with the present conditions of production

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20. The decline of the Syrian market is discussed in more details in Chapter IV.
  21. The fall in demand resulting from the withdrawal of Allied Forces was probably compensated by the rise of exports right after the War. See Table 6.

and capacity. Accurate figures for output of that period are not available. However, Table 3 may be of some help to us. Output in this Table is probably underestimated because it is based on figures reported by only a part of the tanners and not by all of them, in the same way as the Ministry of National Economy still collects its production figures for all industries. Taking sole leather apart, its average yearly output for that period should have been probably in the vicinity of 2500 tons at least. This figure should represent the consumption of Lebanon, Syria, foreign troops and exports particularly after 1945. The fact that Lebanon's consumption alone of sole leather is estimated today at 1300-1400 tons per year, <sup>22</sup> supports the above view. Taking again 2000 tons as the average output of leather for the last few years, we may conclude, with the above assumptions in mind, that the leather industry today produces a smaller output of sole leather than it used to produce at full capacity, yet with more tanneries and better equipped ones. This contrast gives a clear idea of the sharp rise of excess capacity in the sole leather branch of the industry. As a matter of fact, three tanneries in Mashghara of an average capacity of 100 tons per year each have closed down shortly after 1950.

A similar analysis of upper leather production would lead to the same conclusion with respect to excess capacity in this branch of the industry. It is probable that today's average output of upper leather is above that of full capacity period, but capacity has increased tremendously due to the recent expansion in this branch of the industry which was emphasized above. The production of processed

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22. See Chapter III, Section 2.

goat and sheep skins does not present the same problem of excess capacity because, as will be seen later (Chapters III and IV), this item of production is primarily for export, and its markets are vast.

It is to be noted, in conclusion, that whereas the sole leather branch of the industry expanded primarily during the last war, expansion in upper leather, although started during the War, continued in the post-War period and even after the rupture of Customs Union with Syria. The former expanded rapidly during the War due to the ease with which new equipment—mostly made locally—could be acquired. Besides, a relatively small amount of equipment is needed in starting a sole leather tannery which plans to rely much on manual labor. On the other hand, upper leather tanneries, under the stress of demand during the War, could not expand sufficiently due to the scarcity of highly specialized equipment at that time needed for upper leather manufacturing and which had to be imported. Such demand was faced with production at even above normal capacity by employing more of one shift of labor per day! After War, as it became possible to acquire new equipment, expansion went on rapidly in upper leather since demand was still pressing. This accumulation of capacity continued even after 1950, the year of ending Customs Union with Syria. This was due to the fact that investors in this branch of the industry did not realize that the Syrian market will dispense so quickly with their leather, especially that entry into this industry is not easy as it needs a relatively large capital investment as well as skill and experience. Besides, they conceived that the Lebanese market still offers possibilities for expansion, one of which is the replacement of



imported light leather. To this is added their view to the Arab markets as potential outlets with vast prospects.

Excess capacity in the leather industry then is real, and the way in which it developed calls for deeper investigation into its nature, and the internal factors which made its rise possible. This matter is examined in the following chapter.

## CHAPTER II

### FACTORS UNDERLYING EXCESS CAPACITY IN THE LEATHER INDUSTRY

#### 1. The Tanning Process

In order to have an ampler ground for the analysis of excess capacity in the leather industry, the reader should be acquainted with the process of tanning. This process involves a number of chemical as well as physical changes which will be described in brief below.

Tanning is the conversion of animal hides into leather. This action is achieved by the combination of the tanning material with the protein fibers of the pelt known as collagen. The compound thus formed is leather. This combination is resistant to washing so that none of the constituents can be washed physically. The main property which tanning imparts to the skin is that it converts it to an imputrescible substance, i.e., a substance which does not decay by bacterial action. Raw skin putrefies quickly when wet. It may resist putrefaction when dried, but as soon as it comes into contact with water it becomes highly putrescible. Leather differs from raw skin in that it does not decay whether dry or wet.

The secret of this chemical reaction is not yet fully understood. A number of theories has been given to explain the change which the skin undergoes under the action of tanning materials, but none of them has been entirely accepted.

There is a wide variety of kinds of leather all of which may be classified under two major kinds, namely, heavy leather and light

leather. Heavy leather includes such leathers as sole, belting, and upholstery leathers. Light leather is softer, more pliable, and includes leathers used for uppers in shoes, garments and gloves. The manufacturing of leather may be divided into three major processes, namely, preliminary treatment of raw hides, tanning, and finishing. Each will be described below with necessary details.

Preliminary Treatment of Raw Hides.

For the preparation of the above mentioned varieties of leather, selection of proper raw hides is made first. In general, heavy leathers are made from heavy raw hides, usually cow hides, and in few cases, horse hides, whereas light leathers are made from light hides, referred to as skins. Calf, goat and sheep skins are the types most appropriate for light leathers. The preliminary treatment is almost the same for all types of leather, whereas tanning and finishing give them their different properties. This preliminary step consists of the following processes:

a. Curing. - This is done in the slaughter house where skins and hides are preserved with salt, or merely by drying slowly. For good curing, salting and drying are both applied to the same hide or skin.

b. Soaking. - Hides are soaked in water for a few days to clean them from dirt, and to absorb water so as to return to their green state.

c. Liming, fleshing and unhairing. - Hides are then put in saturated lime water for one or two days under which action the epidermis (outside layer of the skin) is destroyed. This facilitates

the removal of hair and the flesh layer which sticks to the inner part of the hide. Flesh is then removed either by hand with a special knife or with a fleshing machine. Hair is removed also, usually with an unhairing machine. However, by adding arsenic into lime water, as it is practised in Lebanese tanneries, hair is loosened and then falls into the solution.

d. Deliming and bating. - Lime should be removed from the pelt, otherwise the resulting leather would be hard and inflexible. This deliming is obtained by washing the pelts in running water. For a higher degree of flexibility, more deliming is needed which can be obtained by adding some acid to water in order to react on absorbed lime. However, the complete removal of lime is obtained through a process known as bating. In this process hides are treated with an infusion of hen manure, after which they become soft and fallen. However, complete removal of lime from pelts destined to sole leather manufacture is not needed since sole leather usually should possess a higher degree of inflexibility. Such pelts are slightly bated and in some cases not bated at all. Bating also reduces plumpness from hides which results during liming. As infusions of hen manure have disgusting odors and are usually hazardous, a product made from certain enzymes has been developed to replace hen or other manures used in bating. This product is known commercially under Oropon, and it is in use at present in all tanneries of Beirut and its suburbs, whereas those of Mashghara still use hen manure except a single light leather tannery which bates with Oropon.

e. Pickling. - Some types of leather are tanned directly after bating, others, especially those to be chrome-tanned, need still another process before tanning known as pickling. The purpose of this process is to bring bated hides to a condition of equilibrium by treating them in a solution of acid and salt. This speeds up the tannage because it facilitates the penetration of the tanning agents. Besides, pickling preserves hides from decay indefinitely which is highly needed in shipments over long distances.

#### Tanning.

Following preliminary treatment on hides, tanning may be started. There are two main processes through which most leathers are tanned, namely, vegetable tanning and chrome tanning.

Tanning materials used in vegetable tanning are extracted from certain trees rich in tannin such as spruce, hemlock, quebracho, dividi, chesnut, mimosa, sumac, etc.... These trees carry tannins in their bark, leaves, twigs, <sup>24</sup>pads, and roots. In chrome tanning basic chromium salts are used instead of vegetable tannins. Chrome tanning is faster than vegetable tanning and is used mainly in light leather, whereas the latter is used in heavy leathers.

The most important principle in tanning is that the tanning material should penetrate the hide slowly and gradually. This is due to the fact that a highly concentrated tanning liquor would tan only the outside layer of the hide which would in turn prevent tannins from

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24. Wilson, John Arthur, Modern Practice in Leather Manufacture (New York 1941), p. 273.

diffusing into the inner layers. Those untanned inner layers would decay in time and spoil the whole piece of leather. Thus in vegetable tanning for instance, hides are passed through a number of vats containing tanning liquors <sup>25</sup> in a gradually rising degree of concentration. The number of vats may exceed ten, depending on the degree of fixation required. To speed up the process, the last few vats are replaced by slowly rotating drums where hides are subjected to drumming for few hours in a highly concentrated liquor. When tanning is thus completed, hides are wringed and then hanged to dry.

The tanning liquor used in chrome-tanning is prepared essentially from a chromium salt conditioned with water and other materials to the required degree of concentration and acidity. The process is carried on in slowly rotating drums after which the tanned hides are washed and piled for further operations. Chrome-tanned light leathers usually undergo a number of complex processes before being given the last finishing operations. Thus tanned hides are first wringed and then set out through special machines. Thick hides are split to the required thickness, then the outer surface of every hide is levelled with a shaving machine which has proper blades for the process. After drying partially, leather is stuffed with oils and greases which give it softness, fullness and flexibility, and at the same time increase its strength. This last process is known as fatliquoring which is completed in rotating drums with a variety of oils and greases. Leathers

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25. Those tanning liquors are prepared by mixing water and the tanning material in ratios which vary with the required degree of concentration of the tanning material. The latter is taken as a percentage of the weight of hides to be tanned.

are then dyed through rotating drums and with various dyestuffs. Before drying completely, light leathers are staked on a special staking machine, which, through its flexing action, renders the leather loose and pliable. After staking, leathers are buffed on a buffing machine which sandpapers the grain surface<sup>26</sup> and softens it. A brushing machine then cleans the surface from the dust produced. At the end of these processes, leathers are left to dry in special drying rooms which, according to modern practice, are equipped with units to control both temperature and humidity.

In heavy leathers, after-tanning operations are relatively few. One of those operations is known as extracting and loading. Additional "extracts" or tanning materials are stuffed into the leather with certain sugars and salts, all of which do not combine chemically with the leather and thus can be washed out with water. The purpose of this additional loading is to make leather harder and less flexible which is required in sole leather. In addition, this loading increases the weight and the yield of leather. Heavy leathers are also oiled but not to the same extent as in light leather. The amount of oiling depends upon the degree of flexibility desired. In the case of sole leather, little oiling is needed since this type of leather is often firm and less flexible. In more pliable leathers such as belting leather, more oiling is needed. Some heavy leathers are buffed for smoothness, and after drying, all are rolled with heavy rollers to give them a more compact structure.

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26. The outer surface of the hide beneath the hair.

Finishing.

The purpose of finishing in light leathers is to give the leather additional attractive qualities. There are numerous methods of finishing light leathers, some of which are still held in secret by the tanners who have developed them. The majority of the finishing methods involve the coating of the exposed surface of leather with different combinations of plastic materials and then applying some mechanical treatment to the coated leather. The raw materials from which finishes are made are also numerous. Among them are protein materials (casein from milk, egg albumin, ox blood, etc...), gums and mucilages, waxes, natural resins, pigments, dyes, and the like. <sup>27</sup> Some finishing methods produce different kinds of leather such as: embossed leathers (with various surface designs), patent leathers, glazed leathers, etc..... After the finishing operations are completed, most light leathers are ironed, then measured with a special machine, graded and bundled for delivery.

Heavy leathers usually do not undergo many finishing operations. In most cases the grain surface is treated with a colouring finish and then rolled again.

2. Nature of Leather Producing Units in Lebanon.

In treating the problem of excess capacity in the leather industry in Lebanon, a more detailed knowledge about the tanning units is needed. This should cover three points, namely, kinds of leather

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27. Wilson, op. cit., pp. 582-598.



produced, local tanning procedures, and size and number of tanneries.

Kinds of Leather Produced.

The Lebanese tanneries produce the kinds of leather which form the bulk of consumed leather. The types produced fall under three headings:

a. Sole leather. - Heavy leather manufacturing goes almost entirely into the production of sole leather, both outsoles and insoles, for men's and women's shoes. Belting leather is produced on a very small scale, and probably for the own uses of the tannery. Saddling (or harness) leather is also produced on a small scale, and only for special orders.

b. Upper leathers. - The main part of light leathers produced is for shoe uppers. The majority of uppers in men's and women's shoes are made from what is known as box leather which is produced from cow and calf hides. Thus box leather is the chief product of light leather tanneries in Lebanon. Patent leather was produced on a large scale for local consumption and export, but as it is now out of fashion especially in men shoes, its production fell considerably and thus left much idle equipment and space. <sup>28</sup> Glazed kidskin, known as "chevreau" leather, is produced but even on a smaller scale. Attempts have been made to produce <sup>29</sup> chamois and <sup>30</sup> suede leathers, but so far no considerable output has been produced. Chamois leather is a very good cleaner used in cleaning cars, furniture and the like, whereas suede leather has a

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28. Such as in Ghantous and Chatalbachian tanneries (located both in the suburbs of Beirut).

29. Spongy leather made from split sheep-skin tanned with oil.

30. Leather made from sheep, goat or calf skins usually with the flesh side out which gives it a velvety surface.

wide range of uses in garments, gloves as well as in shoes. The production of these two types needs special techniques not yet mastered in local tanneries. A considerable part of produced light leathers goes into the manufacture of hand bags, luggage, wallets, key cases, belts, watch bands, and the like.

c. Pickled, tanned and half tanned sheep and goat skins. -

The essence of this branch of the industry is the processing of goat and sheep skins either for local consumption or for export. Skins for local consumption are chrome or vegetable tanned and then finished in processes much similar to those of upper leather. They are mainly used in shoe-linings, and sometimes for leather art works. But the majority of processed skins are exported unfinished either pickled<sup>31</sup> only or half-tanned. When pickled, the skins are preserved indefinitely; likewise when they are half-tanned, i.e., tanned only with no further finishing operations. Those processed skins are usually exported to several countries of Europe and to the United States where they are finished into fine garment and glove leathers.

Local Tanning Procedures.

The question arises here as to whether the Lebanese tanners follow the same tanning procedure described in Section 1 of this Chapter which is normally the scientific basis for tanning. Tanning is not a purely scientific process which obeys definite rules and formulas. There is still much space for touch and senses, especially in light leather manufacture where much craft is needed. Thus the tanner

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31. See previous section for pickling.

has many chances to modify operations--of course only in their minute details--within a range which suits his own conditions. This is what the Lebanese tanner has already done. Secondly, tanning operations are numerous and intricate. However, some of them may be omitted or simplified without much degrading the leather produced. Even if degraded, the consumer cannot discover that unless he is well-trained in grading leather.

It is because of the ignorance of consumers and the intense price competition prevailing in the leather market, that most Lebanese tanners make shortcuts in their tanning processes. The discussion of those shortcuts is more of a technical nature. However, mention could be made to some of them. Soaking and liming in tanning practices are performed in a series of vats, whereas in most Lebanese tanneries they are performed in a single vat. The process of tanning processed hides, especially in sole leather tanneries in Mashghara, is confined to 3 or 4 vats only, whereas in good tanning it is much more elaborate. Finishing in light leathers is reduced to few operations, in sole leather practically no finishing is applied. The process of unhairing almost in all tanneries is dispensed with by the use of arsenic in liming. Arsenic destroys the hair follicles, and thus hair falls into the solution. Two things result from the use of arsenic: firstly, hair is thus destroyed, while if removed mechanically, it could be used in many by-product industries (only goat hair and sheep wool are removed mechanically). Secondly, the use of arsenic needs a high degree of control with regard to concentration and timing, which is hardly done.

Tanning needs a great deal of control over temperature in the different liquors used, and over the length of each process. With regard to the former, there is scarcely any proper control over temperature. The latter is controlled but imperfectly. Lebanese tanneries are using too much mechanical drumming in order to speed up the tanning cycle, but this excessive drumming damages the leather.<sup>32</sup> The above shortcuts and reductions, among other factors, reduce costs but at the expense of quality.

Tanneries in Lebanon may be divided into two categories. The first is the sole leather tanneries located in Mashghara and the second is the recent ones of Beirut and its suburbs. The former tanneries are old, shabby and poorly equipped. With the exception of 7 tanneries among them which have each a heavy leather roller, almost all the others have no other equipment in addition to the drums and diesel motors with which each is equipped. Thus all other operations are made with hand. The only light leather tannery there should be excepted also as it has few old machines. The latter tanneries are relatively recent, and thus have a better layout and are better equipped. At least 2 or 3 tanneries among them are very well-equipped and may be considered as modern tanneries in the real sense.

Another important factor in the nature of those tanneries is the lack of specialization. The only specialized tanneries are those which produce sole leather in Mashghara. However, the light leather

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32. Bell, K., Report on the Tanning and Leather Industry in Lebanon with Recommendations for its Improvement, (Beirut, 1955), p. 10.

tanneries, as stated before, produce all kinds of leather manufactured in Lebanon. In the United States, for instance, most tanneries specialize in one kind of leather each. A light leather tannery may specialize in one type of light leather, such as box, patent or chamois leathers.<sup>33</sup> Through specialization economies and other benefits of large scale production may be realized. However, under present conditions, Lebanese tanners cannot afford to go too far in specialization mainly due to the limitations set by the size of the market. Besides, it is noticed that in many tanneries skilled workers spend much of their time on jobs which need no special skill such as hauling hides or moving equipment which could be done equally by unskilled labor.

Number and Size of Tanneries.

The number and size of tanneries in Lebanon is of prime importance in our analysis of excess capacity. As to number, the problem of what makes a tannery faces us as we attempt at counting. In the Ministry of National Economy there are 78 tanneries registered as of August 1958. This number includes all units which convert hides into leather, or simply prepare pickled sheep and goat skins. A large number of such small units is included and therefore the number of real tanneries is much smaller. According to the Industrial Census made by the Ministry of National Economy with the assistance of the Economic Research

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33. From an interview with Mr. Omar Sa'ab, the leather expert of the Industry Institute-Lebanon.

Institute of the A.U.B. for the year 1955,<sup>34</sup> the number of tanneries employing an average of 5 workers and above was found to be 36 (Table 8). As it is shown in Table 8, the majority of firms are the smaller ones, i.e., those employing between 5 and 24 workers. However, 7 tanneries employ the largest number of workers (228) and contribute the highest portion of value added (LL 1,059 million) produced by the industry.

But the above classification mixes heavy leather tanneries with light leather ones. An attempt was made to dissect them with the help of available information. In Table 9 we have a classification of Mashghara sole leather tanneries by size with respect to number of workers employed. It can be seen that the number of small tanneries, i.e., those employing between 1 and 9 workers, is prevalent. A more relevant comparison would be made in terms of output. This has been done in Tables 10 and 11. Table 10 shows the prevalence of small size tanneries in the production of sole leather. In Mashghara, 19 small tanneries produce each an average between 10 and 49 tons a year. Ten more tanneries, rather small in size, produce between 50 and 99 tons each. The next 3 tanneries producing each between 100 and 149 tons a year may be considered as of medium size, whereas the remaining 3 may be considered of relatively large size. The same small size production is also apparent in Beirut and suburbs tanneries which produce regularly sole leather in their mixed tanneries (producing both heavy and light leathers).

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34. Results of this census were published by the Ministry of National Economy in June 1957 in a mimeographed work titled: Republic of Lebanon, Ministry of National Economy, Industrial Census: 1955, (Beirut, Lebanon, June 1957). In March 1958, the Economic Research Institute of the A.U.B. published a mimeographed classification by industry of this Census titled: Industrial Census of Lebanon, 1955, Volume II: Classification by Industry, Economic Research Institute, A.U.B., (Beirut, Lebanon, March 1958).

The case in light leather is, however, quite different. Table 11 presents a classification of light leather tanneries with respect to output. It is to be noticed first that their number is smaller than those of sole leather. Secondly, the range between the smallest tannery and the biggest one is not as big as that in sole leather tanneries. Whereas the largest sole leather tannery produces 17 times as much as the smallest one (Table 10), the largest light leather tannery produces only 5 times as much as the smallest (Table 11). Thus the smallest light leather tannery is not too small compared with the biggest. Although the greater part of output is produced by the small and the medium size tanneries, the difference in size is not so acute even when comparison is made with the top two tanneries. Thus the "problem of small producers" in the light leather tanning is not as acute as it is in the heavy leather tanning. Besides, whereas a sole leather tannery may be as small to employ only one worker and produce 10 tons of leather profitably over a year, the minimum size of a light leather tannery cannot be profitable below at least 200,000 sq. ft. of light leather production per year due to the high fixed costs involved. We can conclude also that, whereas both branches of the industry are far from being atomistic, light leather tanneries differ from heavy leather ones in that they consist of a small number of medium and large size producing units. The above comparisons are of great help when we come to study competition in the industry in Section 4.

### 3. Cost Structure

A study of the cost structure of the leather industry enables

us to understand the role which the costs of production play in the rise of excess capacity. This study will cover two points, the one is the constituents of costs, and the other is the analysis of these constituents.

Cost constituents.

The costs of leather production consist of three items which are common among manufactured products, namely, materials, direct labor, and overhead.

a. Materials. - The raw materials which enter into the manufacturing of leather are raw hides and chemicals. The majority of raw hides used in tanneries are cow, ox and calf hides. The local supply of those hides is small, and probably does not exceed 10 per cent of the needs of tanneries. Besides, hides from local cows and oxen are not thick enough to yield heavy leathers, and therefore they are mostly used in light leathers. Thus most hides from this category are imported in the dry, dry-salted or green-salted state. The sources of supply are African countries such as Abyssinia, British East Africa, the Union of South Africa, and Mombassa. Some hides come from South America, and some others from the United States and France, known as American and French groupings. The latter are known to yield a very good quality of sole leather.

Hides are bought in packs each containing one category of hides of a nearly uniform weight. This uniform weight of hides decides whether the pack is to go to the manufacture of heavy or light leather. Tanners are experienced in this respect that they can make their choices from raw hides. However, their purchases are much risky in that some of the



hides within the closed packs may be damaged, and therefore they have to rely on the reputation of the firm with which they deal and on their past experience with it, especially because damaged hides usually are detected only after they are tanned.

Goat and sheep skins are provided by local slaughter houses and collectors. A part is also imported from Syria and some other neighbouring countries.

Few of the chemicals used in tanning are prepared locally, such as lime, common salt and sulfuric acid. However, the majority of those chemicals are imported, including tanning materials such as quebracho, mimosa and divi-divi extracts used in vegetable tanning, and chromium salts used in chrome tanning. Besides, there is a number of bases, salts, acids and oils. Germany, England and the United States, among other western countries, are the main suppliers of chemicals.

b. Labor. - Labor in a tannery is usually of the skilled type. It consists of technical manual operations as well as the operating of machines. Workers are trained in tanneries, and there is no other technical institute for such training. An average worker knows pretty well all the operations performed in the tannery, although some of them, like fleshing, are known by a few as they need special manual skill. However, they have very little chances to learn new operations or techniques since none of the tanneries has a true chemist, nor do they undertake research for the development of new procedures or new types of leather. An average worker in the tanneries of Beirut and its suburbs is paid about LL 6.5 a day, whereas in Mashghara he is paid between LL 5 and 6 daily. This rate of pay seems very low, especially when compared with leather workers wages in more advanced countries. In

the United States for instance, the average hourly earnings in the leather tanning industry amounted to \$ 1.81 in 1955 and \$ 1.88 in 1956.<sup>35</sup> Converted to Lebanese currency at the current rate (315 L. ps.) this would amount to about LL 5.70 and LL 5.92 respectively, which is nearly equivalent to a full day wage in Lebanon.

However the low wage in Lebanon is counterbalanced to some extent by the inefficiency of the workers. In the first place, they need much supervision and control which occupies most of the time of the proprietors and their supervisors. In many cases valuable hides are spoiled because of the negligence of the workers. As was put by a leading tanner,<sup>36</sup> it seems that those workers lack a feeling of prestige for the standards of their trade, and there are very few incentives to induce them to develop higher levels of skills. Besides, workers are given some bonuses and indemnities over the year, plus a 15 days paid leave, which raises a bit their wages. They have a union of their own, and in many instances bargaining takes the collective form.

c. Overhead. - Depreciation charges, rent, supervision, water and power costs are the most important items in the overhead. A further analysis of overhead will be made below.

#### Cost Analysis.

One important point in costs remains before us to discuss, which is the relation between the cost components listed above. In studying those relations, reference will be made to unit costs, i.e., cost per kilogram of finished heavy leather, and per square foot of

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35. U.S. Bureau of the Census, Statistical Abstract of the United States: 1957, (Washington, D.C., 1957) p. 224.

36. Mr. N. Ghantous, Chairman of the Tanners' Union.

finished light leather.

After inquiring a large number of tanners about those unit costs, the author found out that those tanners cannot tell the unit costs of their lots as they finish them. This is because they do not use cost accounting in keeping their records which is the case with almost all industrial firms in Lebanon. As accounts are based on the financial accounting basis, it would be very difficult for a tanner to know his unit costs accurately enough before the end of his accounting period where he can calculate his average unit costs from his total inputs and total output for the whole period. Thus the problem faced very often by tanners is the costing of the lots which they finish and sell within the period.

However, in order to face emerging costing problems, each tanner keeps an estimate of his average unit costs. Those estimates serve more of standard costs than of real costs, and when making their sales tanners usually base on them. Table 12 shows such estimates given by four tanneries which produce sole leather. It is to be noted that the cost of raw hides varies within a wide range. This is due to different varieties of hides used which means that different qualities of leather are thus produced. On the other hand, costs of labor and overhead seem nearly constant within the same tannery for all kinds of hides processed. Table 13 shows also similar estimates for 3 light leather tanneries.

Both tables show an important factor in leather costs, namely, the fact that materials (hides and chemicals) form the major part in unit costs of finished leather, whereas overhead is but a small part.

Estimates differ with each tannery producing leather from the same category. This variance is due to inaccuracies as well as to different kinds of materials used, different processes, and different levels of efficiency. In general, those estimates are some how exaggerated, and the tanners explain this exaggeration in that such reserved estimates safeguard them against losses when they make their sales. However, this safeguard should cause them also many losses as they turn down many profitable offers simply because they do not know their real costs.

A more realistic estimate of costs is to be found in Tables 14-19. Those Tables were selected from data presented by 36 tanneries covered by the 1955 Industrial Census.<sup>37</sup> Although the individual reports filled in by the industrial firms are not available for public use, arrangements were made with the Ministry of National Economy to use part of their data. It is to be noted that actual names of the reporting firms have been removed, and only a serial number identifies each of them. The figures in those tables cannot be guaranteed as absolutely correct, although most of them were given from the books of records of the reporting firms. Besides, output has been adjusted in accordance with beginning and ending inventories. In the absence of any better information, primarily because industrialists in Lebanon would think more than twice before giving any direct information about their costs, we accept those tables as representing the costs of production statements of the selected tanneries to a reasonable degree of accuracy.

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37. This is the Industrial Census of Lebanon for the year 1955 which was conducted by the Ministry of National Economy with the assistance of the Economic Research Institute of the A.U.B., and to which reference was made previously.

Taking Tables 14-16 first, the dominance of materials in the cost structure of sole leather is quite clear. The cost of materials in the three tables is between 92 and 94 per cent of total cost. The rest is labor and a very small per cent of overhead. Thus the converting costs are relatively very small. This fact explains a very important point which will be met later in this thesis,<sup>38</sup> namely, that cheap labor in Lebanon by itself is not of much help in giving Lebanese leather cost advantages in foreign markets because labor forms but a small part of unit costs, whereas materials form the major part. This is true particularly in the case of sole leather.

A further look at the overhead in the three tables would show other important facts. Fixed costs in the overhead are probably only those of depreciation and rent, and the others are of the semi-variable type. In fact, depreciation is not real as the tanneries in Mashghara are all old, and they have almost all depreciated entirely their assets,<sup>39</sup> and it is quite probable that they have acquired no substantial assets in the last ten years. As to rent, almost all tanners in Mashghara own their premises, either in full or in part. Water is available free in running streams. Other overhead expenses, such as fuel, oils and electricity, vary to a great extent with output being semi-variable. Almost all labor employed is direct, whereas supervision, which is an important element in indirect labor, is performed by the owner himself. The conclusion we may draw is that in similar sole leather tanneries in

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38. Chapters IV and V.

39. See Chapter I, Section 2.

Mashghara overhead is not a heavy burden to the owners of tanneries. Thus, working below capacity does not burden their costs. On the other hand, if they close down for some period, or produce only a small output, there would not be much to worry about. Their overhead costs, apart from their own living expenses, are not high enough to drive them out of business. Therefore they remain in business working at any possible capacity since most of their costs are variable and thus flexible with output.

In Tables 17 and 18 which represent each an approximate cost of production statement for a light leather tannery, the same feature with regard to materials appears. Materials (hides and chemicals) in upper leather also form the major part of unit cost, though not to the same extent as in sole leather being 69 per cent in the first tannery and 76 per cent in the second. The rates of labor is higher and this is quite expected in upper leather tanning since there is a long list of post-tanning and finishing operations not found in sole leather tanning, and which require additional labor. Overhead in both tanneries is higher than in the sole leather tanneries. The list of overhead costs in Tables 17 and 18 is probably incomplete, and there should be additional items not mentioned. Even so, overhead remains a higher ratio of total unit cost. This is quite reasonable since light leather tanneries, as mentioned in Section 1 of this Chapter, are highly equipped and need a much greater capital investment, thus their depreciation charges are higher. Besides, most of them hire their premises, or part

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40. See Section 1 of this Chapter.

of them, and pay a higher rent being in Beirut or its suburbs. Most of them hire foremen, pay at least for a part of their water, and since they are highly mechanized they use a greater amount of power part of which is a fixed cost. Thus, working below capacity is a real problem to those tanneries as it burdens their costs, especially because most of them have been recently equipped<sup>41</sup> and their depreciation charges are thus high.

Our above analysis was confined to the costs of production in sole and upper leathers. Pickled, tanned and half-tanned skins have nearly the same cost structure. The following data represents estimates of costs of production per pickled goat or sheep skin:

Skin	150-250	L. ps.
Chemicals	20-25	
Direct labor	50	
Overhead	<u>5</u>	

Total costs per skin 225-330 L. ps.

Raw materials form a high proportion of unit costs (between 60-75%), whereas overhead forms a much smaller proportion (0.9 - 2.2%). A half-tanned skin would cost 100 L. ps. more in labor, chemicals and overhead, and for a finished skin an additional 50 L. ps. is needed.<sup>42</sup>

However, the tanneries producing such processed skins do not have idle capacity as the others do due to the existence of wide markets abroad for this product. A great portion of output is furnished by a number of small tanneries located in Wadi-Shahrour,<sup>43</sup> Tripoli and Zahle, which operate at full capacity nearly. The rest of output is

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41. See Chapter I, Section 3.

42. The whole information was given by Mr. Y. Kamel, a prominent tanner and dealer in pickled, tanned and half-tanned goat and sheep skins.

43. A small town in Mount Lebanon.

produced by four tanneries in Beirut which concentrate on this product and still produce other kinds of leather but on a smaller scale.

#### 4. Competition

The above cost analysis should throw light on the kind of competition prevailing in the leather industry. To start with, entry into sole leather manufacturing is relatively easy. Within the prevailing techniques and procedures in Lebanon, all that is needed is some large hall, few vats, one or more cylinders run either with electric power or hydrocarbon fuel. Tanners in Mashghara estimate that a small tannery in their town may be started with an investment of L.L. 2000 only. Materials are usually purchased on credit, and they are not paid for until the finished leather is sold. As to labor, the owner himself works aided with some members of his family, and he does not have to hire more than one or two workers. Thus, the establishment of such a small tannery is quite possible.

Two other means have also facilitated entry as well as helped a number of small tanners to remain in business. The one is that a number of small tanners, while possessing only few vats and some space, have managed to hire one or more drums in some tanneries which have idle capacity, and thus no investment in equipment was needed. The other is an arrangement made by dealers in hides and chemicals to supply some tanners in Mashghara with materials which they tan and return as finished leather at a certain price per kilogram for the processing done. While some of those tanners were about to leave business due to their failure to find outlets for their output, this arrangement transferred their output into the hands of more capable sellers, and thus enabled them to keep their tanneries working.



The easy entry into sole leather tanning has greatly facilitated the expansion of this industry, and is highly responsible for the resulting excess capacity. Besides, it has led to the existence of a relatively large number of small producers who become in time the main source of competition in the industry. What is of more importance is the fact that the marginal producers in this type of structure could not be eliminated, and probably will not be easily eliminated in the future. It was stated above that their overhead costs are relatively negligible and that the bulk of their costs are variable. Added to this is the fact that those marginal producers will not hesitate to accept profits as low as to equal their daily wages were they to work for others. Those tanners would be in a worse situation were they to leave entirely their trade which has become a tradition in the family and the community, and learn some other trade. In discussing the problem of competition with larger tanners, they expressed their optimistic belief that those marginal producers will be forced out of business sooner or later. Although this belief may find a good support in economic theory, the author could not share them their "optimism" as long as the above conditions may prevail, and it seems that those marginal tanners are well equipped to resist economic forces which work to drive them out of business. Of course this situation will not continue if the conditions of production change so as to force tanners to install new equipment and follow new procedures in production.

The above analysis leads us to the kind of competition which is expected to prevail. It is rather price competition than any other

kind of competition. Competition comes primarily from small tanners in the form of price cuts. And since those tanners produce over one-half of total output,<sup>43</sup> their price cuts should be responded to by similar price cuts by larger tanners. Severe price cuts and attempts to rob one another's clients, form really a sort of cutthroat competition. Price cuts have reduced profits, besides they have degraded the quality of sole leather produced. Competing tanners tend to use cheaper and poorer materials, and they have shortened the length of the tanning cycle which resulted in poorer finished leather. Consumers of leather, in general, are price conscious since few of them can recognize the different grades and qualities of leather, which gives to price competition its intensity.

Competition in light leather tanning is of a different nature. In the first place, it does not come from small producers since most of the existing 12 light leather tanneries are of medium size with only two of relatively large capacities. Entry into this branch of the industry is not easy, because, as it was seen before, a light leather tannery needs to be highly equipped in order to perform all needed operations. Most of its capital equipment is highly indivisible which makes its minimum profitable size much bigger than that of a sole leather tannery. Tables 10 and 11 show quite plainly the distribution of tanneries by size in both branches of the industry. However, price competition still prevails in light leather tanning, but owing to its fewer and larger firms as well/<sup>as</sup>to difficult entry, tanners are more

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43. Table. 10.

conscious of each other's actions, and hence price competition is not so severe as to reach the cutthroat level. Some price understanding exists among those tanners and price cuts are not much deliberate, although no formal agreement or collusion with regard to prices or output has ever been arrived at. This is a case quite common in a market under imperfect competition and especially when its firms are small in number. While each firm is independent and free from any oligopolistic collusions whether formal or informal, however its actions have to be harmonized to a large extent with the behaviour and reactions of the other rivals.

### CHAPTER III

#### INTERNAL MARKET

##### 1. Estimates of Leather Production in Lebanon

We have been examining so far the problem of excess capacity in the leather industry, and the internal and external factors which contributed to its rise. The next step is to study the markets open before the Lebanese leather, and the extent to which those markets may absorb this excess capacity. This will be done by studying the existing local and external markets for leather.

To start with, a knowledge of the amount of leather produced annually in Lebanon is of necessity. The first problem we are confronted with, is the lack of accurate data, and therefore much of our analysis, like before, is to be based on incomplete data. Figures of the Ministry of National Economy, shown in Table 19, are incomplete because only a part of the questioned tanneries did report, and we have no idea about the size of output not reported. Even those reporting usually underestimate their output for fear of income tax charges, and in accordance with the prevailing secrecy in business.

A further investigation was made into the individual questionnaires filled by the tanneries covered by the Industrial Census of 1955. The quantity of hides consumed by the industry for that year was found to be about 2729.5 tons of cow hides costing about LL 5 million, and about 610,100 goat and sheep skins costing nearly LL 2-million.

The remaining direct materials used by the industry, i.e., chemicals, were valued at <sup>44</sup>LL 3 million. Table 1 shows the production for that year as calculated from those individual questionnaires after certain inventory adjustments. For sole leather, it is about 1508.5 tons, for upper leather about 5,006,100 sq. ft., and for processed goat and sheep skins about 486,000 pieces (skins). It is noted that there is a large discrepancy between the last figure and the one stated above, namely, 610,100 pieces of goat and sheep skins used by the industry. This discrepancy may be explained by the fact that a number of such light skins, particularly goat skins, were consumed in the production of upper leather, and therefore the output thereof was entered in sq. ft. units under the total output of upper leather.

The above figures as derived from the 1955 Census, although relatively more reliable, are also lacking in other respects. They represent output of tanneries employing 5 workers and above only, and thus miss those employing below 5 workers. However, this problem is not faced in the upper leather output since the Census included almost all the upper leather producing tanneries as they all employ 5 workers and above. Thus the figure given above for upper leather output seems quite reasonable and accurate. In sole leather and processed goat and sheep skins, the case is different. As was already mentioned, a large part of sole leather output is produced by small tanneries which employ below 5 workers, and therefore the figure stated above for sole leather production must fall short considerably from the true ones. The same

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44. The three costs are on f.o.b. shipping point basis.

is true for the output of processed goat and sheep skins, and probably to a greater extent because of the existence of a large number of small tanning or processing units not covered by the Census.

A further source of knowledge is the estimates of the tanners themselves, especially the leading ones. After a long experience in the industry, those tanners have got to know each other, mainly with respect to output and sales of each. Besides, the recent attempts to merge all tanneries into a single firm<sup>45</sup> have accumulated some data in the hands of the top members of the Tanners' Union regarding output. Those estimates put the average annual output of sole leather for the last 2 or 3 years, between 1800 and 2000 tons, and for upper leather for the same period between 5 and 6 million sq. ft. a year.<sup>46</sup> Estimates of pickled, tanned and half-tanned goat and sheep skins output approach an average of 800,000 pieces yearly for the last 2 or 3 years.<sup>47</sup> It is of interest to note that out of the estimated yearly output of sole leather, namely 1800-2000 tons, 1700 tons are produced in Mashghara alone, and the rest in the upper leather tanneries of Beirut and its suburbs.

## 2. Size of Local Market

After surveying output, our next step is to examine local consumption which forms the larger portion of the leather market.

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45. To be discussed in Chapter 5.

46. Information was supplied by Mr. N. Ghantous, Chairman of the Tanners' Union, and was approved by other leading tanners.

47. This figure was given by Mr. Y. Kamel, Chief producer of processed skins, and was approved by the Chairman of the Tanners' Union.

Leather is used in a number of local industries of which shoe-making is the major one. The other leather products industries produce mainly: luggage, ladies hand bags, school and office cases, wallets, saddlery, and some small items such as key cases, watchbands, leather oriental works and the like. Other leather products such as gloves and leather garments use imported leather.

Estimates of leather consumption by those industries are again dubious due to the lack of accurate statistics. With regard to the inquiries of the Ministry of National Economy only about two-thirds of leather products manufacturers questioned in 1956 reported. The following results were gathered:<sup>48</sup>

Output of shoes:	185,344 pairs
Leather consumed in their manufacture:	
Sole leather	76,850 kg.
Upper leather	231,100 sq.ft.
Shoe lining leather	82,855 sq.ft.
Output of other leather products:	
Ladies hand bags	45,548 bags
Travel cases	22,750 cases
School cases	6,600 cases
Leather consumed in their manufacture:	
Heavy leather	3,200 kg.
Light leather	41,875 sq.ft.

Leather consumed according to these figures would be 80,050 kg. of heavy leather, 272,975 sq.ft. of light leather, and 82,855 sq. ft. (about 10,000 pieces) of shoe-lining leather. No figures are given to any other leather products.

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48. Data was gathered from the Industry Section of the Ministry of National Economy.

The above figures for leather consumption represent but a small portion of the truth. Firstly, because only about two-thirds of those questioned did report. Secondly, even those questioned represent only a portion of the real number of producers, especially in shoe-making where there are hundreds of small shoe-makers scattered in distant streets and villages and never contacted by any statistician. Besides, leather used in slippers was not included.

Going through the reports of the 82 shoe-making concerns enumerated by the Census of 1955, it was found that the amount of leather used by those concerns totalled about 217,950 kg. of sole leather of which 3840 kg. was imported and the rest was locally made, and about 583,440 sq. ft. of upper leather of which 52379 sq. ft. was imported. No such computation was made for the shoe-lining leather consumed because the quantities consumed were stated in different units. Unfortunately, the 1955 Census as it looks from its questionnaire, was mainly interested in arriving at the value added contributed by the industrial sector to the national income with little concern about physical quantities whether with regard to input or to output.

As to the consumption of leather in products other than shoes, no reliable computation could be made from the reports of the nine firms engaged in manufacturing leather products and which were covered by the Census. The reason is that some of them stated the value of materials they used in a lump sum, including leather. However, the amount of light leather they consumed in that year does not seem to have exceeded 100,000 sq. ft., with no heavy leather used. The products of those firms consist mainly of ladies hand bags, luggage, school and office cases, and the like.



The figures derived from the Census reports show only part of the true amount of leather consumed locally for the same reasons stated above. To repeat, the Census enumerated only those firms employing 5 workers and above and left the rest. This can hardly be of much value especially in shoe-making, since the greater part of shoes manufactured in Lebanon is still made by individual shoe-makers who can be counted in hundreds, and even in thousands, scattered over the whole country. Most of these shoe-makers prepare special orders for their clientelle, and usually manufacture very little for stocking purposes. Besides, a considerable amount of sole leather is consumed in shoe repairs which was not included in the Census.

To arrive at more reasonable figures for leather consumption, estimates of people with expert knowledge was resorted to. One of these estimates was prepared in conjunction with an expert from the Ministry of National Economy,<sup>49</sup> and is stated as follows:

Number of shoe wearers in Lebanon	1.2 million persons
Distributed as follows:	
500,000 persons with an average consumption of 2 pairs per year, total:	1,000,000 pairs
100,000 persons with an average consumption of 4 pairs per year, total:	400,000 "
600,000 persons with an average consumption of 1 pair per year, total:	<u>600,000</u> "
Total consumption	2,000,000 "

To find the amount of leather used in this estimated quantity of shoes a ratio was taken from the data given on page 54, representing the

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49. Mr. S. Gabreel, Head of the Production Section in the Industry Department.

amount of sole leather in an average pair of shoes, and applying it to the above total,

$$\text{thus, } \frac{76,850}{185,344} \times 2,000,000 = 829,268 \text{ kg. of sole leather.}$$

Likewise, applying the ratios for upper leather and shoe lining leather on page 54 we get:

$$\frac{231,100}{185,344} \times 2,000,000 = 2,493,741.4 \text{ sq. ft. of upper}$$

leather, and

$$\frac{82,855}{185,344} \times 2,000,000 = 894,067 \text{ sq. ft. of shoe-lining}$$

leather, or, 111,758.4 pieces at an average of 8 sq. ft. per piece.

The above figures include imported leather which entered in the manufacturing of the estimated number of shoes consumed. But as it is seen later (Section 3), those imports are small in size so that local consumption of leather in the shoe-making industry may be considered to consist mainly of locally made leather. However, the above results do not cover leather used in other leather products, nor does it include leather used in shoe repairs which cannot be estimated with reasonable accuracy.

Tanners have their own estimates of local consumption of sole leather, upper leather and shoe-lining leather. They derive these estimates from their average sales to the local market over the last few years. Upon inquiring a number of leading tanners, estimates seem to round about 1300 tons of sole leather, 4 million sq. ft. of upper leather and 200,000 pieces (skins) of shoe-lining leather. Those figures include leather used in the manufacture of exported shoes as well as other leather products. However, those figures, in principle,

cannot represent the size of local market since they ignore imports, which, although small, form a portion of local consumption. Besides, as it was stated above, they do not exclude leather used in exported shoes and other leather products although the latter quantities are relatively small.

Another attempt was made by the author to arrive at a reasonable estimate for local consumption of leather. This estimate is based on the formula:  $C = P + I - E \pm S$ , where C represents consumption, P production, I imports, E exports, and S net increase or decrease in inventories. For sole and light leathers, the year 1955 was taken as basis for a computation due to the availability of approximate figures for inventory adjustments derived from the individual reports of the tanning concerns covered by the Census of that year. In the case of sole leather, output for that year was taken at a minimum of 1800 tons,<sup>50</sup> since exports after 1955 increased, and it is more likely that consumption did not decline, but rather increased too. In addition to imports of sole leather for that year (Table 20, tariff 349), the amount of sole leather in imported shoes was calculated with the use of the above ratios<sup>51</sup> and added to sole leather imports. Likewise, sole leather in exported shoes was calculated and added to exports. Figures taken from individual Census reports show a net increase in inventories of 57,079 tons at the end of 1955. Thus by our formula we get:

$$C = 1800 * 15.145 - 363.797 - 57.079 = 1394.269 \text{ tons.}$$

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50. Based on the estimated average output of 1800-2000 tons;  
See Section 1 of this Chapter.

51. See page 57 for these ratios.

In upper leather computations, chances of error are greater since more conversion figures are to be used, mainly to convert imports and exports from kilograms (as presented in foreign trade statistics) to equivalent units in square feet so as to match output which is given in square feet. The rate of 65 gms.<sup>52</sup> per average square feet of upper leather was taken as a fair average for conversion. For the same reason stated above for selecting a minimum figure per sole leather output in 1955, a figure of 5 million sq. ft. was taken to represent output of upper leather in 1955. Imports for that year, plus upper leather in imported shoes and parts of shoes were calculated with the above ratios<sup>53</sup> and were found to total 308,879 sq. ft. In the same manner exports<sup>54</sup> amounted to the figure 2,114,450 sq. ft. It is to be noted that for imports and exports of upper leather (not entered in finished products) only tariff nos. 351 and 353 were taken since they include almost all types of upper leather produced in Lebanon<sup>54</sup> of which the above figure for output consisted. Inventories as computed from the 1955 Census reports show a net increase of approximately 203,600 sq. ft. Using the formula we get:

$$C = 5,000,000 + 308,879 - 2,114,450 - 203,600 = 2,990,829 \text{ sq.ft.}$$

Commenting on the above results, it is observed that the figure computed for sole leather consumption (1394.269 tons) is above that estimated by the tanners (1300 tons), especially that the latter includes

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52. This figure was accepted by most light leather tanners contacted as an average weight per sq. ft. of different types of upper leather.

53. Stated on page 57.

54. See Appendix I for Tarrif nos. 351 and 353.

sole leather in exported shoes. However, since output has been taken at a minimum which is probably below actual output, it seems that the tanners figure underestimates local consumption. In the case of upper leather, the discrepancy between the calculated figure and that estimated by tanners is greater. After allowing for errors coming from inaccurate conversion rates and ratios, some points may be given in explanation of this discrepancy. Firstly, tanners estimates included upper leather in exported shoes whereas our calculated figure excludes this item. Secondly, the figure of 5 million sq. ft. is probably too small to represent output of 1955, and a higher figure should have been used. <sup>55</sup> Nevertheless, the tanners' estimated figure for local consumption of upper leather might have been exaggerated. Under all cases, it seems quite probable that the true volume of local consumption must lie some where between the tanners estimates and the above calculated figures.

It is to be noted that the figures dealt with above for output and local consumption of light leather include only those leathers used in the manufacturing of shoes and other products using the same stuff such as ladies hand bags, office cases and the like. This is because the purpose of studying the volume of leather markets at this stage, both local and external, is to evaluate the existing outlets for the leather industry in Lebanon with its actual level of output with regard to quality and quantity. Thus imported leathers which are not

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55. As a matter of fact some tanners estimate average yearly output of upper leather at a figure as high as 6.5 million sq. ft.

produced locally, such as garment leathers, were not entered in our figures. Besides, morocco leathers, used mostly in luggage manufacturing, were not included in our figures due to the difficulty<sup>of</sup> estimating their output as they are produced in small quantities by diverse units, and in many cases by luggage manufacturers themselves.

With regard to the consumption of shoe-lining leather no similar computations could be made due to the lack of inventory adjustments in any single year. Thus we have two figures, the one resulting from our calculations of shoe-lining leather used in the manufacture of locally consumed shoes (111,758.4 pieces), and the other as estimated by tanners and dealers in the business (200,000 pieces). Part of the discrepancy may be accounted for by the fact that the tanner's figure includes shoe-lining leather used in exported shoes and similar products.

### 3. Imports and Protection

Two main competitors may possibly curtail the internal market for locally produced leather. These two competitors are: leather imports and substitutes. The former will be taken in this section, and the latter will be dealt with in the succeeding one. Imports will be studied in two steps, the one is the analysis of these imports with respect to their share of local consumption, and the second is the study of protective barriers.

#### Analysis of Imports.

The study of Tables 20 and 21 clears the position of leather imports with respect to the industry as a whole. In the first place,

imports of sole leather (and transmission belts) for the years 1953-57 as shown by Tariff no. 349, never exceeded 17.694 tons (1956) and even went as low as 3.220 tons in 1955. Compared with the estimates of local consumption of sole leather already covered, these imports should not exceed a small fraction of consumption. Still more insignificant those imports would look when compared with estimates of local output of sole leather (1800-2000 tons per year), which leads to the conclusion that they form no serious competition to local leather.

Imports of light leather also form a small fraction of estimated local consumption as well as of total output. Tariff no. 351<sup>56</sup> represents the kind of light leather highly used in shoes and other light leather products. Imports of this kind have fluctuated between 11.434 and 10.494 tons for the period 1953-57 (Tables 20 and 21), dropping to 9.552 tons in 1956. Converted to square feet, the average for that period should be in the vicinity of 178,000 sq. ft.<sup>57</sup> when compared with the estimated output of 5-6 million sq. ft. per year, this figure stands also as a small per cent of total output. Imports under Tariff no. 353, consisting mainly of patent leather, have dropped considerably during the period under study as patent leather has become out of fashion for the last few years. Besides, locally made patent leather has been improved to the extent that it has satisfied the major part of local consumption, especially in women shoes where it is still in use on a small scale. Leathers falling under Tariff no. 354 consist mainly of fine suede leathers for garments and gloves, which are not yet pro-

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56. For more details about tariff numbers see Appendix I.

57. The ratio of 65 gms/sq.ft. is taken as basis for conversion.

duced locally. Under Tariff no. 355 we have few kinds of leather not produced locally and imported in small quantities, such as fine leathers for musical instruments, leather from pig hides and from skins of snakes, fishes and other reptiles. This leather type is used in making some expensive shoes and hand bags. Tariff no. 356 represents mainly scraps of sole leather such as damaged pieces and trimmings used mainly in soles replacements and repairs. Tariff no. 350 includes heavy upper leathers which are manufactured from heavy hides with special processes not yet fully mastered in Lebanese tanneries. This type of leather goes mainly to the manufacture of heavy shoes.

Imports of finished leather products are classified under Tariff numbers 357-364 and 600-602 (Tables 22 and 23). For further details about the coverage of these tariff numbers, reference should be made to Appendix I. It is noted that those products are numerous in types, but are imported generally in small quantities. With regard to imports of processed goat and sheep skins appearing under Tariff no. 352, such imports represent mainly pickled skins imported from neighbouring countries for further processing here.

In concluding our analysis of imports of leather and leather products, the following points call for special attention. Firstly, it is noticed that those imports can be classified under two headings. The one includes imports of certain products which are produced locally but of different quality (usually inferior), and the other includes those which are not produced locally at all, or produced only on a small scale.



For the former, we may cite sole leather, box and patent leathers, shoes, and slippers. Those products are imported in small quantities but usually of expensive qualities. Taking upper leather imports first, it seems that these imports consist of fine grades not manufactured locally. The reason why this leather excels local production in quality is due to certain superior types of hides, mainly calf hides (or kips) raised in some countries of Europe, but not exported. Besides, the tanning processes are of higher technical level, and include a better application of chemical knowledge. The resulting leather is softer and highly pliable. On the other hand, local upper leather when taken from a good quality, is usually stronger and more resistant to wear and tear.<sup>58</sup> Besides, imported leather is much more expensive, firstly due to the high protective tariffs (to be discussed below), and secondly, even if exempted from any tariff, it would remain at least 25 per cent more expensive than equivalent local leather.<sup>59</sup> This is due to reasons mentioned before, most known of which are cheap labor and reduced overhead. Thus while a manufacturer of shoes pays from LL 1 to LL 1.50 for a square foot of good local box leather, he pays LL 3-4 per square foot of an equivalent imported grade which probably excels the former with its somewhat softer surface.

Imports of sole leather fall under the above category in the sense that although some good qualities are manufactured locally, still a small quantity is imported to be entered in some luxuriously

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58. Information was given by Mr. K. Shaftary, a manufacturer of high grade shoes.

59. See Section 2 in Chapter II, supra.

expensive shoes. It is true that this leather is in some respects superior to local leather, but not enough to justify the difference in price, namely from LL 7 to 8 per kg. of imported leather compared with LL 2.50 to LL 3 which is usually paid for a kilogram of local sole leather of an equivalent quality. Imports of finished shoes do not exceed a quota of 13,000 pairs per year, and usually are of the expensive type. They are particularly consumed by foreigners used to them.

In studying imports falling under this class, the psychological factor should not be ignored. Most people are still under the impression that locally made products are always inferior to those imported, even if prices were the same. Thus while purchasing or ordering new shoes, customers often insist that uppers at least should be from imported leather, and it is quite probable that a large amount of local leather is being sold under the name of foreign leather. It is only recently that manufacturers of shoes have started to "confess" confidently that they use locally made sole leather.

For the second class of imported leather and leather products, i.e., those which are not produced locally or produced only at a small scale, few examples may be given, such as garment and glove leathers, chamois leather, and saddling leather. Whereas garment and glove leathers, soles and cardboards from leather scraps, are not yet produced locally, others have been produced in some cases, but in small quantities and unsatisfactorily.

Another point of prime importance is the effect of imports upon excess capacity in the leather industry. The above analysis

implies that those imports are small to an extent that they hardly form any important competition to the local industry. It may be said also that even if all those imports were cut down entirely and equivalent products were turned to the local industry, a very small portion of idle capacity would be occupied. Thus the problem of excess capacity does not lie in imports and they cannot be of much help in solving it. Besides, those imports consist of small quantities of diversified products, and it would be impractical for a single tannery to specialize in any one of them under present conditions in the industry, or to specialize in all of them.

#### Protection.

Having analyzed imports above with respect to their structure and size, the question arises now as to the role played by protection and its effectiveness in preserving the local market largely for local leather.

A study of the tariff schedule for leather and leather products would help in evaluating the amount of tariff protection enjoyed by local leather. Table 26 shows the tariff schedule for leather and leather products. Maximum tariff rates used to be applied in the past to countries non-members in the previous League of Nations. However, today this tariff is only applicable to Japan and for a limited number of commodities. On the other hand, reduced tariffs on imports from Palestine (today Gaza district only), Syria, Iraq, and Jordan, are rarely referred to, since the major part of leather and leather products imports comes from western Europe and America to which the normal tariff is applied. It is noticed that some tariffs have two rates, i.e., an advalorem and a unitary rate. The latter is applied whenever the validity or accuracy of invoices are doubtful.

Where the advalorem rate only exists, doubtful invoices are referred to investigating committees.

The highest tariff rate, namely 50 per cent, is applicable to Tariff nos. 349, 357-a, and 600-606 (Tables 26 and 27). Thus the highest degree of tariff protection has been given to sole leather (since Tariff no. 357-a represents soles from scrap leather) and to finished shoes. This high rate has been arrived at under the pressure of sole leather and shoes producers, and due to the fact that the local output of those products exceeds by far the needs of local consumption, and its quality satisfies the demand of the majority of consumers.

The next lower rate (40%) is applied to leathers or leather products which do not compete local sole leather such as cardboards from leather scraps (Tariff no. 357-a), and to leathers which compete locally made light leathers, mainly Tariff nos. 351, 352, 353, and 360 (Table 26). It is noticed that even those leathers or leather products produced locally on a small scale, such as Tariff nos. 354 and 362, are protected with that same rate. The third lower rate (25%) is applied to certain leather products which are produced locally in very small quantities, or not produced at all. There is much contradiction in having garment leather (Tariff no. 354) protected with a 40% rate, whereas finished leather garments are protected with a 25% rate only. It is the contrary which is more in accordance with protection principles. One item is exempted, namely, Tariff no. 363, as it represents leather articles used in industry and for other technical purposes.

The principle followed in the protection policy, is thus to give the highest protection rate to sole leather and shoes, a little lower rate to upper leather and certain leather products, and a still lower rate to another group of leather products. Pressure for protection coming from light leather producers is relatively recent, and it has been just strong enough to bring the tariff rate to 40%, whereas pressure for sole leather and shoes protection is older, and has been alarming under the existing conditions of excess capacity which were felt a longer time ago.

In evaluating the above tariff rates, the question arises as to the degree of protection given to the leather industry. Measured by Lebanese standards of tariff protection, the rates of 50% and 40% are supposed to be among the highest protective rates applied in Lebanon. Thus, according to tariff policy in Lebanon, a 50% tariff rate is considered as a top protection rate, although the 40% rate is of a little lower level. On the other hand, a 25% tariff rate is supposed to be the common rate applied to most imported commodities for the sake of revenue and protection when needed. However, the protection afforded by those rates should not be overestimated due to the fact that tariff rates in most cases, are applied to the declared value of imported goods at the official rates of foreign currencies and not at their market rates which are quoted when payment is effected. Thus if the customs duty is based on the true value of imports in Lebanese pounds, i.e., the amount of local currency actually used in purchasing foreign exchange at the market rate to pay for these imports, then the tariff rate would fall considerably by ratios reaching as far as

35 per cent, depending on the currency used in the payments made. Thus the above higher tariff rates are not really prohibitive rates, and the small size of leather imports should be explained not entirely as an effect of tariff walls, but rather on the basis that the leather industry in Lebanon has developed to a level which satisfies the tastes and purchasing power of the majority of Lebanese consumers. It was pointed above that even if the tariff duty is entirely removed the price differential between imported and local leather will still remain large. Thus a reduction in the tariff rate probably would not lead to a proportionate rise in imports, nor would a further rise in the tariff rate lead to a proportionate drop in imports.

In addition to the above tariff protection, the industry has also been encouraged by exempting its imported raw materials from any customs duties. Besides, its imported capital equipment, provided that it is approved by the Ministry of National Economy, is also subjected to a nominal tariff rate of 1%. Those two traditional means of encouraging domestic industry fall within the tariff policy in Lebanon with respect to almost all local industries.

Protection, in addition to tariff differentials may be effected through other direct means such as import licenses and quotas. Imports of all leathers are free in the sense that they are not subjected to any import licenses or any quota system, with the exception of patent leather (Table 28) whose imports have to be approved through a license granted by the Ministry of National Economy. However, no definite quota is assigned, and the granting of import licenses has become a

matter of formality. It is to be noted here that no kind of leather or leather product is entirely prevented from entering Lebanon. On the other hand, leather cases, leather soles and heels, and leather shoes, are all subject to import licenses and quotas as is shown in Table 28. Licenses are granted by the Ministry of National Economy to few importers already in business, each with a share of the assigned quota. A small portion of this quota is usually reserved to new entrants each year. The quota for imported shoes is only of 13,000 pairs, and that for leather cases is of 3500 kg. per year. The size of both quotas is so small that it does not form any serious problem to the leather industry as a whole, or to the shoe and leather cases industries separately. The subjection of rubber and non-rubber shoes to import licenses and quotas (Table 28) is meant primarily to protect similar local industries, and indirectly, leather shoes to some extent.

The fulfilment of those quotas is supervised by the customs authorities and the Ministry of National Economy. In normal conditions the quota limit is strictly observed and may not be surpassed, although many leather and shoe manufacturers claim that those quotas have been sometimes exceeded under the pretext of importing exclusively to the Lebanese Army whose imports do not obey quota restrictions.

#### 4. Substitutes

Competition may come also from substitutes. In studying leather substitutes, it is difficult to decide what makes a substitute, and whether it is a close or a distant one. The elasticity

of substitution between two commodities shows the degree to which these two commodities can replace one another. Thus if the elasticity of substitution between two commodities is infinite, i.e., if a small rise in the price of the one would shift the total demand for it to its substitute, then the two commodities are perfect substitutes, and may be considered almost as one commodity. If the elasticity of substitution is high, then the two commodities are close substitutes. If it is low, they are distant, and if zero, then they are not substitutes at all, and a change in the price of the one would have no effect upon the demand for the other.

In searching for substitutes to leather in the manufacture of certain commodities, plastics may be cited as close substitutes in certain products. Plastic materials have been taken as close substitutes to leather in the manufacture of bags and cases, and particularly in ladies hand bags. Before the advent of plastic materials, almost all hand bags and cases were made from light leather, and a large portion of light leather output went into this kind of consumption. With the advent of convenient plastics, substitution took place rapidly, and the use of leather today in ladies hand bags has been confined to few luxurious and expensive types. However, the luxurious and expensive nature of these leather hand bags cannot be justified on a cost basis. They could be sold at much cheaper prices, and thus retain a considerable size of leather consumption. But with the appearance of plastic materials, plastic hand bags were destined for public use, whereas leather bags were removed to the luxury arena of the few. Thus while the majority of ladies hand bags from plastics are sold at retail prices varying between LL 10 and 15, a leather bag would



cost LL 60 and above, although it does not cost more than LL 5 to 6 in materials including domestic leather, and a little more in labor and other costs.

It is not easy to estimate the amount of leather which is being replaced by plastics in ladies hand bags and cases due to the lack of reliable figures. According to some estimates, not more than 100,000 sq. ft. of local light leather is used today in the manufacture of ladies hand bags and cases, whereas before the wide use of plastics not less than 1.5 million sq. ft. were consumed yearly in that direction. It is to be noted that substitution has been at slower pace in office and school cases as well as in heavy luggage. Besides, in addition to plastics, cloth has also shared in replacing leather in ladies hand bags.

Plastics have been considered as leather competitors in upholstery coverings. In the last few years, attractive types of plastic materials have been imported mainly from the United States, England, and western Germany, for the use as coverings for furniture. They have been largely in use as furniture coverings in movie theaters, hotels, restaurants, offices, and even in private residences for sitting rooms, dining rooms and the like. They have been also used in cars and busses as seat coverings. Those materials are basically fabric coated with a plastic substance which gives either leathery or cloth feeling. They are easily washable and very durable. In addition to coverings, they are being used in book binding.

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60. Estimates are given by Mr. N. Ghantous, Chairman of the Tanners' Union.

61. Information regarding qualities and usages of those plastic materials was given by Mr. B. Tarazy, Manager of the Du Pont Department in F.A. Kettaneh Establishments, Beirut.

The question arises now as to whether those plastics are really substitutes to leather in upholstery coverings. Leather, at least in Lebanon, has scarcely been used in furniture coverings and especially in public places, thus it can hardly be said that these plastics have been replacing leather in this particular field. Even if the supply of these plastic materials were entirely cut down, then it is unlikely that demand would turn to leather, and probably the shift would be to cloth and not to leather. These plastic materials cost nearly the same as light leather which fits for furniture covering (between LL 1 and 1.50 per sq. ft.), but leather is not easily washable as plastics. Besides, leather usually comes in the form of small irregular skins, which, if used in coverings, would leave much of wastage, and a number of skins should be joined for a large furniture covering. Thus, on the whole, these plastic materials are very distant substitutes, and probably they form closer substitutes to cloth rather than to leather.

Rubber is another substance which has been substituted for leather in the manufacture of shoes. There are shoes manufactured entirely from rubber, or from rubber soles and leather or fiber uppers. Reliable figures for domestic consumption of such shoes are not available. However, some hints may be obtained by examining the available data. Data collected by the Ministry of National Economy from the majority of producers, gives the following figures for output in 1956:

Shoes made entirely from rubber, or from rubber soles and leather or fiber uppers	423,000 pairs
Tennis shoes (rubber soles and fiber uppers)	481,000 "
Slippers (rubber soles, with or without leather uppers)	45,608 "
Rubber boots	245,000 "

Exports of these types of shoes cannot be estimated correctly due to much overlapping between close tariff numbers while registering them. However, it can be assumed that the majority of output represented by the above data was consumed locally, since exports for that year of partially or entirely rubber shoes (Table 25, Tariff nos. 603-605) amount to about 57 tons, which even at a small average of 300 gms. per pair would not exceed 190,000 pairs.

Another hint may be found in the data collected from the files of the Industrial Census of 1955. The nine reporting firms (employing 5 workers and above) which produce rubber shoes and rubber fiber shoes, reported their sales for that year as consisting of the following: 88,299 rubber boots, 147,743 rubber shoes, and 504,724 pairs with rubber soles and fiber uppers. Of the latter figure, 473,116 pairs are tennis shoes. The above figures should be fairly accurate due to the fact that most firms producing rubber or mixed shoes, usually employ more than an average of 5 workers, which means that the majority of producers were covered by the Census. Again it may be assumed that most of these sales were made to the local market since exports for that year were also small (Table 24), and on the above basis, they would not probably exceed 160,000 pairs of all kinds. It is observed that rubber has been supplemented with cloth and other fibers in substituting leather.

The question arises as to how high the elasticity of substitution is between leather on the one side, and rubber and fibers on the other. Rubber is used very often in heels, but in complete soles it is used almost only in winter. Full rubber shoes and boots are scarcely

used in seasons other than winter. Rubber is a bad conductor of heat and humidity, and thus it is used in winter to keep the feet dry and warm. However, in a semi-tropical climate such as in most of Lebanon and the Middle East, rubber footwear is highly uncomfortable during the dry and hot seasons. Leather has ventilating properties which rubber does not have. Leather is porous, and it allows the passage of water vapor in the sweat, which keeps the feet cool and comfortable. Experiments have shown that leather has a high permeability to water vapor, averaging at 66% of evaporation rate from free surface.<sup>62</sup> That is, if a wet surface is covered with leather, then 66% of the amount of water vapor emerging through free space would be allowed through leather, irrespective of temperature and differences in relative humidity.

Rubber thus is not a close substitute to leather in the manufacture of shoes. Whereas it has some desirable properties in winter, it is uncomfortable for the rest of the year. Even most rubber shoes and boots consumed are used not in towns or cities, but rather in muddy villages during winter. Rubber therefore is not a real menace to leather in this country as its elasticity of substitution is rather low. Consumers may not know completely the difference in the properties of both substances, but they can at least feel the discomfort caused by rubber shoes in warm seasons. This menace becomes still smaller when leather is not more expensive than rubber, as the case is at present.

With respect to shoes with fiber uppers, tennis shoes are

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62. Wilson, op. cit., pp. 663-667.

of main interest. Tennis shoes consumed in Lebanon are not all purchased by tennis players. As a matter of fact, a large part of them is used by the lower income groups as a daily footwear. A great number of workers in Beirut and other districts wear tennis shoes because they are cheaper than leather shoes. Tennis shoes consumed under those conditions are real substitutes to leather shoes, and to the lower income groups they seem to be close substitutes to leather shoes.

##### 5. Possibilities of Expanding Local Market

After presenting the above exposition of local leather market, we need to examine whether it is possible to expand this local market, so that excess capacity may find a total or partial solution.

The degree of competition offered by imports and substitutes to domestic leather has been found in our above analysis small and of little significance. Thus if imports of sole leather were completely restricted, and equivalent demand shifted to local industry, excess capacity even in a small sole leather tannery would not be solved. Imports of upper leather are of the same order, and if cut off completely no significant expansion in local output would be enhanced. With regard to imports of leather shoes, a quota of 13,000 pairs (Table 28) is but a small fraction of an output estimated at a minimum of 2 million pairs per year.

We are led thus to the conclusion that new campaigns against leather imports, whether through higher tariff rates or additional direct controls, would be of little value in solving the problem of excess capacity in the industry. Such campaigns would not lead to

sensible expansion in the local market. However, as it was mentioned previously, a part of leather and leather products imports belongs to certain types which are not produced locally such as garment and gloves leathers. Lebanese tanners claim that they have not yet attempted seriously to develop the production of these products because demand is too small to warrant such an attempt, especially that those products are numerous and are imported in small quantities. In other words, tanners have so far refrained from producing these products not because their costs are too high to compete imports, but because demand is rather small. This seems to be a vicious circle to which the tanners take a negative attitude. If we look into the matter from a different angle, it seems that there is much hope in suggesting to the tanners to take the risk of breaking this vicious circle by producing these products. It is quite possible that in this case supply would create its own demand, of course not in Say's Law<sup>63</sup> sense, but in the sense that when such products are produced locally to a satisfactory quality, advertised and supplied at low prices, the public would probably develop new habits and tastes and would become used to them. In other words, people would wear more leather garments and gloves, suede shoes, and the like. The chance seems quite promising since most of such fine leathers are made from goat and sheep skins which are being exported semi-processed in large quantities to be finished abroad for the same purposes.

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63. Say's Law which represents the classical theory of income and employment, states that supply creates its own demand. This is in the sense that outlays on the production of goods create additional demand sufficient to absorb those goods so that unemployment cannot exist.

With regard to substitutes, the case is different. Taking plastics for instance, no appreciable effort has been made so far to stop the substitution of leather by plastics in the manufacturing of ladies hand bags and similar products. The government, especially in a free trade country such as Lebanon, can hardly attempt to force Lebanon's women to use leather hand bags instead of plastics hand bags. Besides being cheaper, hand bags from plastic materials have become the fashion of the day in almost all countries. However, this should not prevent Lebanese tanners from exploiting this field by developing new and cheap leathers which can stand the competition of plastics. It may be a good idea to have some tanners engage directly in the manufacturing of special leather hand bags and similar products using their own leather.

Rubber has been described above as being a more distant substitute to leather in the manufacture of shoes as it has some special qualities appropriate to only one season in the year. Thus we can hardly think of expanding domestic leather market at the expense of existing rubber consumption as the elasticity of this substitution is low. Besides, rubber shoes industry is a growing one, and is protected through tariffs and quotas. Any campaign against it in favor of leather, besides being economically unfeasible, does not find supporters whether in the public or in official circles.

In searching for possibilities for the expansion of local market, the question remains as that of how to make people consume more leather. Some openings were pointed to above, where the initiative is presumably to be taken by the tanners themselves. One may think of

extensive advertising by tanners for the wearing of leather shoes, or any shoes. Whereas this may be very helpful in an underdeveloped country where a considerable part of the population does not use shoes, this can hardly be useful in Lebanon where all people wear shoes. However, the steady rise in the national income in Lebanon, provided that it is accompanied by a fairer distribution, gives large hopes for a growing internal demand for leather. This greater demand will probably be manifested, in one way, by a rise in the existing levels of consumption due to higher incomes, and in another, by a shift from certain closer substitutes, such as tennis shoes, to leather products. Besides, the population growth in Lebanon, going at a relatively high rate, affords also ample possibilities for a large local market in the future. This may absorb the excess capacity in the leather industry, provided that the net rate of investment in this industry remains zero, or somewhere below the rate of the prospective expansion in the market.



## CHAPTER IV

### EXTERNAL MARKETS

#### 1. Analysis of Leather Exports

In the previous Chapter, the local market for leather was studied with an aim of finding possibilities for expansion so as to afford new outlets for the excess capacity in the industry. This purpose may be continued now by studying the leather exports of Lebanon and the possibilities of expanding them.

The period 1953-57 has been chosen for our analysis of exports as being representative of recent trends in the foreign trade of Lebanon, especially after the dissolution of the Customs Union with Syria. Leather exports in general, have increased over this period. In Tables 20 and 21 exports under Tariff nos. 349, 351 and 352<sup>64</sup> have increased largely between 1953 and 1957, namely, 33.3 per cent for the first tariff, 124 per cent for the second, and 42 per cent for the third. On the other hand, exports under Tariffs 353 and 356 dropped notably, the former being patent leather which has become out of fashion, and the latter being leather scraps for the manufacturing of synthetic soles and cardboards which are giving way to plastics. Exports of leather products show also an increase over the period (Tables 22 and 23), with the exception of slippers and shoes whose exports dropped by about 73 and 37 per cent respectively.

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64. For details about contents, see Appendix I.

Taken moneywise, exports of leather have increased over the period from about LL 2.6 million to LL 3.3, whereas exports of leather products have dropped from about LL 565 thousand to LL 446 thousand in the same period. Adding both exports together, the resultant would show a net increase of 20 per cent between 1953 and 1957, which is a rather modest increase in total exports. However, two allowances should be made here. The first is for some few leather exports which might have gone under other tariff numbers, and the second is for certain leathers in exported leather products which might have been from a foreign origin. On the whole, these two allowances are too small to modify our analysis significantly.

The global figures for exports do not suffice our purpose for studying the possibilities of expanding those exports. A further investigation into the export markets would help understanding and evaluating those possibilities. Taking the Syrian market first, mention was made above to its impetus on the development of the leather industry in Lebanon. Table 29 figures the unfortunate outcome of the Syrian market with respect to Lebanese leather. Before March of 1950 Lebanon and Syria under the Customs Union were almost one market. Thus shipments of goods from Lebanon to Syria and vice versa were considered as transactions within the same market and were not recorded in any customs records. Under the Customs Union system, the leather industry in Lebanon supplied most of the needs of the Syrian market, and the Syrian dependence on the Lebanese leather became quite obvious right after the separation of the two markets. In Table 29, sizeable exports of Lebanese leather to Syria appear thus directly after separation.

However, with the resolution of Syria to build its own leather industry, exports from Lebanon declined rapidly to an extent that in 1956 and 1957 they fell to negligible figures. Exports of sole and upper leathers (Tariffs 349 and 350) to Syria dropped from a ratio of 58 and 92.8 per cent respectively of total exports of these two products in the last three quarters of 1950, to 0.2 per cent and zero respectively in 1957. No other exports were made in this year (1957) except for some occasional exports under Tariff no. 364.

The almost entire loss of the Syrian market was a severe blow to the leather industry. However, expansion in other markets compensated for losses in Syria. An important market where such expansion has been marked is Jordan. In Table 30, this expansion appears in exports of sole leather (Tariff No. 349), upper leather (Tariff no. 351), shoe lining leather (Tariff no. 352), and patent leather (Tariff no. 353). It is noted, on the other hand, that exports of finished leather goods, such as shoes, have dropped drastically during the period. It is quite natural in a country like Jordan where industrial development is still in its first steps, to replace imported finished leather goods with their raw materials, namely, finished leather. This seems to form a first step in industrialization.

Another market which has shown signs of expansion is that of Cyprus. This expansion started right after the closing of the Syrian market (Table 31). However, this expansion was reversed in the last few years as is seen in Table 31 especially in exports of sole leather (349), shoe lining leather (352), patent leather (353), and shoes (601-602). Upper leather (351) is still expanding at high pace,

whereas morocco leather (360) was not exported to Cyprus in large quantities until 1956.

New markets have just been opened in the oil producing Arab countries, such as Saudi Arabia, Kuwait, Bahrein, and the other Arab states of the Persian Gulf. The rising incomes and expenditures in those countries have opened new frontiers for the leather industry, although such prospects have not yet given their fruits. As it is seen in Tables 33 and 34, leather exports to Saudi Arabia, Kuwait and Bahrein, started in the form of finished leather goods, such as products of morocco leather (luggage and bags and the like), slippers, and shoes (Tariff nos. 360-602). It is shown in Table 33 that these exports to Saudi Arabia have declined in the last few years, whereas they kept an almost expanding pace in Kuwait and Bahrein (Table 34). Meanwhile, it is noticed that exports of sole and upper leathers to those countries have started recently, and it seems that the chances for leather exports to these developing countries, at least in the short run, lie in those last types of exports rather than in shoes or other finished leather products. This took place in Jordan, and it is quite probable that it may be repeated mainly in Saudi Arabia, and perhaps to a lesser extent in Kuwait and Bahrein, provided that exporters of leather in Lebanon take the chance and work for it.

Expansion of exports took also another way which was through pickled, tanned and half-tanned goat and sheep skins (Tariff no. 352). Those exports differ from the remaining leather exports in that they are shipped half processed to Europe and America where they are converted through highly advanced processes, into fine suede and chamois

leathers used in garment, gloves and even shoes (especially ladies shoes). Exports of this kind of leather have gone in high leaps in the last five years as is shown in Table 35, where the United States, Italy, and recently Switzerland and Western Germany, have been the biggest single importers. Exports to Jordan, Iraq, and Cyprus, are merely of tanned goat and sheep skins used in shoe linings, and are not of the same nature as those exported to Europe or America.

Exports of leather shoes, as is seen in Table 36, have declines in the period under study. However, new markets have been gained in some African countries, and the market for shoes has expanded from the neighbouring Arab countries to the developing countries in the north, east, and west of Africa. It is possible to generalize from those experiences, that under the rush of demand in developing countries, imports of finished products which can be produced at an early stage of economic development (such as shoes) usually expand rapidly, but to contract later and give way to imports of their raw materials (such as leather). At a higher stage, imports of such goods as leather may be expected to give way to imports of machinery and raw materials to produce those products at home. With respect to leather, this took place early in Lebanon, and recently in Syria and Iraq, and it is expected to occur in Jordan as will be seen below.

Iraq has not been an important market for the Lebanese leather. This is due to the fact that Iraq produces the larger part of its leather, and thus a protective policy has been followed so far. In Table 32, no expansion is shown in the exports of sole and shoe

lining leathers, other exports were dropped entirely in the last 3 years. However, exports of upper leathers, slippers, shoes and other products under tariff no. 364, have expanded considerably over the period, although their size is still small.

Leather exports to Egypt have been so far negligible, and this is due to the fact that Egypt has a well-protected leather industry. At the same time, its technical level as well as its cost advantages both in labor and local hides, compete very well with those in Lebanon, and thus there are little chances for the Lebanese leather to enter in competition with the Egyptian leather even if protection from the latter were removed.

The analysis carried above leads us to an important point, namely, that of the degree of concentration of foreign markets. In Table 37, an attempt was made to analyze the distribution of leather exports, and the number of markets which absorb those exports. Exports of the last two years (1956 and 1957) were taken as basis for our study. The great reliance of sole leather exports upon one market is strikingly shown in Table 37 (Tariff no. 349). This single market is Jordan. Thus in the above mentioned two years, 95.5 and 96.3 per cent respectively of total exports of sole leather went to Jordan. The next market in size is that of Cyprus which absorbed 3.5 and 2.7 per cent respectively of total exports of sole leather. Added to this, are the small fractions absorbed by the remaining Arab countries (Syria, Iraq, Saudi Arabia, Kuwait and Bahrein). The above mentioned markets together absorbed all sole leather exports in 1956, and 99.73 per cent in 1957 whereas the rest of the world absorbed a negligible fraction.

The second major type of leather exported, namely upper leather (Tariff no. 351) shows almost the same degree of dependence, although on two markets rather than one. Thus in the two years, exports of upper leather were divided mainly between Jordan and Cyprus, 60.9 and 32.6 per cent of total exports going to each respectively in 1956, and 58.3 and 33.3 per cent respectively in 1957. Dependence on the Jordanian market here is less than in the case of sole leather. Nevertheless, over 90 per cent of upper leather exports went to the two countries together, whereas only 1.9 and 0.6 per cent in the two years respectively went to the rest of the world (outside the seven countries in Table 37).

This whole dependence on one or two markets for exports of sole and upper leathers has been always a source of fears and complaints on the part of tanners. As a matter of fact, the concentration of export markets in a few markets, carries with it elements of instability and many risks for future changes in demand in these few markets, which tanners have already faced in the Syrian market. Tanners in Lebanon have been recently worried with the news that a modern tannery is on the way to be established in Jordan with the participation of the Jordanian government in its capital investment. This will probably mean an entire loss of a major market. Fears of Lebanese tanners, and especially of sole leather producers, are quite justifiable in this respect, and it will be a real problem to them to find new outlets for about 96 and 60 per cent of their exports of sole and upper leathers respectively, which are absorbed at present by Jordan. Thus the diversification of the outside markets is a real need which tanners should face.

Fortunately, the case is different with the third major kind of leather exported, namely, pickled, tanned and half-tanned goat and sheep skins (Tariff no. 352). As it is shown in Table 37, the major part of exports in Tariff 352, namely, 99.58 and 97.72 per cent for the two years respectively, went to countries outside the market represented by the Table. This product, as was stated before, has a wide market in Europe and America (Table 35) as these countries depend to a large extent on imported goat and sheep skins in the raw, processed, or half-tanned condition for the manufacture of fine leathers for garments and the like. The local supply of raw skins of goats and sheep in those countries is far below demand, since they rely mainly on bovine animals for their meat rather than on goats and sheep which still form the major source of meat in most countries of the Middle East. Besides, exports from Lebanon into these countries form a small part of their total imports, and thus it is expected that this condition affords to these exports more stability and more chances for expansion. Exports of such processed skins, as seen in Table 35, seem to have spread over a relatively large number of countries, and although the United States and Italy were dominant importers with regard to the size of imports, the concept of a diversified export, rather than a single market, is more relevant in the case of this type of leather.

The minor leather exports seem to be more concentrated in the Arab market and Cyprus, with the exception of some finished products, namely, shoes, morocco leather products, and some other products (Tariffs 360, 364 and 602) which have expanded to other markets.



In conclusion then, it can hardly be spoken of any actual Arab market for the Lebanese leather in the wide sense. What is actual is that Jordan at present forms the major Arab market for two main types of leather, shared with Cyprus too. In addition, oil producing Arab countries have shown recently new possibilities for the expansion of this Arab market. The markets for the remaining chief leather product (Tariff no. 352) lie in the outside world, namely in Western Europe and America. Added to this is some finished products, such as shoes, which have acquired new markets in some African countries.

With regard to their aggregate size, export markets form a considerable share of the total market for leather. Taking the year 1955 as an example for its available data and estimates, our calculations for consumption above <sup>65</sup> show that exports of sole leather amounted in that year to about 21 per cent of the total market, i.e., local consumption plus exports. In the case of upper leather, this ratio rises to about 41 per cent. Estimates of output and consumption of finished and processed goat and sheep skins <sup>66</sup> make it possible to count on a ratio of about 75 per cent as representing exports to the total market for finished and unfinished grades of this product.

## 2. The Position of Leather in Trade Agreements

Trade agreements in Lebanon have been regarded as a means for expanding foreign trade, and particularly for finding outlets to ex-

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65. Chapter III, pages 58 and 59.

66. See Chapter III, Section 1 and 2 for these estimates.

portable Lebanese products. After the dissolution of Customs Union with Syria, the government adopted the policy of extending trade agreements to as many countries as possible, with the hope that these agreements would compensate for the Syrian market which had been separated with barriers not much less restrictive than in other markets. The large deficit in the balance of trade was the main motive for expanding export trade rather than difficulties of foreign exchange or other balance of payments problems. It was believed, as it is still, that reducing this deficit, besides removing risks of economic instability, would promote largely domestic output and employment.

The purpose of studying the place occupied by leather in the trade agreements concluded by Lebanon, is to examine the impetus of these agreements on leather, and whether they have been effective in expanding leather exports. As it is shown in Table 42, favorable terms have been extended to leather in most trade agreements negotiated by Lebanon. These terms range from full exemption of tariff duties, to the mere freeing from import licenses. In addition, other terms not apparent in Table 42 accompany most of these agreements to facilitate trade. Some of these terms include the most favoured nation clause, arrangements for payment, equal internal duties, and the like.

In studying the effect of trade agreements on leather, or any other product, one is faced with the difficulty of isolating the effect of a trade agreement from other effects which might have contributed to changes in the volume of trade. However, in our following attempt, effects of trade agreements will be pointed to when that is possible. Each of the three categories as shown in Table 42 will be taken separately.

Preferential Agreements.

As it is shown in Table 42, these agreements consist of a number of bilateral agreements concluded with Arab countries and a multilateral agreement concluded among the members of the Arab League. Of the bilateral agreements, that concluded with Jordan is the most liberal one as it provides full exemption from tariff duties to leather with other Lebanese products. Besides, Jordan seems to be the only country which has expanded substantially its imports from Lebanese leather after concluding the trade agreement with Lebanon. Thus between 1952 and 1957, aggregate leather exports to Jordan rose from LL 949,061 to LL 1,694,766 (Table 30), or from 34.5 to 45.4 per cent of total leather exports. It is true that this upward trend in leather exports has started since 1950, but it is more likely that the full exemption extended to leather has diverted to Lebanon a large portion of Jordan's demand for leather. On the other hand, exports of leather products to Jordan declined despite the tariff reduction provided for them by the agreement. This reduction has failed to divert demand from the Jordanian manufacturer to his Lebanese colleague.

The agreement with Syria had no apparent positive effect on leather, as Lebanese exports of leather kept on declining before and after the agreement was concluded (Table 29). As a matter of fact, the reduced tariff extended to sole and upper leathers is not of much value since the Syrian normal tariff on leather is very high (Table 38), and a reduction of 50 per cent still leaves a high tariff wall. Exemption from import licenses becomes of little use under such circumstances. Likewise, the agreements with Egypt did not have any noticeable effect on leather, although the second agreement is still too recent to give evidence of its effects. It seems again that even with a

reduced tariff and free entry, Lebanese leather does not have much chances of expansion in the Egyptian market due to technical and cost advantages enjoyed by the Egyptian leather.<sup>67</sup>

With regard to the Arab Economic Agreement (among members of the Arab League), its effect on leather should be studied only in those Arab countries which are not tied to Lebanon with bilateral agreements which give more favorable terms to leather and similar products. Trade relations are regulated by the bilateral agreements when they give better terms to exchangeable goods. Thus while excluding Jordan, Syria and Egypt, the effects of this agreement should be sought in the remaining partners, namely, Iraq, Saudi Arabia, Libya, and Yemen. Leather exports to Iraq have been rising slightly since 1954 (Table 32). However, this rise cannot be attributed solely to the effect of the agreement, since other factors such as the rising level of incomes and expenditures must be accounted for. On the other hand, leather exports to Saudi Arabia have been declining since 1952 (Table 33) which means that this agreement has not been of any help in expanding leather exports in that market. Whereas almost no leather exports to Yemen appear in foreign trade statistics of Lebanon, exports of shoes to Libya, although started at an earlier date, seem to have jumped since 1955 to relatively higher figures.<sup>68</sup> There is much ground to believe that this impetus, although small, has come through the Arab agreement which came into effect with Libya in 1955.

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67. See page 83.

68. From 415 kg. in 1953 and 470 kg. in 1954, to 3470 kg., 6990 kg., and 3200 kg. in 1955, 56, and 57 respectively.

Agreements aiming at balancing trade.

These agreements, as shown in Table 42, were concluded with some countries of the Soviet Bloc, with an explicit aim of balancing trade between the two contracting parties. Such agreements could be expected to lead to a real increase in exports as both parties are bound to exchange goods in a specified value. However, each party remained free to vary his imports from the products specified in the agreement, except for citrus fruits, bananas and apples which receive often a special treatment. Thus leather was not benefited to any appreciable extent as shown in foreign trade statistics, and it seems that even such kind of agreements cannot interest the other partners in a product which does not possess interesting qualities which appeal to them.

Agreements for facilitating trade.

Table 42 shows a third category of trade agreements concluded for the mere purpose of facilitating trade and removing discrimination against Lebanese exports, with no intention of balancing trade bilaterally. It is to be noted that two of these agreements (with France and Italy) provide for specified quotas of leather to be admitted, whereas the others either admit it freely under no limited quotas, or give it no special terms. It is to be noted that these quotas are not necessarily fulfilled by the other party since foreign trade in these countries, unlike the countries of the Soviet Bloc, is still within the free enterprise domain in spite of state controls. The quota system thus provides a ceiling above which import licenses are not granted. The effect of these trade agreements on leather should be

reflected in the exports of processed goat and sheep skins since this is the main type of leather exported outside the Arab countries and Cyprus. Reference to Table 35 shows that only three of the non-Arab countries listed as major markets to this product have concluded trade agreements with Lebanon, namely, West Germany, France, and Italy. Exports to West Germany have expanded after 1951, date of conclusion of the trade agreement, those to France have declined after 1955 far below the quota specified by the agreement, whereas those to Italy have expanded since 1950, and even exceeded in 1957 the quota of the agreement. The extent to which expansion may be attributed to the trade agreements with Italy and West Germany is questionable. Processed skins are admitted to those countries as raw or semi-raw materials, and thus are subjected to low tariffs or exempted entirely. Besides, the leather industry in those countries depends largely on imported hides and processed skins, and foreign supply seems indispensable whether regulated with trade agreements or not. On the other hand, exports to other countries with which no trade agreements have been concluded, such as the United States and Switzerland, have grown in the same direction without the effect of such agreements (Table 35).

However, in spite of shortcomings, trade agreements have been useful in opening wide possibilities for the Lebanese leather, whether through preferential treatment in the Arab markets, or by eliminating discrimination abroad. Those possibilities leave the door open to better marketing procedures, new and better qualities, and the like, to realize further expansion in the export markets.

### 3. Possibilities of Expanding Leather Exports

In the above two sections an analysis of the actual external markets for leather and the forces which have led to the existing pattern, was made. The question now arises as to whether it is possible to expand these markets so that the resulting larger size of exports would give a partial or total solution to the problem of excess capacity in the leather industry. Our attempt to search for new possibilities will consider first expansion under the present technical and organizational conditions in the industry, and then, under a reorganized industry with a higher technical level and a larger number of products. However, the second condition will be dealt with largely in Chapter VI as a part of certain proposals for the solution of the problem of excess capacity.

#### Possibilities under actual conditions.

A. Marketing. - Assuming that the industry will not change its present status both with respect to its organizational pattern and its technical level, then will there be any chances to expand its exports? To be able to answer this question, investigation into the marketing procedures followed so far should be made. The first thing which impresses the investigator is the absence of any marketing techniques or even ordinary methods in distributing leather in foreign markets. Generally, contacts are held directly between the producing tanners and importers abroad. Thus each tanner is his own salesman, and in most cases, this tanner-salesman waits while supervising his tannery for his clients to contact him or send for new orders. This

deficiency in marketing is partly responsible for the failure of the industry to expand in most of the Arab markets, or even to keep the level of its exports to certain countries such as Saudi Arabia. Taking this country as a case, it is noticed in Table 33 that leather exports to Saudi Arabia between 1952 and 1957 have declined by about 83 per cent of their level in 1952. During that period no new tanneries were established in Saudi Arabia, and no additional discriminatory measures were taken against Lebanese leather. Besides, the level of consumption of leather must have risen there due to the rising level of incomes and expenditures. The above decline then is necessarily accounted for in the weakness or complete absence of marketing devices on the part of Lebanese tanners. The stagnant market, so to speak, of Lebanese leather in Arab growing markets such as Iraq, Kuwait and Bahrein is not in harmony with the dynamic nature of those markets, and it seems that there is much possibility for expansion in those markets if more selling efforts and techniques were directed to them and to similar ones.

Lebanese leather products in their present state, are still needed in a number of Arab countries which have no leather industry such as Saudi Arabia and Kuwait, or have a relatively inferior industry with respect to technical level, variety and size of output, such as in Syria, Iraq, Jordan, and a number of Arab countries in Africa (other than Egypt). For the introducing of new selling techniques, the establishment of a selling agency or board seems to be a necessity. This agency may represent the whole industry and may thus be organized by the Tanners' Union, or it may be established by certain



leading tanners and work for them exclusively. This agency would specialize in selling, and in order to extend its selling efforts to the target markets, it should have a system of representing salesmen residing in those countries. The job of those salesmen would be to carry on market research, contact customers, advertise Lebanese leather, effect sales with all necessary operations, and all similar promotional work realized by selling agencies. This selling agency may also extend its activities to other non-Arab countries in Africa which have started recently to import certain leather products from Lebanon. The markets of these undeveloped countries can probably absorb large quantities of Lebanese leather products.

With respect to the markets in the advanced countries, it seems that under present conditions, the expansion of exports of processed skins is the main possibility which can be hoped for. Lebanese exports to those markets form but a small fraction of their total imports, and it seems quite possible to promote exports of such processed skins by improving the present selling means. The proposed selling agency may undertake the job of expanding sales to those countries through direct representation and contacts. Besides, such expansion necessitates the improvement of existing marketing procedures such as better packing of skins, better grading, more efficient delivery, and the like.

B. Trade agreements. - In addition to the above possibilities which are assumed to spread from private initiative, there seems to be other possibilities for expansion through government action. In

spite of existing drawbacks and shortcomings which were pointed to above, trade agreements still can be a useful tool of trade policy aiming at eliminating tariff barriers and discrimination, if properly managed. Besides, they provide a good means for advertising the products exchangeable between the contracting parties. Thus, Lebanese authorities may share to a large extent in expanding leather exports by attempting to negotiate a large number of liberal Arab agreements which provide for the entire elimination of tariff barriers and import licenses on Arab industrial products including leather and leather products. A good example which should be extended to other Arab countries is the trade agreement with Jordan which exempts leather, with a number of other industrial products, from tariff duties. This policy is not too far from realization as it is in line with Arab economic policy aimed at, or hoped for. With a large deficit in its balance of trade, Lebanon is put in a favourable bargaining position while negotiating such agreements, in addition to its free trade policy. A reduction of 25 and 50 per cent of normal tariff on a number of industrial Arab products as provided by the Arab Economic Agreement is truly a step forward in expanding the Arab market, but the benefit from this reduction with respect to leather is still handicapped by the high tariff rates in certain Arab countries such as Syria and Iraq (Tables 38 and 41). Other countries, such as Jordan and Saudi Arabia have lower tariff rates on leather (Tables 39 and 40). However, the entire removal of tariff barriers should remain the ultimate goal of an inter-Arab trade policy aiming at establishing an Arab market.

The non-Arab trade agreements, as was stated above, could not induce sufficiently the other parties to import leather from Lebanon.

It is doubtful whether the Lebanese negotiator can succeed in giving leather, and perhaps some other industrial products, a preferential treatment in the bilateral trade agreements providing for balanced trade similar to that given to citrus fruits and bananas (i.e., fixed quotas). Such an attempt, if successful, could open wide possibilities for leather exports. It seems quite probable that it may succeed at last in the case of processed skins. The other non-Arab free trade agreements, in as far as they benefit leather and similar products by exempting them from import licenses or allotting to them accepted quotas, remain a good measure for providing new chances and possibilities for leather. The government's policy therefore should continue in this sense although the results with respect to leather have not yet been outstanding.

Possibilities within prospective conditions.

Leaving the assumption of static conditions in the industry, we may forecast a reasonable expansion in leather exports in case this industry is reorganized on a new scientific basis, both managerially and technically. The leather industry in Lebanon stands in an underdeveloped area which, while still backward industrially, needs to a large extent the products of the Lebanese industry. But as economic progress takes its way, the countries in this underdeveloped area build easily and quickly their own leather industries to a managerial and technical level at least parallel to that arrived at in Lebanon. However, those countries, including Lebanon, still import high qualities of leather, and, on the other hand, do not consume certain foreign

made types of leather as they are too expensive. If the leather industry in Lebanon could raise its technical level enough to produce higher quality leather and new types not yet produced in the area, then it is quite probable that Lebanon would become the main supplier of such high quality leather products in the Arab countries and the Middle East.

There are enough reasons to believe that such change in the industry can take place in Lebanon. With a relatively more advanced social and economic background, the existence of some technical centers or institutions, more contacts with technically advanced countries, and a number of facilities and economies in such matters as climate, transportation, power, finance, and the like, one may expect such a reform, if not a revolution, to take place in an industry such as leather, whose case may develop into a model for other industries. In Chapter VI, possibilities and suggestions conducive to such reform will be discussed in more details, together with the results which they may lead to.

## CHAPTER V

### ATTEMPTS TO SOLVE THE PROBLEM OF EXCESS CAPACITY

#### 1. The Tanners' Solution

Excess capacity in the leather industry has been worrying the owners of tanneries for the last few years, and it was in 1957 that the tanners started serious work on the problem. The problem as seen by the tanners was that the industry as a whole had been over-capitalized in the sense that too many plants and too much equipment have entered the industry in excess of that optimum needed to produce the demanded output. The logical response to this assumption was that either aggregate output should be restricted to a fixed level regardless of capacity, or that excess capital equipment should be withdrawn from the industry.

For the first solution, attempts were made to form a kind of cartel whereby quotas of production would be distributed over the various tanneries. However, the difficulties involved in such an organization were foreseen by the planners, and it was anticipated that dispute over the amount and distribution of quotas would arise. Besides, strict control of such quotas to the prescribed quantities seemed impractical. Thus, plans turned to the second possibility, namely, the merging of all tanneries into one production unit organized under corporate form.

Meetings held by the leading tanners in 1957, and particularly in the last quarter, arrived at the preliminary steps for merging.

In the first place, the experiment is to be started in the sole leather branch of the industry after which it may be moved to light leather tanneries if successful. The plan was to organize a corporation for the production of sole leather, with a capital stock of LL 2.5 million consisting of 25,000 shares at LL 100 per share. Stock ownership was to be limited to the producers of sole leather already in the industry. Stock allotment was to be made on the basis of output by individual tanners for the last five years, and at the rate of 10 shares per average ton of production. Consideration should be made to tanneries with relatively large capital investment, and thus a higher ratio should be allotted to them depending on the quality and size of capital equipment, space, and other facilities they have. Payment for stock subscriptions was to be partly in cash, and partly in installments. However, an arrangement was to be made for tanners who cannot afford to pay the necessary funds, and this to be in loans made by other members of the industry.

With regard to production, it was planned that the demanded output would be produced in a few efficient tanneries already in the industry, and thus about 20 tanneries were to be closed. However, the planned corporation was to pay a form compensation or royalty of about 20 L ps. per kg. of average production to the owners of those closed down tanneries, in addition to their share in profits. It was believed that such a compensation would help in preventing them from using their tanneries for private production. On the other hand, rent would be paid to the owners of the utilized tanneries. Thus the planned corporation was to operate few efficient tanneries mainly in Mashghara, with one or two in Beirut. Collections from subscribed capital would serve

partly as working capital, and partly to modernize the operating plants.

The above scheme demanded that all tanners should join the merger, and thus none should be left outside or allowed to engage in private tanning. Besides, it claims to afford two factors which eliminate excess capacity in the industry: the one is the physical withdrawal of a large number of tanneries from production. The remaining plants would be working at full capacity and unutilized capacity would be located in the closed ones. In addition, competition would thus be eliminated, and by restricting output to a size which allows the raising of prices above their level under existing cutthroat competition, a form of monopoly profits would be reaped which would be above the actual level of profits in the industry. The other factor which this merger claims to afford is that it establishes the basis for large scale production with the scale economies it entails. In other words, it solves the problem of indivisibility of certain factors of production which the industry cannot employ due to the small scale of production followed by its individual plants. The introduction of indivisible factors would involve marketing procedures, management, technical operations, laboratories and research, and the like. With regard to management, no such details were taken into consideration, since the production policy was the main concern of those who planned the project. However, it was agreed implicitly that management principles which rule usually in corporate organizations should apply in this merger.

The project, as set above, seems to carry the seeds of its failure due to the multiplicity of problems it tackles. It differs

from the ordinary establishment of a corporation in that it has to settle a number of questions of which the allotment of shares is the major one and with which negotiations stūbled. The workability of this project was tested when the tanners attempted to make a schedule for stock allotments among all participants. In the first place, each tanner tended to exaggerate the volume of his average output during the last five years. As there was no reliable data for such outputs, the planners investigations and estimates were not generally accepted by individual tanners concerned. Secondly, tanners with better equipment and greater capacity demanded a higher ratio of stock allotment than that given to smaller and less efficient tanneries. It was not possible to agree on this exceptional ratio since other tanners emphasized the volume of actual output rather than the volume of physical capacity as indicative of the tanner's goodwill, or ability to produce and sell regardless of the size of his equipment. Upon disagreement on these issues, the project was put insuspension. The scheme was proposed and supported enthusiastically by a group of leading tanners in Mashghara who suffered most from excess capacity in their sole leather tanneries. Others were interested in it, particularly the Chairman of the Tanners' Union as he himself had a considerable amount of idle capacity in his mixed tannery (producing upper and sole leathers). It was agreed in principle that a committee elected from the Union should put this scheme into effect when final agreement on terms is arrived at.

#### Evaluations.

In evaluating the above scheme, the economies of large scale



production seem to be the major advantage in merging a number of small production units into a large firm which can enjoy the benefits of large scale economies whether in management or production. However, scale economies would be handicapped to a large extent due to the fact that the scheme does not attempt, at least in the short run, to establish a new plant, or few plants, of optimum size which can benefit from scale economies. It would rather operate few of the existing firms which are small in size and even dispersed in location. Thus, a proper division of labor in such small plants and an effective control of operations would not be possible. Besides, certain indivisible factors such as technology and supervision, certain forms of equipment, and the like, could not be utilized efficiently among such dispersed small plants even if they were owned by the same firm. A second point to note in the project is its willingness to pay rent, or some form of royalty, to those tanneries which will be closed down. Such a payment would indeed burden the costs of the new firm, and it is quite probable that it will be shifted to consumers in higher prices.

Finally, assuming that this scheme would overcome all disputes and conflicts among the participants and come into existence, the new emerging firm should maintain a full monopoly over the industry. In Lebanon, where the establishment of new plants or industries should be approved by the Ministry of National Economy, the above sort of monopoly may be easily protected by the government within the present industrial policy concerning new industrial establishments.

The wisdom of establishing such a monopoly over the production of leather is highly questionable from an economic view. In the absence of competition, there would be no guarantee that the quality of leather would be improved above its present level, or that new kinds would be developed. In other words, this branch of the industrial sector would probably lose its dynamic nature initiated by competition, and this loss would be reflected in the contraction rather than expansion of markets both local and foreign, in higher prices transferred to the consumers, stagnant qualities of leather and even degraded ones.

## 2. Attempts of the Industry Institute

Leather industry was among the Lebanese industries which drew the attention of the Industry Institute in Lebanon. In studying the leather industry and attempting to improve its technical level, the Industry Institute had not really in mind the problem of excess capacity and the solution to this problem. The attempts of the Institute aimed at better quality, new types, and a better and more efficient utilization of materials and labor. The Institute forecast that an overall improvement of the industry would lead to greater sales and output. In terms of excess capacity, this would mean a greater demand for leather and a greater output, and thus a partial, if not complete, solution to the problem.

It was early in 1955 that the Industry Institute established a leather section to specialize in leather problems. It employed in May of 1955 an American expert as consultant to the section. This

consultant started his activities by surveying a large number of tanneries in Beirut and Mashghara, with a number of industries producing leather products. His findings were presented to the Institute in a report<sup>69</sup> which dwelt mainly on the following points:

1) Quality of workers, buildings, and equipment.

Workers in the field, both employers and employees were esteemed by the consultant as capable and experienced, although none of them received any technical training. Lack of training is mainly responsible for poor control noticed in most operations. With regard to buildings, he emphasizes that an average tannery has better building than a similar one in the U.S.A., although the latter is better lighted and equipped. The need for drying equipment almost in all tanneries, is emphasized mostly. This need seems quite urgent for better leather. More equipment is recommended in the shoes and hand bags industries.

2) Leathers and leather products produced. Types of leathers and skins and hides used in their manufacture, as well as leather products produced locally were listed, all of which have been mentioned in the course of our study.

3) Technical remarks: The consultant's remarks treated mainly quality and yield. They may be summarized in what follows:

a. Sole leather. - Color and finishing are generally good, but stiffness is too high, and the surface cracks easily. These defects could be reduced by such factors as better soaking, fleshing after liming, better liming and more controls over bating and delimiting.

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69. Published in mimeograph in 1955 under the title: "Report on the Tanning and Leather Industry in Lebanon with Recommendations for its Improvement, by Kenneth E. Bell".

improving drying operations, and reducing mechanical work in the rotating drums such as in Mashghara. Yield in sole leather is generally low, and this is due to loss in the hide substance in several operations: a too long soaking period or high temperature; a short liming period and thus insufficient swelling; uncontrollable bating resulting from the use of hen manure; the failure to determine the quantity of tanning materials required because the acidity of hides in process remains undetermined; poor drying controls; and too much mechanical drumming.

b. Upper leather. - A large percentage of upper leathers examined were found to be good. But most of them have two main defects, namely, poor breaking and lack of softness and uniformity. Recommendations to treat these defects rely mainly on improving and controlling such processes as soaking, liming, bating, mechanical motion, and drying. Improved tanning, oiling, and finishing are also needed, with a better watching of relative humidity during the last finishing processes. Yield could also be increased through controls similar to those mentioned for sole leather. Besides, humidity in leather before staking and in the finishing processes should be controlled to the optimum amount. Tacking was observed to destroy a large area of the tanned skins, and thus improved tacking was recommended.

4) New products recommended. The Institute's consultant

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70. In a later report the Institute's consultant recommended the "pasting process" not yet known in Lebanon, which increases the area yield and smoothness in upper leather. It consists of pasting tanned skins in a stretched form to special boards to be dried.

recommended the introduction of new products into the industry, namely, chamcois and suede leathers, tanned shearling skins (wool or hair on) of sheep or goat, and wall boards made from upper leather shavings.

In addition to the above survey, the Institute started a pilot-plant in the leather section, i.e., a small tanney equipped with all tanning equipment on a small scale. The purpose of this pilot-plant was to carry out experimental work, tests, demonstrations, and the like. It was felt that need calls for a permanent local leather expert to head the leather section. Thus a Lebanese graduate of the A.U.B. with a chemistry major was selected for this purpose and sent to Lowell Technological Institute at Massachusetts (U.S.A.) where he spent six months in the School of Leather Engineering and at the same time visited a number of leather centers. This training trip was accompanied and supervised by the Institute's consultant.

The Industry Institute held wide contacts with the tanners through its consultant and its trained leather chemist. Visits to a large number of tanneries in 1955 and 1956 were made with the purpose of "selling" the Institute's services available to tanners. In these visits questions were answered, recommendations were made, group demonstrations with tannery motion picture were made in several occasions, one of which was in Mashghara. Meanwhile, some tanners resorted to the Institute for their problems, and a number of contracts were signed with the Institute for carrying out certain experimental work and tests. As the Institute's equipment was still lacking, a number of such tests was made in the A.U.B. laboratories. The idea of a self supporting leather section thus seemed on the way to success.

Furthermore, the Institute led a research on the procedures of killing cattle, flaying and curing their hides as followed in Lebanon and the Arab Middle East. The findings of this research were published by the Institute in 1957.<sup>71</sup> Results showed that great losses in hide substance were incurred because of poor handling and improper methods of slaughtering cattle and flaying and curing hides. Deficiencies were pointed to, and better methods were recommended.

After tracing the lines of this experiment which was undertaken by the Industry Institute, it is quite interesting to follow up its effects on the leather industry. So far, results were quite unfortunate, and even a complete failure. The tanners realized very soon that the Industry Institute attempts were of practically no value and thus ruptured their relations with the Institute. On the other hand, the Industry Institute officials realized too that the tanners were not interested in their efforts nor were willing to cooperate or make use of the services which the Institute was willing to offer. After the departure of the American consultant in 1956, contacts between the two parties declined. Recently (July 1958), the Lebanese leather chemist found that there was no work for him to do in the leather section, and thus he withdrew from his post. Since that time all activities of the leather section have almost ceased, and the pilot-plant which was still under construction was abandoned midway.

In commenting on this unsuccessful experience, it is difficult

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71. This was through a report titled: "The Quality of Leather as Affected by Defects in Killing, Flaying and Curing, by the Industry Institute - Lebanon. January, 1957", published in mimeograph in Arabic and English.

to decide which party is to be blamed for the failure. On the one hand, the tanners claim that the Institute's leather experts are not of the standard needed. The American consultant, although proficient in one branch of the industry (namely, shoe-lining leather) does not seem to be well-versed in the other types of leather. The Lebanese trained chemist is not yet experienced in the industry, and he needs a number of years of actual experience in leather manufacturing before he may be of real help to the industry. These claims are supported by the tanners' belief that tanning is not a purely scientific process governed merely by formulas and chemical laws. There is much place in it for handicraft, particularly in upper leather, and therefore a true expert must have accumulated a sizeable amount of experience and handicraft in addition to his scientific background. Thus most tests or experiments referred to the Institute practically gave no valuable results, or at least, they failed to give any satisfactory results in the tannery when they were moved to it from the laboratory.

On the other hand, officials of the Industry Institute claim that the tanners have little incentive to improve the quality of their leather, or to change their long-lived tanning methods. Thus they did not follow up the tests or experiments referred to the Institute, and in many cases contacts were suspended or deferred because of lack of interest or unwillingness to pay the little expense incurred. The Institute believes that the real reason should be sought in the tanners' attitude towards scientific research. Being almost all of little education, they seem to have little faith in or understanding to the scientific method based on both theory and empirical testing.



Taking both views into consideration, the following conclusions may be drawn:

1) The tanners' claims with regard to the proficiency of the Institute's experts were true to a large extent. Officials of the Institute admitted that this was true to some extent, particularly because the imported expert was chosen and paid by I.C.A. in Lebanon (International Cooperation Administration) and not by them, and thus they had no chance for making a choice. It was also admitted that a leather expert should have a real experience in leather over and above his theoretical background, since handicraft in tanning cannot be ignored, though not to be esteemed to the same degree claimed by the tanners.

2) It seems quite evident that the job of technical institutes, such as the Industry Institute, and particularly in underdeveloped countries, is not purely technical. There is much room for psychological and human factors which decide to a large extent the degree of acceptance of scientific knowledge. In other words, the job of such institutes is not only to change existing technical levels, but also to change human attitudes towards science and progress. Thus, the attitude of the Lebanese tanners towards scientific experimentation must have been considered by the Institute as given and as part of the problem of backwardness in the industry. More efforts thus must have gone to the changing of this attitude, i.e., the idea of technical change and progress must have been "sold" adequately first before attempting to impart it to processes and machines. With this approach in mind, probably more social and managerial work was needed for the success of the experiment along with, of course, the proper type of technical skill needed.



## CHAPTER VI

### SUGGESTIONS

#### 1. The Problem Recapitulated

The previous chapters have presented the problem of excess capacity as faced at present by the leather industry, and the attempts which have been undertaken to find a solution to that problem. Before attempting at any further suggestions, a recapitulation of the problem is given below to help focussing our study.

The problem, as stated before, centers around the fact that the industry has accumulated a sizeable amount of unused capacity. In addition, the existence of such unused capacity has tempted tanners to expand their output to a volume which may be disposed of only through severe price competition and low rates of profit.

Demand for leather has been studied both in local and foreign markets with the purpose of finding new possibilities for raising demand so that the industry may work at full, or at least, at some higher rate of capacity. Surveys of local market have led to the conclusion that the consumption of the present types and qualities of leather produced by the industry can be raised only with the increase in population and the level of national income. Surveys of foreign markets have shown that, in general, Lebanese leather seems to have been demanded largely in the countries which do not have any leather industry, and whenever such countries build their own leather industries, then local products can displace easily Lebanese leather as it is not endowed with any superior qualities. With this portrait

of the problem in mind, a plan for the reorganization of the industry is suggested with the belief that it may open wide possibilities for the industry to work at higher levels of capacity.

## 2. Proposed Reorganization of the Industry

Our proposal assumes the willingness of the majority of tanners to find an outlet for the problem, and therefore it relies largely on private initiative rather than on decisions taken by the government or any other collective authority. This willingness has been so far felt in the awareness of the tanners of the problem and the risks it entails, and, in addition, in the solutions they have so far attempted or looked for. Besides, the problem faced by the industry is a two-fold problem in that its background is not the same in the two sections of the industry, namely, the heavy and the light leather sections. Hence, the proposal is in two parts, the one for heavy leather and the other for light leather.

### Proposal for the sole leather section.

The small size nature of sole leather tanneries has already been emphasized as a most relevant feature in the industry.<sup>72</sup> In this type of structure no leadership was possible with regard to standards of output and prices. Thus, it was left to price competition to determine the pattern developed by the industry. Besides, this type of structure has excluded the possibilities of large scale production and the economies which may be derived therefrom. Thus, mergers or

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72. See Chapter II, Section 2.

consolidations seem to be the first step in our proposal. This step does not mean the amalgamation of all sole leather tanneries in one cartel, or corporation, for instance. It rather calls for the creation of few strong and competing mergers which would assume leadership in the industry. This leadership, as will be seen later, is in the production standards and policy which those mergers can arrive at owing to technical and managerial facilities, to be discussed in more details below, which should form an integral part of their new position. As to the location of these mergers, Mashghara seems to be the most convenient center. This town has been so far the home of sole leather industry. With its abundant supply of water, abundant and cheap skilled labor, experienced entrepreneurs, cheap rent, and all other traditional aspects related to the industry, this town offers the most economic location for the proposed new tanning units.

The formation of a first merger in Mashghara would probably lead to the formation of other mergers. This movement may be started by few tanners with personal understanding and ties which is quite easy to attain in a small town like Mashghara. Such personal contacts and even family ties still characterize most business organizations in Lebanon, and it is unlikely that this principle will fail in Mashghara. The aim would be to form a new firm which merges a number of existing firms which chose to merge voluntarily. As to the organizational form, our model merger would preferably take the form of a partnership at least in the short run. This is due to the simplicity of this type of organization as compared with the corporate form, and besides, due to the personal element involved in a partnership and the direct contacts and controls which may be gained from

the experienced merging partners. Our model merger should select a single tannery to operate which should be reorganized according to modern techniques. The merging partners should assemble any useful and needed equipment in this tannery with all needed additions in equipment, units, space, and the like. With regard to size, personal investigation with experts in the field has led to the conclusion that the minimum size of a sole leather tannery which may benefit from the basic economies of large scale production should not fall below an average capacity of 360 tons per year, employing 15 workers daily. However, optimum capacity for large scale economies is above that minimum, and therefore our model merger has to choose a higher capacity to start with.

The new possibilities open before such a merger would include the following:

a. A proper division of labor whereby the whole tanning process, owing to large scale production, may be divided into definite and integrated operations which may be controlled fully by specialized foremen to each operation. This division with the better standards of control it allows, should lead to the production of superior qualities of leather which cannot be produced under the present system of control.

b. The proposed higher scale of production allows the utilization of certain indivisible equipment such as fleshing machines, wringing machines, drying units, and the like. Fleshing machines give uniformity to leather highly needed in the standardization of the product. Likewise, wringing machines control the amount of water

in processed hides, and drying units solve the problem of delay in cold seasons and certain defects in leather which result from the absence of drying systems. In addition, such types of equipment, when used at full capacity, reduce average costs substantially by replacing much of the manual work and handling needed at present. The financing of such new equipment will be dealt with later as the whole financing of the plan will be discussed.<sup>73</sup>

c. The higher scale of production allows the employment of full time experts or chemists, the establishment of laboratories and the carrying of research which is entirely absent under the existing conditions, or, in very few cases, substituted with empirical attempts based on the trial-and-error method. Such experts and trained chemists are not available at present in Lebanon, and thus have to be called from abroad. However, the demand for such expert knowledge will probably induce specialization in leather technology in the long run, and Lebanese experts would become more available.

d. Economies of large scale marketing may also be attained in our model merger. Large scale purchasing of raw materials allows in most cases lower prices and better credit terms. Besides, by purchasing in bulk, our model merger can acquire better quality of raw hides which scarcely enter Lebanon at present.<sup>74</sup> Under such conditions, it would pay to employ purchasing agents to make selections in the country of origin itself. This procedure is being followed by certain American and German tanning firms which make most of their

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73. See below, page 126.

74. Mr. K. Chatalbachian, owner of two large upper leather tanneries in Lebanon and Syria, informed the author that by purchasing his raw materials in bulk for the two tanneries, he saves 10-12 per cent of their cost, and can get better hides which other tanners cannot do.

purchases of pickled skins in Lebanon through such specialized agents. Meanwhile, selling agents may be employed, advertising and other selling techniques may be explored at full.

e. Other managerial economies may be attained by employing capable managers and accountants. Most important would be the introducing of cost accounting which has been lacking so far.

Having cited above the possibilities which a merger may explore, we still have to design a production policy which it should follow so as to assume a leading position in the industry and a high marketability for its products. This policy may be defined in two points:

a. New types of heavy leather should be produced. These types include leathers such as flexible and impermeable sole leathers. The production of these types needs practically the same equipment, but it requires special techniques mainly in tanning and oiling.

b. The above mentioned possibilities, both technical and managerial, should enable our model merger to produce superior qualities of heavy leather and probably at reduced costs. However, this alone does not guarantee to these products a high saleability or a distinguishing quality highly esteemed by the consumers. The latter on the whole are quality ignorant, and they have not yet been used to differentiate the products of any sole leather tanner. Thus the merger should adopt the policy of differentiating its products so as to be recognized and identified easily whenever met. To do this, a system of uniform standards should be established, i.e., the leather produced should be graded according to fixed and highly differentiated standards. The standards should be based on scien-

tific measurements, such as thickness, amount of extras and non-tanning materials included, flexibility, strength (tensile and stitching resistance), and the like. In addition, these grades and standards should be heavily advertised both to shoe-manufacturers and shoe-consumers. In other words, the consumer should be educated so as to become quality conscious. Thus the grades and standards of our model merger may become easily distinguished and probably highly sought by the consumer. Besides, there are a number of purchasers such as the Lebanese army, and even all other Arab armies, who do not buy leather except according to certain specified standards. It has been reported that many sales were turned down because no Lebanese tanner could offer leather to the specified qualities, or could offer any quantity of a uniform standard. It is interesting to note that a major reason which prevented so far the establishment of large scale shoe-factories in Lebanon is the absence of uniform standards of leather needed for the production of uniform qualities of shoes.

The above stated production policy would endow our merger with a leading position, with products which cannot be easily competed by inferior rivals. Besides, greater sales would be expected both in the local and outside markets. On the other hand, the rise of such a merger would probably lead to the organization of similar mergers, and it is highly probable that in a short period the industry would consist of a few competing mergers each with differentiated products, and all making use of large scale economies. The history of the leather industry in the United States has witnessed

a similar movement on a larger scale. Thus between 1869 and 1954 this industry moved from 4500 small tanneries to 580 large ones which almost resulted from this stepping to higher scale production through voluntary mergers and consolidations.<sup>75</sup>

It is to be noted that whereas the above proposal may lead to the scrapping of much of the existing unused capacity in the industry and the introducing of modern equipment, it may also reduce or eliminate excess capacity in entrepreneurship by expanding output, and, necessarily, raising the level of profits. However, a number of firms may remain outside any merger, in which case they become marginal firms in the real sense, i.e., in that they exercise no significant effect or leadership with respect to price and quality. Although the chances of their viability become less, it is quite possible to expect that these firms may continue to cater a small portion of the market with inferior and irregular kinds of sole leather which may still be demanded by some consumers not adapted to the changes in the industry.

Proposal for light leather section.

The few light leather tanneries in Lebanon, as was shown in Chapter II, consist of relatively large plants most of which are highly equipped and have all necessary means for large scale production. Thus the problem faced by these tanneries differs in nature from that faced by sole leather tanneries. However, none of these tanneries specializes in a single product. Almost all of them produce

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75. Alderfer, E.B. and Michel H.W., Economics of American Industry, (New York 1957) pp. 459-460.



a variety of light leathers, and in many of them sole leather is produced too. Thus, whereas a single tannery, as a unit, has all facilities for large scale production, in practice very few scale economies may be realized since every tannery produces various types usually in small quantities, and almost none of these types is produced alone in a single tannery on a large scale. The problem as faced by these tanneries is not then of magnifying the size of the average tannery to reach a large scale level of production. It is rather a problem of specialization, or in other words, the full utilization of each tannery for the production of a particular type of light leather so that scale economies may be attained in each tannery.

In order to realize the above principle, one may think of a production cartel whereby quotas of output would be distributed over producers not according to specified quantities, but rather according to specified types each of which would be allotted to a particular tannery. However, the success of such a cartel is highly doubtful, and the solution should be sought in other fields. The solution seems to be again in mergers or consolidations among the existing tanneries. A model merger of this type would allow a single firm to own a number of light leather tanneries which would make it possible to dedicate each tannery to the production of a unique type of light leather, or at most, few related types.

The advantages of such a merger are much similar to those mentioned above for the heavy leather merger. Specialization allows large scale production in each tannery, and thus scale economies may be attained. Indivisible factors can be employed at full capacity, whether in equipment or in personnel. Marketing economies become

also within reach. Purchasing in bulk provides better prices and terms as well as better qualities purchased. Selling agencies can be organized on the specialization principle, and such organized selling efforts would have much to do in expanding markets.

The production policy of this model merger, as with the sole leather merger, should rely on two principles, namely, innovation and standardization. With regard to innovation the field is wide open for a large variety of light leathers which may be introduced. In the first place, the types produced at present can be highly improved by studying the whole process and basing it on modern scientific methods. Besides, better purchasing provides better hides and skins which may add to the value of the product. Secondly, mention was often made in the previous chapters to new types of leather that may be introduced. These types need special techniques and sometimes special equipment not known to Lebanese tanners. Expert knowledge is highly needed, and thus laboratories and experimentation will have to occupy a position of primacy. Among the types that may be introduced, garment leathers come first. It is quite striking to observe that Lebanon exports over 600 thousand processed goat and sheep skins for leather garment industries abroad, while it imports few leather jackets and similar leather garments usually sold at very high prices ranging between LL 200 and 300 per average jacket in retail stores. By dedicating one (or more) of its tanneries to the production of garment leathers, our model merger may convert a large part of these processed skins into garment leathers for local consumption and export markets. Special cheap types of garment leather may be produced

for the use of workers and other groups such as policemen in rainy seasons. Such garments have certain qualities superior to those of wool, mainly in that they preserve warmth better and do not wet quickly. Besides, they last for a longer period and thus, to a worker, they may become the most economical kind of garments in rainy seasons. It is quite probable that a local supply of leather garments at lower prices would induce a higher demand for them, and consumers would grow a taste for them, although few wealthy consumers at present use leather garments as a luxury dress. Likewise, export markets offer wide possibilities for such products.

Glove and chamois leathers may also be produced along with garment leathers as they come from the same kind of skins (goat and sheep skins). Chamois leather is highly spongy, and is demanded for the cleaning of cars, furniture, and the like. Our model merger can produce in two sections, each using related materials and processes. One section may specialize in cow and calf leathers, and the other in sheep and goat leathers. The former may include a variety of upper leathers such as box, side, suede, embossed, shrunk, printed, patent, glazed kid, and similar leathers. The latter may concentrate on goat and sheep skins products, such as garment and glove leathers, chamois and shoe-lining leathers. In addition, this latter section may also engage in preparing pickled and half-tanned skins for export markets, especially when excess quantities of such skins are on hand.

The idea behind dividing production into two sections lies in that division affords many economies in sorting raw hides and

skins. Thus, with one section for hides and another for skins, the different sizes and qualities of purchased hides and skins can be sorted in each section in accordance with the types of leather produced. However, this should not imply that each section should operate only one tannery. On the contrary, it may employ a number of specialized tanneries depending on the volume of output. It is to be noted also that this division facilitates the introduction of new systems such as pasting which gives more uniformity to leather, a finer grain, and more yield.

The other line of production policy is product standardization. As it was seen in the proposed merger for sole leather, the production of standard grades of leather with specific and uniform qualities is a major factor in the strife for leadership. Standard products with regard to physical and chemical structure, color, strength, etc..., if heavily advertised, become easily recognized by the public which has usually more confidence in such standardized products. This policy of standard products could be explored more by proposing that our light leather merger enter a major leather products industry such as the shoe industry, in combination with a heavy leather merger. The two firms with their standard products, could create a differentiated leather-shoes industry, with products of uniform grades which the public would probably prefer to the present heterogeneous products.

With the formation of such a merger in the light leather industry, one may expect the rise of other mergers, and it would be quite probable that in a short period, the industry would consist of few strong competing mergers with specialized tanneries. The outcome

of such a movement would be a wider variety of leather types, better and more uniform qualities, lower costs, and greater output. A high quality output of leather, whether heavy or light, can be disposed of easily when produced at low costs which is possible to a high degree in our proposed mergers. In addition to the proposed economies and techniques, cheap labor remains another factor in reducing costs. Low costs under such a competitive structure, would be transferred to consumers in lower prices which would probably expand consumption. It is believed that such leather can find markets not only in the surrounding underdeveloped countries, but also in the advanced countries of Europe and America.

Supplementary proposals.

A set of proposals may be presented here either to supplement the preceding two proposals, or as an expected resultant of the new organization of the industry. Following is a summary of these proposals:

a. A mechanized shoe-industry. - In Lebanon the shoe-industry has not yet entered the large scale mechanized stage. It is believed that the main reason for this delay is the absence of uniform standardized quantities of leather. This factor has been well emphasized in our preceding proposals, and it is expected that the proposed organization, or better, revolution in the leather industry, would induce a similar revolution in the shoe-industry and probably in the other leather products industries. A mechanized shoe-industry can produce cheaper and better shoes. In hand-made shoes for instance,

much of the strength of the sole leather is lost because of soaking it in water which dissolves much of the extras and other strengthening materials added to the leather. Similarly, the mechanization of the hand bags industry would lead to a reduction in the prices of ladies hand bags which are fantastic at present, and would enable these products to regain their position, at least partly, which has been overshadowed by plastics. It is expected also that shoes, hand bags, luggage products, and other leather products, when produced on a mechanized large scale basis, would find better markets abroad.

b. By-products. - The only by-product produced at present in the industry is glue which is manufactured from raw hide trimmings and flesh wastes. However, a number of other by-products could be produced profitably, and thus deserve further study and research. Cardboards and synthetic soles are common by-products manufactured from leather shavings. Hair which is lost in liming under present procedures, could be used gainfully in a number of by-products. Such by-products, if processed successfully, would reduce costs sensibly.

c. Help from the Industry Institute. - It has been assumed so far that the proposed mergers would employ their own experts or chemists either from local sources or from outside. However, the Industry Institute is in a position to offer technical assistance for the industry in its proposed organization. In the first place, it can cooperate by finding experts in leather abroad due to its wide contacts with research centers. Secondly, the Institute may reactivate its leather section and develop its pilot-plant for tanning. This

pilot-plant, financed fully or partly by the tanning firms, should be turned to a research and training center with its own chemists. Tanners thus may refer to it tests and some research problems which they cannot perform in their own tanneries. Furthermore, its training services would be even of more importance. It is suggested that a training scheme should allow each foreman or chemist in a tannery to spend a period of training in the leather section of the Institute for, say, two weeks or the like, after which another trainee is taken, and so on. The leather section would have thus continuously one or more trainees. Besides, the Institute can assist in market research and similar projects.

d. Financial help. - The formation of mergers such as described above, with additions in equipment and other capital units, would need financial resources for such fixed capital as well as for working capital. It is quite possible to provide part of these needs from the working capital of some merging tanners, but probably this will not cover all needs. Since it was proposed that these mergers be organized as partnerships, and not corporations, no public subscriptions to capital would be expected. Whereas short-term loans could possibly be provided by commercial banks, no such possibility seems to be available for long-term capital needed. One possibility would be to introduce financing partners with equivalent interests in the merger. These mergers can attract new capital if they can show the prospects of their reorganization and the few principles it is based on. However, the most appropriate resort for such type of credit at present is the Agricultural Industrial and Real Estate Bank in Lebanon. The financing of such industrial reorganization seems to

be a typical activity for which this Bank was established. Such re-organization is a daring step in industrial development which may lead to similar steps in other industrial concerns. Pressure thus should be directed to the Bank in order to support the movement in the leather industry by providing it with its long-term needs of capital. Probably the Bank's attitude would be greatly influenced by the pressure exerted by the merging tanners themselves, whether in its own administration or in other governmental centers.

e. Trade agreements.-The Government should act in harmony with the proposed developments in the industry. It should proceed with concluding liberal trade agreements with the Arab countries as well as the other countries, with special care to leather and leather products. Such agreements, as stated before, may expand exports by reducing or eliminating tariffs, and by removing discrimination and similar barriers. Besides, tariff policy should be coordinated so that tariff exemptions and protection should respond to the developments expected in the industry.

#### Practicality of the proposals.

To be of real value, to the industry, our proposals should be practical. In talking of practicality, our two proposals, i.e., the one proposed for heavy leather and the one for light leather, are to be discussed here since they present a general plan of re-organization, whereas the other proposals are only supplementary. The test for practicality is whether such proposals can be put into effect under existing conditions. Although our two proposals go too far in assuming an active class of tanners endowed with a dynamic spirit and an optimistic view with regard to prospected possibilities ahead, their practicality is felt in the following points:



a. Reality of the problem and search for solution.- The problem of the industry is real, and tanners have been so far looking for a solution. Thus, what has been suggested is not merely hypothetical, nor it tends to superimpose itself on a group of indifferent or disinterested industrialists. The fact that these tanners have worked on a too ambitious scheme for their industry <sup>76</sup> which proved to be impractical, implies their readiness to consider any other alternative as there are no indications which show that they have given up their search for a solution.

b. Simplicity.- The two proposals are simple in that they suggest the merging of a number of firms in each section of the industry into a partnership. This form of organization was suggested due to its simplicity, both with regard to formalities of formation and management. Besides, it appeals more to comprising partners as it preserves their direct control over the business which they would not be willing to give up such as in a corporation. The presence of partners in the business would be a valuable asset as it will benefit from their long experience in the trade. Furthermore, social factors such as personal relations, family ties, and the like, assist greatly in the formation of such partnerships as these factors are basic to the formation of business organizations in Lebanon other than sole proprietorships. Merging partners are already in business, and thus taking the first step, i.e., pooling their resources, does not seem much risky. If immediate gains are not realized, important losses

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76. See Chapter V, Section 1.

also will not be expected as there will be no reasons why conditions should turn worse than they are now. Once established, the development of the merger along the lines traced in our proposal seems within access, and even it becomes a necessity for its longevity.

c. Dealing with few individuals.- Dealing with a small number of interested individuals is another sign of practicality in our two proposals. It was shown in the previous chapter that the main reason for the failure of the tanners' scheme for organizing an all-inclusive corporation was because it deals with a large number of individuals with differing conditions and attitudes. Our planned reorganization starts with two units, one in each part of the industry, and each unit is to consist of few individuals in which case the chances of finding such comprising persons are great. The successful formation of one unit would probably lead to the formation of another unit, or units, and this type of consolidation, initiated by small groups, leaves the door open for like people to merge voluntarily. Of course, the type of assets owned and the liabilities assumed by the negotiating partners, in addition to personal factors, decide to a large degree the success of such attempts.

The practicality of our proposals can be increased if aid or sponsorship be extended from outside. Official bodies such as the Ministry of National Economy or the Ministry of General Planning can sponsor the realization of these proposals by carrying on all needed studies, and assuming technical, legal, and managerial advice. The Association of Industrialists may be named as another agency which can adopt the plan and work in conjunction with interested tanners for its realization. Mention was made above to the role played by

the Agricultural Industrial and Real Estate Bank in financing such projects, and it may be added here that this Bank may accelerate the formation of such mergers through a policy of extending financial support to all mergers formed within specified limits and conditions. Compared with its resources and the size of loans it has so far provided, the requirements of partly financing few such mergers would not be of a size which the Bank cannot meet.

## CONCLUSION

The preceding case-study of leather industry in Lebanon has been focussed on excess capacity in this industry. The causes which led to the rise of excess capacity as well as the factors which facilitate the accumulation of such excess capacity were studied and analysed. The problem was treated on the basis of finding a satisfactory solution to it. For this purpose output was studied quantitatively and qualitatively along with the markets and their absorptive capacity. The conclusions that we can make from our findings all center around an important fact, namely, that the industry with its present level of technology, organization, and managerial skills, can have very little chances to remedy excess capacity. Furthermore, the problem seems to become even more acute with the tendency of most customer countries to establish, sooner or later, leather industries with outputs which can be brought to match easily with the products exported to them at present from Lebanon.

Reliance on such markets cannot be stable, nor can it promise any expansion or remedy. This is because it is a reliance on ignorance and economic backwardness, or even better, on the exploitation of these two conditions in an age where all forces seem to have united to fight backwardness. Thus, the solution should be in line with the philosophy of the age, i.e., in fighting backwardness in the industry itself, in revolutionizing its principles and techniques, in scrapping its old-fashioned structures, and reorganizing it in the

light of modern techniques and on purely scientific bases. For this aim few suggestions were offered as means for paving the way to this expected revolution in the industry. It is believed that the proposed principles would enable the industry to produce a greater and better output. Being greater, it would occupy all those in the industry, although much of the obsolete equipment would have to be scrapped. Being better, the expected output has more chances in the existing markets, and in other markets which lie beyond the present horizon.

Our proposed principles leave us with an industry of high quality output, and this is not the end. The battle for this output should be fought, and it has great chances to be fought successfully. The proposed industry of tomorrow will have its problems, one of which would be how to dispose of its output. Nevertheless, the only solution to the problem seems to come through a higher output, and in as much as it is the only solution, the battle for a high quality product seems to be more worthy of fighting and more promising of success than that fought for an inferior product lacking any commanding qualities.

APPENDIX I

CONTENTS OF TARIFF NUMBERS  
USED IN THE THESIS

As Listed in the Tariff Schedule of the Lebanese  
Customs.

<u>Tariff Number</u>	<u>Content</u>
349	Sole leathers vegetable or chrome tanned, transmission belts.
350	Leathers from hides of big animals other than those included under Tariff no. 349.
351	Calf leathers, tanned only or finished.
352	Goat and sheep skins, pickled, half-tanned, or finished.
353	Patent leathers, gold, silver, or bronze coated leathers.
354	Buffed, suede and chamois leathers.
355	Unclassified leathers.
356	Leather shavings and scraps, old leathers.
357	Synthetic leather from leather scraps: a. for soles            b. other
358	Leather shoe-parts.
359	Saddling leather products.
360	Morocco leather products (made from goat or sheep skins tanned with sumac or chrome, used often in luggage and coverings), luggage products.
361	Leather garments.
362	Leather gloves.
363	Technical articles from leather or hides.
364	Products from leather or hides not mentioned elsewhere.

<u>Tariff Number</u>	<u>Content</u>
600	Heavy non-lined shoes from cow, ox, or horse hides leathers, dyed or with natural color.
601	Leather slippers.
602	Other leather shoes with leather or rubber soles.
603	Shoes from textile or vegetable materials not mentioned elsewhere, with leather or rubber soles.
604-a	Rubber shoes.
604-b	Rubber boots.
605	Shoes not mentioned elsewhere.
606	Shoe-uppers and other parts.*

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\* Leather parts are stated usually under tariff no. 358, whereas non-leather parts go under this tariff.



APPENDIX II

TABLES

TABLE I

Number of Tanneries in Lebanon Classified  
By Date of Foundation

Year	No. of tanneries established*	Approximate production in 1955		
		Sole leather (metric tons)	Upper leather (sq. ft. )	Processed goat and sheep skins (pieces)
1918 and before	10	634.8	1,445.900	166,800
1919-1928	3	203.1	—	15,000
1929-1938	12	491	2,003.300	75,900
1939-1945	5	128.1	294.400	219,200
1946-1950	3	47.9	220,000	9,100
1951-1955	<u>3</u>	<u>3.6</u>	<u>1,042,500</u>	<u>—</u>
Totals	36	1508.5	5,006,100	486,000

\* The 1955 Census covered only plants which employ a minimum of 5 workers and above.

Source: The Ministry of National Economy of Lebanon, individual questionnaires filled by the leather tanning firms for the Industrial Census of 1955.

TABLE 2

Leather Tanning and Finishing: Number of Establishments,  
Number of Persons Engaged and Value Added by Legal Orga-  
nization

<u>Type of legal organization</u>	<u>Number of establishments*</u>	<u>Number of persons engaged</u>	<u>Value added (LL 000s)</u>
Individual proprietors	14	409	1,626
General partnership	22	415	1,122
Limited partnerships			
Corporations			
Other	—	—	—
All types	36	824	2,748

\* See footnote in Table 1.

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Source: Economic Research Institute - A.U.B., Industrial Census of Lebanon: 1955. V. 2, Classification by Industry (Beirut 1958), p. 125.

TABIE 3

Estimates of Leather Production in Lebanon for the Years  
1940 - 1948

Year	Sole leather	Calf leather (up- per leather)	Pickled, half-tanned and tanned goat and sheep skins
	tons	sq. ft.	pieces
1940	(not available)	(not available)	300,000
1941	1500	1,500,000	220,000
1942	2300	2,000,000	215,000
1943	2500	1,500,000	700,000
1944	1800	2,000,000	240,000
1945	1500	1,700,000	650,000
1946	2500	2,000,000	600,000
1947	1500	2,000,000	575,000
1948	2000	2,500,000	500,000

Source: Governments of Lebanon and Syria, Conseil Supérieur des Intérêts Communs, Services d'Etudes Economiques et de Statistiques, Recueil de Statistiques de la Syrie et du Liban. Vs.: 1942-1943 (Beirut 1945), p. 92; 1944 (Beirut 1946), pp. 103-104; 1945-1947 (Beirut 1948), pp. 91-92.  
Government of Lebanon, Ministère de l'Economie Nationale, Service des Statistiques Générales, Recueil des Statistiques Générales 1947 et 1948 (Beirut 1949), pp. 90-91.

TABLE 4

Estimates of Leather Production in Syria for the Years 1940-1947

Year	Sole leather	Calf leather (upper leather)	Pickled, half-tanned and tanned goat and sheep skins
	tons	sq. ft.	pieces
1940	(not available)	(not available)	340,000
1941	100	900,000	340,000
1942	120	960,000	310,000
1943	82	688,000	255,000
1944	95	560,000	210,346
1945	110	510,000	152,500
1946	37	413,000	102,500
1947	42	312,500	103,500

Source: Governments of Lebanon and Syria, Conseil Supérieur des Intérêts Communs, Services d'Etudes Economiques et de Statistique, Recueil de Statistiques de la Syrie et du Liban. Vs.: 1942-1943 (Beirut 1945), p. 91; 1944 (Beirut 1946), p. 101; 1945-1947 (Beirut 1948), p. 89.

TABLE 5

Imports and Exports of Leather in Lebanon and Syria (Under Customs Union) for the Years 1938 - 1942 (kilograms)

Tariff No.*	1938		1939		1940		1941		1942	
	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports
349-a**	10,681	38,355	23,706	517,416	19,398	21,652	130	-	460	-
349-b	43,309	396,784	14,982	107,033	3,542	75,800	2,144	2,000	22,840	-
350-a**	2,790	102	8,707	988	-	-	-	-	140	-
350-b	12,288	626	-	5,430	-	-	-	-	-	-
351	7,903	11,474	24,287	32,049	10,651	16,425	1,360	6	2,528	-
352	9,344	449,489	12,325	356,764	4,821	175,554	245	5,046	1,253	7,682
353	29,993	-	6,211	5,337	4,066	-	591	-	1,701	-
354	1,439	-	5,318	-	4,201	-	2	-	523	-
355	52,012	14,298	22,311	82,016	15,172	156	782	95	10,473	765
356	16,596	40,407	15,478	57,400	8,447	16,650	16,500	-	476	-

\* For tariff contents see Appendix I.

\*\* Under Customs Union Tariff no. 349 was split into: (a) for soles and transmission belts from buffalo hides, and (b) for others; similarly Tariff no. 350 was split into: (a) for leathers from cow hides with special tannage to be used for water buckets, and (b) for other leathers from big animals.

Source: Governments of Lebanon and Syria, Conseil Supérieur des Intérêts Communs, Douanes de la Syrie et du Liban. Statistiques du Commerce Extérieur, V. 1, (Beirut 1946), pp. 451-458 (V. 1 includes the years 1938-1943).

TABLE 6

## Imports and Exports of Leather in Lebanon and Syria (Under Customs Union) for the Years 1943-1947

(kilograms)

Tariff No.*	1943		1944		1945		1946		1947	
	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports
349-a**	-	-	-	-	5,000	-	10,524	19,743	2,359	54,012
349-b	-	-	4,742	-	209,689	-	246,337	133,780	45,912	175,030
350-a**	-	-	-	-	680	-	240	553	-	9
350-b	-	-	-	-	27,066	-	3,790	-	-	-
351	295	-	460	-	1,359	-	5,073	5,889	29,951	2,552
352	179	-	94,493	37,609	34,220	26,680	2,149	494,358	27,252	182,136
353	263	-	-	-	-	-	1,079	23,995	4,182	555,000
354	-	-	43	-	1,367	-	8,287	-	10,076	30
355	1,302	128	3,349	-	2,517	65	5,859	2,959	7,379	2,562
356	-	-	-	-	11,308	-	30,681	-	3,627	8,589

\* For tariff contents see Appendix I.

\*\* See same footnote in Table 5.

Source: Governments of Lebanon and Syria, Conseil Supérieur des Intérêts Communs, Douanes de la Syrie et du Liban, Statistiques du Commerce Extérieur, Vs.: 1943, V. 1 (Beirut 1946) pp. 451-458; 1944 V. 2 (Beirut 1946) pp. 214-217; 1945, V.3 (Beirut 1946) pp. 22-226; 1946-1947 (Beirut 1948) pp. 247-279.

TABLE 7

Imports and Exports of Leather for the Years 1948-1952 - Lebanon and Syria Under Customs Union: 1948-March 1950;

Lebanon after Separation: April 1950-1952  
(kilograms)

Tariff No.*	1948		1949		19-----50				1951		1952	
	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports	Exports
					Before Separation		After Separation					
349-a**	30,704	7,210	11,234	12,740	12,826	15,049	2,260	219,126	2,110	170,804	25,406	273,779
349-b	11,420	91,846	12,612	115,282	-	-	-	-	-	-	-	-
350-a**	1,800	17,026	350	6,177	-	-	-	4,515	-	-	619	-
350-b	1,545	1,060	-	9,910	-	-	-	-	-	-	-	-
351	23,961	21,927	12,581	10,509	2,381	1,786	14,672	18,535	6,358	33,579	8,124	57,978
352	11,133	190,871	11,254	296,930	4,932	34,905	5,004	187,071	2,992	438,231	3,767	188,358
353	13,000	1,999	107,000	1,880	187	801	80	3,614	295	9,483	85	20,536
354	16,707	2,993	7,144	12,837	472	1,764	4,606	17,477	2,514	12,121	4,282	3,254
355	5,801	6,650	3,593	9,670	1,581	1,251	3,240	2,683	5,499	3,632	2,905	4,234
356	511	1,498	13,277	100,711	1,437	24,500	4,323	12,870	22,065	52,442	6,188	110,671

\* For tariff contents see Appendix I

\*\* See same footnote in Table 5.

Source: Governments of Syria and Lebanon, Conseil Supérieur des Intérêts Communs, *Douanes de la Syrie et du Liban, Statistiques de Commerce Extérieur, Année 1949*, (Beirut 1950) pp. 351-357; Government of Lebanon, the Supreme Council of Customs, *Statistical Abstract of Foreign Trade. Vs.: 1951* (Beirut 1952) pp. 296-301; 1953 (Beirut 1954) pp. 306-311.



TABLE 8

Analysis of Output by Size of Business

<u>Average number of persons employed</u>	<u>Number of es- tablishments*</u>	<u>No. of per- sons emp- loyed</u>	<u>Value added (LL 000s)</u>
5-9	13	94	386
10-24	12	191	661
25-49	7	228	1,059
50-99	3	209	580
100 and over	<u>1</u>	<u>102</u>	<u>62</u>
Total	36	824	2,748

\* See footnote in Table 1.

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Source: Economic Research Institute - A.U.B. Industrial Census of Lebanon: 1955, V. 2, Classification by Industry (Beirut 1958), p. 126.

TABLE 9

Number of Tanneries in Mashghara by Number of Persons  
Employed

<u>Average number persons employed</u>	<u>Number of Tanneries</u>
1 - 4	15
5 - 9	11
10 - 24	8
25 and over	<u>1</u>
Total	35

---

Source: Data collected from leading tanners in Mashghara.

TABLE 9

Number of Tanneries in Mashghara by Number of Persons  
Employed

<u>Average number persons employed</u>	<u>Number of Tanneries</u>
1 - 4	15
5 - 9	11
10 - 24	8
25 and over	<u>1</u>
Total	35

---

Source: Data collected from leading tanners in Mashghara.

TABLE 10

Number of Sole Leather Tanneries by Productin

A. Mashghara Tanneries

<u>Average yearly production (tons)</u>	<u>Number of tanneries</u>
10 - 49	19
50 - 99	10
100 - 149	3
150 - 170	<u>3</u>
Total	35

B. Beirut and Suburbs Tanneries

30 - 50	4
150	<u>1</u>
Total	5
Grand total	40

---

Source: Private information from leading tanners in Mashghara and Beirut.

TABLE 11

Number of Light Leather Tanneries by Production

<u>Average yearly production (sq.ft. 000s)</u>	<u>Number of Tanneries</u>
200 - 400	5
500 - 600	6
800	1
1000	<u>1</u>
Total	13

---

Source: Data collected from light leather tanners in Beirut and its suburbs.

TABLE 12

Average Costs of Production per Kilogram of Sole Leather/<sup>in</sup>Four  
Tanneries

Tannery:	A	B	C	D
	<u>L.p.s.</u>	<u>L.p.s.</u>	<u>L.p.s.</u>	<u>L.p.s.</u>
Direct Materials:				
Raw Hides	160-320	200	135-300	80-225
Chemicals	75	80	60-65	65
Direct Labor	15	40	25	20
Overhead	<u>10</u>	<u>15</u>	<u>5-10</u>	<u>5</u>
Total Average Costs	260-420	335	225-400	170-315

---

Source:

Tannery A: Mr. K. Tchatalbachian Tannery, Dora, Beirut.  
 Tannery B: Mr. Y. Kamel Tannery, Quarantine, Beirut.  
 Tannery C: The Salamon Tannery, Dora, Beirut, and Mashghara  
 Tannery D: The Dibs Tannery, Mashghara.

TABLE 13

Average Cost of Production per Square Foot of Upper  
Leather in Three Tanneries

Tannery:	E	F *	F **	G
	<u>L.p.s.</u>	<u>L.p.s.</u>	<u>L.p.s.</u>	<u>L.p.s.</u>
Direct Materials:				
Raw Hides	60-75	50	70	45-80
Chemicals	10	15	15	20
Direct Labor	20	10	12	10
Overhead	<u>5</u>	<u>5</u>	<u>7</u>	<u>5</u>
Total Average Costs	95-110	80	104	80-115

---

\* Inferior grade of leather

\*\* Higher grade

Source:

Tannery E: Mr. K. Tchatalbachian Tannery, Dora, Beirut.  
Tannery F: Mr. Y. Kamel Tannery, Quarantine, Beirut.  
Tannery G: The Salamon Tannery, Dora, Beirut.

TABLE 14

Costs of Production of 180,950 kg. of Sole Leather in Tannery H

(Serial no. 44. Location: Mashghara, year: 1955)

	<u>L. L.</u>	<u>L. L.</u>	<u>Cost/kg.</u> <u>L. L.</u>	<u>Percent of</u> <u>Total cost</u>
<b>Direct Materials:</b>				
Raw Hides	323,000		1.79	68%
Chemicals	<u>119,050</u>	442,050	0.66	25%
Direct Labor (25 lab.)		27,846	0.15	6%
<b>Overhead:</b>				
Indirect labor	-			
Fuel (24 t. diesel)	2,640			
Lubricating oils (10 barrels)	2,000			
Electricity (not used)	-			
Water (free)	-			
Rent (premises partly owned)	400			
Depreciation (assets depreciated fully)	<u>-</u>	<u>5,040</u>	<u>0.03</u>	<u>1%</u>
<b>Total Production Costs</b>		474,936	2.63	100%

---

Source: The Ministry of National Economy of Lebanon, individual questionnaires filled by tanners for the Industrial Census of 1955, Plant Serial no. 44.



TABIE 15

Costs of Production of 158,520 kg. of Sole Leather in Tannery I  
(Serial No. 10, Location: Mashghara, Year: 1955)

	<u>L. L.</u>	<u>L. L.</u>	<u>Cost/kg.</u> <u>L. L.</u>	<u>Percent of</u> <u>Total cost</u>
<b>Direct Materials:</b>				
Raw Hides	200,000		1.26	64%
Chemicals	<u>89,235</u>	289,235	0.56	28%
Direct Labor (19 lab.)		21,000	0.13	7%
<b>Overhead:</b>				
Indirect labor	-			
Fuel (and oil)	2,716			
Electricity (not used)	-			
Water(free)	-			
Rent (owned premises)	-			
Depreciation ( $\frac{81,000}{100} \times 10$ )	<u>810</u>	<u>3,526</u>	<u>0.02</u>	<u>1%</u>
<b>Total Production costs</b>		<b>313,761</b>	<b>1.97</b>	<b>100%</b>

---

Source: The Ministry of National Economy of Lebanon, individual questionnaires filled by tanners for the Industrial Census of 1955, Plant Serial No. 10.

TABLE 16

Costs of Production of 49,890 kg. of Sole Leather in  
Tannery J (Serial No. 9581, Location: Mashghara, Year: 1955)

	<u>L.L.</u>	<u>L.L.</u>	<u>Cost/kg.</u> <u>L.L.</u>	<u>Percent of</u> <u>Total cost</u>
Direct Materials:				
Raw Hides	81,553		1.63	66%
Chemicals	<u>33,811</u>	115,364	0.68	28%
Direct Labor (5 lab.)		5,598	0.11	4%
Overhead:				
Indirect Labor	-			
Depreciation ( $\frac{20000}{100} \times 10$ )	2,000			
Fuel (and oil)	344			
Electricity (50 kwt./hr)	15			
Water (free)	-			
Rent (premises partly owned)	<u>300</u>	<u>2,659</u>	<u>0.05</u>	<u>2%</u>
		123,621	2.47	100%

Source: The Ministry of National Economy of Lebanon, individual questionnaires filled by tanners for the Industrial Census of 1955, Plant Serial No. 9581.

TABLE 17

Costs of Production of 55,000 sq. ft. of Upper Leather in  
Tannery K (Serial No. 548, Location: Rmail, Beirut, Year: 1955)

	<u>L.L.</u>	<u>L.L.</u>	<u>Cost/kg.</u> <u>L.L.</u>	<u>Percent of</u> <u>Total cost</u>
Direct Materials:				
Raw Hides	25,000		0.45	46%
Chemicals	<u>12,550</u>	37,550	0.23	23%
Direct Labor (6 workers)		12,600	0.23	23%
Overhead:				
Indirect labor	-			
Depreciation ( $\frac{12000}{100} \times 10$ )	1,200			
Fuel (and oil)	370			
Electricity (10000 kwt/hr)	1000			
Water (600 m <sup>3</sup> )	120			
Rent*	<u>1,300</u>	<u>3,990</u>	<u>0.07</u>	<u>7%</u>
Total costs of Production		54,140	0.98	99%

\* There is an imputed rent of L.L. 600 not mentioned here.

Source: The Ministry of National Economy of Lebanon, individual questionnaire filled by tanners for the Industrial Census of 1955, Plant Serial No. 548.

TABLE 18

Costs of Production of 825,000 sq. ft. of Upper Leather in  
Tannery L (Serial No. 6745, Location: Burj Hammoud, Beirut, Year: 1955)

	<u>L. L.</u>	<u>L. L.</u>	<u>Cost/kg.</u> <u>L. L.</u>	<u>Percent of</u> <u>Total cost</u>
Direct Materials:				
Raw Hides	335,000		0.40	65%
Chemicals	<u>54,000</u>	389,000	0.07	11%
Direct Labor (45 lab.)		95,360	0.12	19%
Overhead:				
Indirect labor	4,992			
Fuel (and oil)	2,700			
Electricity (41666 kwt/hr)	5,000			
Water*	187			
Rent	3,500			
Depreciation	<u>8,500</u>	<u>24,879</u>	<u>0.03</u>	<u>5%</u>
Total Production costs		509,239	0.62	100%

\* Tannery has its own water too.

Source: The Ministry of National Economy of Lebanon, individual questionnaires filled by tanners for the Industrial Census of 1955, Plant Serial No. 6745.

TABLE 19

Estimates of Leather Production in Lebanon for the  
Years 1954-1956

<u>Kind of Leather</u>	<u>Unit</u>	<u>1954</u>	<u>1955</u>	<u>1956</u>
Sole leather	kg.	992,074	1,045,000	1,517,000
Upper Leather	sq.ft.	3,244,252	2,811,000	2,914,050
Processed goat and sheep skins*	piece	384,000	494,000	760,950
No. of tanneries questioned		66	68	74
No. of replying tanneries		55	49	41

---

\* This includes pickled, tanned and half-tanned skins.

Source: The Ministry of National Economy of Lebanon, Statistics  
of the Industry Section.

TABLE 20

Imports and Exports of Leather in Lebanon for the Years

1953-1955

Tariff No.*	1953				1954				1955			
	Imports kg.	Exports kg.	Imports L.L.	Exports L.L.	Imports kg.	Exports kg.	Imports L.L.	Exports L.L.	Imports kg.	Exports kg.	Imports L.L.	Exports L.L.
349	16,232	288,441	38,974	640,132	15,723	333,230	43,549	754,753	3,220	336,254	10,038	782,164
350	1,876	291	6,259	3,524	7,687	-	53,005	-	5,663	40	50,502	310
351	11,434	59,662	169,082	628,144	11,881	66,387	187,411	649,039	14,633	95,708	196,934	900,474
352	3,725	416,014	50,070	791,804	8,345	447,164	111,350	1,315,619	14,785	347,907	124,094	902,711
353	2,107	26,101	22,675	426,038	3,550	20,552	29,162	304,859	956	34,628	16,205	254,011
354	3,803	2,143	80,560	31,312	6,934	3,713	127,887	37,426	7,880	2,233	144,429	22,485
355	524	1,469	4,419	26,852	415	830	13,352	15,811	999	480	18,047	3,502
356	2,620	60,230	<u>5,022</u>	<u>6,327</u>	582	8,070	<u>1,550</u>	<u>820</u>	2,035	134,380	<u>4,314</u>	<u>21,110</u>
Totals in L.L.			377,061	2,554,133			567,266	3,078,327			564,563	2,886,767
Net imports or exports in L.L.				2,177,072				2,511,061				2,322,204

\* For tariff contents see Appendix I.

Source: Government of Lebanon, The Supreme Council of Customs, Statistical Abstract of Foreign Trade, Vs.: 1953 (Beirut 1954) pp. 306-311; 1955, including 1954 (Beirut 1956) pp. 258-266.

TABLE 21

Imports and Exports of Leather in Lebanon for the Years 1956-1957

Tariff No.*	1956				1957			
	Imports kg.	Exports kg.	Imports L.L.	Exports L.L.	Imports kg.	Exports kg.	Imports L.L.	Exports L.L.
349	17,694	371,265	52,358	795,911	14,156	384,521	48,141	858,367
350	16,737	661	104,222	8,032	13,909	50	111,912	360
351	9,552	130,423	182,430	1,278,056	10,494	133,643	194,973	1,396,383
352	5,513	690,365	119,849	1,196,042	5,772	590,915	126,359	950,406
353	43	13,628	2,869	125,725	653	8,259	7,352	84,650
354	5,945	1,162	111,897	10,729	7,782	1,274	136,311	14,353
355	164	515	5,588	2,607	606	81	12,734	575
356	279	36,016	664	6,820	2,000	3,764	2,000	376
Totals in L.L.			5,798,077	3,423,922			539,782	3,305,470
Net imports or exports in L.L.				2,844,045				2,765,688

\* For tariff contents see Appendix I.

Source: Government of Lebanon, the Supreme Council of Customs, Statistical Abstract of Foreign Trade for the year 1957 (Beirut 1958) pp. 284-287 (including 1956).

TABLE 22

Imports and Exports of Leather Products in Lebanon for the  
Years 1953-1955

Tariff No.*	1953				1954				1955			
	Imports kg.	Exports kg.	Imports L.L.	Exports L.L.	Imports kg.	Exports kg.	Imports L.L.	Exports L.L.	Imports kg.	Exports kg.	Imports L.L.	Exports L.L.
357-a	-	-	-	-	-	1,276	-	3,655	1,000	4,910	878	11,083
357-b	659	-	2,048	-	10	180	230	270	-	50	-	500
358	168	-	1,006	-	443	25	2,801	82	2,125	1,645	18,731	9,188
359	886	124	4,056	635	1,226	75	6,027	150	1,336	55	5,613	690
360	6,828	4,959	118,508	53,563	4,191	6,757	99,491	51,390	4,569	11,072	105,413	70,256
361	92	397	3,437	2,680	436	2,400	14,737	8,900	1,215	-	19,839	-
362	1,227	198	107,058	4,202	2,461	139	185,976	1,733	2,910	129	134,554	7,423
363	3,729	238	34,081	1,064	2,314	292	23,249	2,047	3,068	107	24,491	970
364	4,258	1,850	79,688	33,915	3,785	3,112	48,696	41,470	3,600	6,533	75,803	46,657
600	-	228	-	1,128	-	225	-	2,210	-	250	-	400
601	1,277	5,452	11,422	27,408	2,396	4,961	15,067	16,784	2,390	5,188	12,692	27,524
602	-	51,553	-	440,766	8,679	43,374	110,392	317,393	11,898	27,563	145,371	209,027
Totals in L.L.			361,304	565,361			506,666	446,084			543,385	383,718
Net exports or imports in L.L.				204,057			60,582				159,667	

\* For tariff contents see Appendix I.

Source: Government of Lebanon, the Supreme Council of Customs, Statistical Abstract of Foreign Trade, Vs.: 1953 (Beirut 1954) pp. 311-315 and 532-534; 1955, including 1954 (Beirut 1956) pp. 258-266 and 443-446.



TABLE 23

Imports and Exports of Leather Products in Lebanon for the Years  
1956-1957

Tariff No.*	1956		1957	
	Imports kg.	Exports kg.	Imports L.L.	Exports L.L.
357-a	-	343	-	787
357-b	490	-	1,574	-
358	1,904	8	3,840	100
359	1,826	195	2,678	2,200
360	2,979	8,004	5,371	40,090
361	1,207	609	1,715	2,310
362	1,108	51	2,025	1,529
363	2,753	556	2,871	3,989
364	5,742	5,613	5,945	37,962
600	19	25	-	480
601	3,545	1,326	4,617	9,442
602	10,775	33,115	11,630	265,136
Totals in L.L.				
Net imports or exports in L.L.				
			630,320	446,181
			184,139	
			152,427	268,068
			103,618	58,774
			27,487	2,725
			133,790	9,947
			62,000	523
			83,601	80,720
			5,170	1,550
			24,011	3,600
			2,144	-
			-	2,230
			591	
			940	
			505	
			9,856	
			45	
			435	
			365	
			5,974	
			95	
			1,482	
			36,072	
			17,484	
			32,304	
			268,068	

\* For tariff contents see Appendix I.

Source: Government of Lebanon, the Supreme Council of Customs, Statistical Abstract of Foreign Trade for the Year 1957 (Beirut 1958) pp. 288-292 and 465-467 (including 1956).

TABLE 24

Imports and Exports of Shoes in Lebanon for the Years 1953-1955

Tariff No.*	1953				1954				1955			
	Imports kg.	Exports kg.	Imports L.L.	Exports L.L.	Imports kg.	Exports kg.	Imports L.L.	Exports L.L.	Imports kg.	Exports kg.	Imports L.L.	Exports L.L.
600	-	228	-	1,128	-	225	-	2,210	-	250	-	400
601	1,277	5,452	11,422	27,408	2,396	4,961	15,067	16,784	2,390	5,188	12,692	27,524
602	-	51,553	-	440,766	8,679	43,374	100,392	317,393	11,898	27,563	145,371	209,027
603	124	6,493	3,230	18,277	29,416	47,974	61,407	123,153	2,337	45,025	14,933	97,540
604-a	38,184	130	105,055	1,262	23,776	15	69,316	80	15,672	788	44,954	1,851
604-b	60,283	16	179,127	60	24,552	235	84,868	1,425	37,171	688	110,622	2,410
605	263	1,732	3,161	8,304	1,099	1,104	6,544	0,015	2,031	697	20,579	10,411
606	94	-	1,866	-	-	178	-	900	45	110	316	2,870

\* For tariff contents see Appendix I.

Source: Government of Lebanon, the Supreme Council of Customs, Statistical Abstract of Foreign Trade, Vs.: 1953 (Beirut 1954) pp. 532-536; 1955, including 1954 (Beirut 1956) pp. 443-446.



TABIE 26

Tariff Schedule in Lebanon for Leather and Leather Products  
(as of September 30, 1958)

Tariff No.*	Unit	Maximum tariff	Normal tariff	Palestine	Syria	Iraq	Jordan
349	kg.	400 ps.	200 ps.	133.35 ps.	100 ps.	200 ps.	200 ps.
	adv.	100%	50%	33.35%	25 %	50%	50%
350	kg.	400 ps.	200 ps.	133.35 ps.	100 ps.	200 ps.	200 ps.
	adv.	80%	40%	26.70%	20%	40%	40%
351	kg.	1000 ps.	500 ps.	333.35 ps.	250 ps.	500 ps.	500 ps.
	adv.	80%	40%	26.70%	20%	40%	40%
352	kg.	1300 ps.	650 ps.	433.35 ps.	325 ps.	650 ps.	650 ps.
	adv.	80%	40%	26.70%	20%	40%	40%
353	adv.	80%	40%	26.70%	20%	40%	40%
354	adv.	80%	40%	26.70%	40%	40%	-
355	adv.	80%	40%	26.70%	40%	40%	-
356**	adv.	80%	40%	26.70%	40%	40%	-
357-a	adv.	100%	50%	33.35%	50%	50%	-
357-b	adv.	80%	40%	26.70%	40%	40%	-
358	adv.	50%	25%	16.70%	25%	25%	-
359	adv.	50%	25%	16.70%	25%	25%	-
360	adv.	80%	40%	26.70%	40%	40%	-
361	adv.	50%	25%	16.70%	25%	25%	-
362	adv.	80%***	40%	26.70%	40%	40%	40%
363	adv.	25%	exempt	exempt	exempt	exempt	exempt
364	adv.	50%	25%	16.70%	25%	25%	-
600	adv.	100%	50%	33.35%	50%	50%	50%
601	adv.	100%	50%	33.35%	50%	50%	50%
602	adv.	100%	50%	33.35%	50%	50%	50%

\* For tariff contents see Appendix I.

\*\* 349-356 Leather, 357-a to 602 leather products.

\*\*\* 40% for Japan.

Source: Government of Lebanon, Conseil Supérieur des Douanes, Direction Générale des Douanes, Tableau des Droits Inscrits au Tarif des Douanes (Beirut 1952), with subsequent amendments; pp. 114-117 for Tariff Nos. 348-364, and pp. 223-224 for Tariff Nos. 600-602.

TABLE 27

Tariff Schedule in Lebanon for Leather and Rubber Shoes  
(as of September 30, 1958)

Tariff No.*	Unit	Maximum tariff	Normal tariff	Palestine	Syria	Iraq	Jordan
600	adv.	100%	50%	33.35%	50%	50%	50%
601	adv.	100%	50%	33.35%	50%	50%	50%
602	adv.	100%	50%	33.35%	50%	50%	50%
603	adv.	100%	50%	33.35%	50%	50%	50%
604-a	adv.	100%	50%	33.35%	50%	50%	50%
604-b	adv.	100%	50%	33.35%	50%	50%	50%
605	adv.	100%	50%	33.35%	50%	50%	50%
606	adv.	100%	50%	33.35%	50%	50%	-

\* For tariff contents see Appendix I.  
Source: Ibid., 223-224.

TABLE 28

Imports of Leather and Rubber Products Subject to Previous  
Licenses and Quotas in Lebanon

Commodity	Tariff No.	Unit	Quota allowed
Patent leather	353	-	(no quota)
Leather cases	360	kg.	3,500
Leather and rubber cut soles and heels, rubber sheets for soles	377	kg.	25,000
Shoes:			
leather shoes		pair	13,000
Rubber shoes		pair	15,000
Rubber boots		pair	20,000
Children shoes		pair	5,000
Medical shoes (for foot treatment)		pair	1,500
Tennis shoes		pair	2,000
Basketball shoes		pair	4,000
Ski and sea shoes		pair	1,000

Source: The Ministry of National Economy of Lebanon, the Foreign Trade Section, Decrees No. 9217 of Dec. 31, 1954, and No. 10482 of July 26, 1958.

TABLE 29

Exports of Lebanese Leather and Leather Products to Syria for the years 1950-1957

Tariff No.*	1950		1951		1952		1953		1954		1955		1956		1957		
	Before Separation	After Separation	kg.	% of total	kg.	% of total	kg.	% of total	kg.	% of total	kg.	% of total	kg.	% of total	kg.	% of total	
	kg.	kg.															
349	-	127,151	58.0	10,731	6.3	61,941	22.6	20,796	7.2	325	0.1	2,951	0.8	-	-	873	0.2
350	-	3,785	83.8	-	-	-	-	291	100.0	-	-	-	-	595	90.0	-	-
351	-	17,209	92.8	22,291	67.9	21,789	37.6	11,410	19.1	3,184	4.8	3,107	3.2	3,445	2.6	-	-
352	-	7,357	9.3	6,444	1.5	1,796	0.9	3,383	0.8	-	-	530	0.2	-	-	-	-
353	-	1,873	51.8	5,161	54.4	10,683	52.2	7,789	29.8	2,629	12.8	-	-	-	-	-	-
354	-	3,520	20.1	2,588	21.3	374	11.5	700	32.9	-	-	-	-	-	-	-	-
355	-	1,103	41.1	273	7.5	510	12.0	392	26.7	-	-	-	-	-	-	-	-
359	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
360	-	7,750	92.7	-	-	-	-	-	-	-	-	-	-	22	0.3	-	-
364	-	-	-	9	1.6	24	2.1	-	-	10	0.3	-	-	-	-	636	10.6
600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
601	-	-	-	-	-	-	-	60	1.1	-	-	-	-	-	-	-	-
602	-	-	-	10,320	26.5	4,113	5.9	420	0.8	-	-	410	1.5	-	-	-	-
Total value in L.L.	-	585,045	57.5	598,442	32.2	748,403	27.2	411,968	13.3	87,934	2.5	56,809	1.8	49,633	1.3	8,842	0.25

\* For tariff contents see Appendix I.

Source (for exports figures): Government of Lebanon, the Supreme Council of Customs, Statistical Abstract of Foreign Trade, Vs.: 1951, including 1950 (Beirut 1952) pp. 296-305 and 500-504; 1953, including 1952 (Beirut 1954) pp. 306-315 and 532-536; 1955, including 1954 (Beirut 1956) pp. 258-266 and 443-446; 1957, including 1955 (Beirut 1958) pp. 284-292 and 465-469.

TABLE 30

Exports of Lebanese Leather and Leather Products to Jordan for the Years 1950-1957

Tariff No.*	1950		1951		1952		1953		1954		1955		1956		1957		
	Before separation	After separation	kg.	% of total	kg.	% of total	kg.	% of total	kg.	% of total	kg.	% of total	kg.	% of total	kg.	% of total	
349	15,049	91,730	41.1	127,421	74.6	182,802	66.5	245,070	84.9	318,119	95.5	308,465	91.7	354,822	95.5	370,290	96.3
350	-	730	16.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
351	1,786	953	5.1	10,164	30.3	30,008	51.8	43,175	72.3	56,597	85.3	71,924	75.2	79,402	60.9	77,943	58.3
352	3,474	660	0.3	5,346	1.2	7,882	4.2	1,194	0.3	4,139	0.9	1,312	0.4	1,302	0.2	10,029	1.7
353	9	452	12.5	679	7.0	2,256	10.9	4,364	16.7	3,368	11.5	6,164	17.8	4,707	34.6	5,947	72.0
354	1,739	13,887	79.5	9,083	74.9	51	1.5	1,385	64.6	3,349	90.2	2,180	97.6	1,162	100.0	394	30.9
355	1,231	1,580	58.9	2,287	62.9	3,010	71.0	20	1.4	201	24.2	480	100.0	465	90.3	-	-
359	107	-	-	-	-	-	-	110	-	-	-	-	-	-	-	-	-
360	113	-	-	296	23.6	20	1.6	238	4.8	698	11.3	2,328	21.0	160	1.9	18	0.2
364	961	15	7.	35	6.4	84	7.4	70	3.8	193	6.2	253	3.9	45	0.8	164	2.7
600	161	15	75.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-
601	403	855	57.6	1,390	92.7	1,475	39.8	4,670	85.8	3,845	77.5	3,510	67.7	300	22.6	410	27.7
602	15,003	14,862	46.3	17,245	44.3	20,579	29.5	15,400	29.9	6,672	15.4	1,950	7.0	225	0.7	-	-
Total value in L.L.	48,411	128,432	12.7	583,720	31.4	949,061	34.5	1,119,540	36.1	1,381,083	39.2	1,456,016	45.2	1,524,060	40.6	1,694,766	45.4

\* For tariff contents see Appendix I.

Source (for exports figures): Ibid.



TABLE 31

## Exports of Lebanese Leather and Leather Products to Cyprus for the Years 1950-1957

Tariff No.*	1950		1951		1952		1953		1954		1955		1956		1957	
	Before se- paration kg.	After se- paration kg. % of total	kg. % of total	kg. % of total	kg. % of total	kg. % of total	kg. % of total	kg. % of total	kg. % of total	kg. % of total	kg. % of total	kg. % of total	kg. % of total	kg. % of total	kg. % of total	
349	-	245 0.1	23,020 13.5	26,191 9.6	21,425 7.4	13,886 4.2	13,294 3.9	12,840 3.5	10,333 2.7							
350	-	- -	- -	- -	- -	- -	- -	66 9.9	- -							
351	-	- -	1,004 2.9	5,302 6.6	4,035 6.7	5,109 7.7	17,060 17.8	42,547 32.6	49,554 33.3							
352	51	3,584 1.9	3,802 0.9	582 0.3	2,526 0.6	1,610 0.4	2,485 0.7	673 0.1	390 0.7							
353	792	1,222 33.8	2,874 30.3	6,506 31.6	11,390 44.4	12,363 60.1	11,087 32.0	7,236 53.1	1,886 22.8							
354	-	- -	110 0.9	- -	- -	300 8.0	- -	- -	880 69.0							
355	-	- -	900 24.8	453 10.7	110 7.5	165 19.9	- -	- -	- -							
359	-	- -	- -	- -	- -	- -	- -	- -	- -							
360	-	38 0.5	52 3.5	2 0.2	- -	27 0.4	46 0.4	2,720 33.9	2,260 22.9							
364	-	- -	- -	17 1.5	2 0.04	- -	- -	- -	- -							
600	-	- -	- -	- -	170 7.5	- -	- -	- -	- -							
601	200	224 15.1	109 7.3	280 7.6	- -	- -	- -	- -	- -							
602	-	4,495 14	4,840 12.4	5,978 8.6	303 5.9	102 0.2	- -	- -	74 0.2							
Total value in L.L.	11,401	63,765 6.3	234,174 12.6	298,946 11	314,410 10.1	298,562 8.5	399,320 12.4	401,210 10.7	630,284 16.9							

\* For tariff contents see Appendix I.

Source (for exports figures): Ibid.

TABLE 32

Exports of Lebanese Leather and Leather Products to Iraq for the Years 1950-1957

Tariff No.*	1950		1951		1952		1953		1954		1955		1956		1957	
	Before separation kg.	After separation kg.	kg.	% of total	kg.	% of total	kg.	% of total	kg.	% of total	kg.	% of total	kg.	% of total	kg.	% of total
349	-	-	2,489	1.4	3,470	1.3	1,040	0.4	-	-	4,700	1.4	1,018	0.3	500	0.1
350	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
351	-	-	37	0.1	16	0.03	652	1.1	732	1.1	1,030	1.0	1,139	0.9	9,271	6.9
352	-	-	120	0.003	-	-	-	-	595	0.1	1,795	0.5	966	0.1	1,611	0.3
353	-	67	539	1.8	1,173	5.7	1,890	7.2	464	2.2	-	-	-	-	-	-
354	-	-	340	2.8	2,067	61.6	85	3.9	-	-	-	-	-	-	-	-
355	-	-	32	0.9	200	4.7	90	6.1	-	-	-	-	-	-	-	-
359	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
360	163	90	125	10	67	5.3	100	1.4	15	0.2	1,945	17.6	350	4.4	30	0.3
364	30	-	135	24.6	181	16.0	245	9.8	960	3.0	3,070	46.9	2,117	37.7	2,901	48.6
600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
601	30	401	-	27.0	172	4.7	-	-	18	0.4	130	2.5	-	-	843	56.8
602	264	1,328	1,460	4.1	712	1.0	805	1.5	390	0.09	1,495	5.4	1,555	4.7	2,649	8.2
Total value in L.L.	3,414	20,673	61,145	2.03	60,478	2.2	51,713	1.7	42,796	1.2	117,287	3.6	90,216	2.4	251,496	6.7

\* For tariff contents see Appendix I.

Source (for exports figures): Ibid.

TABLE 33

Exports of Lebanese Leather and Leather Products to Saudi Arabia for the Years 1950-1957

Tariff No.*	1950		1951		1952		1953		1954		1955		1956		1957	
	Before se- paration kg.	After se- paration kg. % of	kg. % of total	kg. % of total	kg. % of total	kg. % of total	kg. % of total	kg. % of total	kg. % of total	kg. % of total	kg. % of total	kg. % of total	kg. % of total	kg. % of total	kg. % of total	
349	-	-	-	-	75	0.3	38	0.01	900	0.3	5,650	1.7	634	0.2	1,010	0.01
350	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
351	-	-	-	-	-	-	-	-	260	0.4	110	0.1	-	-	855	0.6
352	-	-	-	-	-	-	-	-	170	0.04	-	-	-	-	70	0.01
353	-	-	-	-	-	-	-	181	0.7	60	0.3	52	0.2	-	-	-
354	-	-	-	-	-	-	-	-	-	-	3	0.1	-	-	-	-
355	-	-	-	-	-	-	-	97	6.6	-	-	-	-	-	22	27.2
359	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
360	331	360 4.31	523	41.3	916	72.0	3,207	64.6	3,816	56.5	3,347	30.2	1,518	18.9	1,533	15.7
364	1,105	100 46.5	73	13.3	455	40.3	254	13.7	632	20.3	299	4.7	438	7.8	287	4.8
600	-	-	-	-	12	100.0	-	-	-	-	250	100.0	25	100.0	-	-
601	20	-	-	-	1,736	46.8	310	5.7	496	9.9	870	16.7	663	50.0	82	5.5
602	755	4,700 14.6	600	1.5	32,429	46.5	15,307	29.9	12,804	29.5	10098	36.6	6,117	18.5	2,996	9.3
Value in L.L.	7,834	25,499 2.5	7,547	0.4	361,607	13.1	189,239	6.1	131,157	3.7	124,941	3.9	76,624	2.0	62,562	1.7

\* For tariff contents see Appendix I.

Source (for exports figures): Ibid.

TABLE 34

Exports of Lebanese Leather and Leather Products to Kuwait and Bahrein for the Years 1950-1957

Tariff No.*	1950		1951	1952	1953	1954	1955	1956	1957
	Before separation kg.	After separation kg. % of total							
349	-	-	-	-	72 0.03	-	1,194 0.3	1,951 0.5	1,515 0.4
350	-	-	-	-	-	-	40 100.0	-	50 100.0
351	-	-	-	-	205 0.3	-	100 0.1	1,478 1.1	347 0.3
352	-	-	-	-	90 0.02	166 0.04	-	114 0.02	897 0.2
353	-	-	-	-	115 0.4	650 3.1	50 0.1	35 0.3	-
354	-	-	-	100 3.1	-	39 1.0	50 2.2	-	-
355	-	-	-	-	145 9.8	-	-	35 6.8	59 72.8
359	-	-	-	-	14 -	-	-	175 89.7	505 100.0
360	-	-	45 3.6	207 16.3	1,033 20.8	1,255 18.5	1,159 10.5	2,221 27.7	3,327 33.8
364	200	-	132 24.0	70 6.2	1,204 65.1	1,154 37.1	1,530 23.4	1,285 22.9	776 12.9
600	-	-	-	-	58 25.4	75 33.3	-	-	-
601	-	-	-	7 0.2	341 6.4	427 8.6	148 2.9	83 6.3	85 5.7
602	40	5,623 17.5	1,101 2.8	1,728 2.5	15,621 30.3	13,423 30.9	3,682 13.3	11,228 33.9	12,438 38.5
Total value in L.L.	873	21,850 2.2	12,540 0.7	25,738 0.9	220,311 7.1	157,114 4.5	62,764 2	113,751 3.0	109,815 2.9

\* For tariff contents see Appendix I.

Source (for exports figures): Ibid.

TABLE 35

Exports of Pickled, Tanned and Half-Tanned Goat and Sheep Skins (Tariff 352) by Country  
for the Years 1950-1957  
(kilograms)

Country	1950		1951	1952	1953	1954	1955	1956	1957
	Before se- paration	After se- paration							
Western Germany	-	2,556	10,490	-	28,025	10,725	11,370	14,584	15,030
Switzerland	-	-	-	-	763	64,200	63,616	19,902	31,000
Great Britain	-	80,889	201,607	-	10,740	4,719	6,000	15,000	-
United States	7,100	3,109	48,240	69,562	227,273	107,786	105,164	429,245	268,019
Belgium	-	117	4,500	118	450	-	-	-	360
France	-	-	10,673	-	5,785	2,000	10,610	9,989	1,030
Holland	-	-	-	-	-	-	-	820	883
Sweden	-	-	-	-	-	-	3,500	7,300	7,900
Italy	24,280	88,782	145,807	108,418	135,026	251,054	140,286	190,106	250,246
Norway	-	-	-	-	-	-	-	-	2,450
Jordan	3,474	660	5,346	7,882	1,194	4,139	1,312	1,302	10,029
Iraq	-	-	120	-	-	595	1,795	966	1,611
Cyprus	51	3,583	3,802	582	2,526	1,610	2,485	673	390
All other countries	-	7,375	7,646	1,796	4,232	336	1,769	478	1,967
Totals	34,905	187,071	438,231	188,358	416,014	447,164	347,907	690,365	590,915

Source: Government of Lebanon, the Supreme Council of Customs, Statistical Abstract of Foreign Trade, Vs.:  
1951, including 1950 (Beirut 1952) pp. 297-298; 1953, including 1952 (Beirut 1954) pp. 307-308;  
1955, including 1954 (Beirut 1956) pp. 259-260; 1957, including 1956 (Beirut 1958) pp. 285-286.

TABLE 36

Exports of Leather Shoes in Lebanon (Tariff 602) by Country for the Years 1950-1957 (kilograms)

Country	1950		1951	1952	1953	1954	1955	1956	1957
	Before separation	After separation							
Jordan	15,003	14,862	12,245	20,579	15,400	6,672	1,950	225	-
Iraq	264	1,328	1,460	712	805	390	1,495	1,555	2,649
Syria	-	-	10,320	4,113	420	-	410	322	100
Saudi Arabia	755	4,700	600	32,429	15,307	12,804	10,098	6,117	2,966
Adan	-	-	80	1,140	300	570	60	-	-
Kuwait	40	5,623	1,019	1,446	13,608	12,988	2,809	10,627	11,241
Katar	-	-	-	-	-	-	-	18	177
Bahrein	-	-	82	282	2,013	435	873	601	1,197
Libya	-	-	-	-	415	470	3,470	6,990	3,200
Sudan	-	-	-	-	-	-	3,350	2,833	4,100
Morocco	-	-	-	-	-	-	200	-	-
Cyprus	-	4,495	4,840	5,978	303	102	-	-	74
Sierra Leone	-	-	-	-	-	-	35	285	910
Liberia	-	-	-	1,608	-	2,327	1,074	1,018	3,491
Gold Coast	-	355	-	537	20	-	613	-	-
French West Africa	-	-	-	520	400	6,236	776	996	735
British East Africa	-	-	-	-	-	-	60	-	-
Nigeria	-	-	100	155	230	-	145	90	277
French Somaliland	-	-	-	62	-	-	60	101	300
Ethiopia	-	150	138	80	322	160	-	-	310
Gana	-	-	-	-	-	-	-	506	160
All other countries	6,046	10,619	3,067	67	2,010	220	85	831	417
Totals	22,108	32,132	38,951	69,708	51,553	43,374	27,563	33,115	32,304

Source: Ibid., 1951, 501-502; 1953, 533-534; 1955, 444-445; 1957, 466-467.

TABLE 37

Exports of Lebanese Leather and Leather Products to Jordan, Syria, Iraq, Saudi Arabia, Bahrein and Kuwait, and Cyprus, as Percentages of Total Exports

Tariff No.*	Jordan		Syria		Iraq		Saudi Arabia		Kuwait & Bahrein		Cyprus		Totals		Rest of world	
	1956	1957	1956	1957	1956	1957	1956	1957	1956	1957	1956	1957	1956	1957	1956	1957
349	95.5	96.3	-	0.2	0.3	0.1	0.2	0.03	0.5	0.4	3.5	2.7	100.0	99.73	-	0.27
350	-	-	90.0	-	-	-	-	-	-	100.0	9.9	-	99.9	100.0	0.1	-
351	60.9	58.3	2.6	-	0.9	6.9	-	0.6	1.1	0.3	32.6	33.3	98.1	99.4	1.9	0.6
352	0.2	1.7	-	-	0.1	0.3	-	0.01	0.02	0.2	0.1	0.1	0.42	2.31	99.58	97.69
353	34.6	72.0	-	-	-	-	-	-	0.3	-	53.1	22.8	98.0	94.8	12.0	5.2
354	100.0	30.9	-	-	-	-	-	-	-	-	-	69.0	100.0	99.9	-	0.1
355	90.3	-	-	-	-	-	-	27.2	6.8	72.8	-	-	97.1	100.0	2.9	-
359	-	-	-	-	-	-	-	-	89.7	100.0	-	-	89.7	100.0	10.3	-
360	1.9	0.2	0.3	-	4.4	0.3	18.9	15.7	27.7	33.8	33.9	22.9	87.1	72.9	12.9	27.1
364	0.8	2.7	-	10.6	37.7	48.6	7.8	4.8	22.9	12.9	-	-	69.2	79.6	30.8	20.4
600	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-
601	22.6	27.7	-	-	-	56.8	50.0	5.5	6.3	5.7	-	-	78.9	95.7	21.1	4.3
602	0.7	-	-	-	4.7	8.2	18.5	9.3	33.9	38.5	-	0.2	57.8	56.2	42.2	43.8

\* For tariff contents see Appendix I.

Source: Tables 29, 30, 31, 32, 33, and 34.

TABLE 38

Tariff Schedule in Syria for Leather and Leather Products  
(as of September 30, 1958)

Tariff No.*	Unit	Maximum tariff	Normal tariff	Lebanon	Jordan	Countries of Arab Trade Agreement of Sept. 7, 1953
349	kg.	480 ps.	240 ps.	120 ps.	240 ps.	180 ps.
	adv.	120%	60%	30%	60%	45%
350-a*	kg.	400 ps.	200 ps.	100 ps.	200 ps.	150 ps.
	adv.	80%	40%	20%	40%	30%
350-b	kg.	540 ps.	270 ps.	135 ps.	270 ps.	202.50 ps.
	adv.	90%	45%	22.5%	45%	33.75%
351	kg.	1700 ps.	850 ps.	425 ps.	850 ps.	637.50 ps.
	adv.	120%	60%	30%	60%	45%
352	kg.	2000 ps.	1000 ps.	500 ps.	1000 ps.	750 ps.
	adv.	90%	45%	22.5%	45%	33.75%
353	adv.	90%	45%	22.5%	45%	33.75%
354-a*	kg.	2000 ps.	1000 ps.	1000 ps.	300 ps.	-
	adv.	60%	30%	30%	20%	-
354-b	kg.	2400 ps.	1200 ps.	1200 ps.	666.70 ps.	-
	adv.	60%	30%	30%	20%	-
355	adv.	80%	40%	40%	26.70%	-
356	adv.	80%	40%	40%	26.70%	-
357-a	adv.	100%	50%	50%	33.35%	-
357-b	adv.	80%	40%	40%	26.70%	-
358	adv.	120%	60%	60%	60%	45%
359	adv.	50%	25%	25%	25%	18.75%
360	adv.	80%	40%	40%	40%	30%
361	adv.	50%	25%	25%	25%	18.75%

(continued on next page)



TABLE 38

(continued)

Tariff No.*	Unit	Maximum tariff	Normal tariff	Lebanon	Jordan	Countries of Arab Trade Agreement of Sept/ 7, 1953
362	adv.	50%	25%	25%	25%	18.75%
363-a*	adv.	50%	25%	25%	25%	18.75%
363-b	adv.	40%	20%	20%	20%	15%
364	adv.	50%	25%	25%	25%	18.75%
600	adv.	200%	100%	100%	100%	75%** and 100%***
601	adv.	200%	100%	100%	100%	75%** and 100%***
602	adv.	200%	100%	100%	100%	75%** and 100%***
605	adv.	200%	100%	100%	100%	75%** and 100%***
606	adv.	100%	50%	50%	33.35%	37.5%

\* For tariff contents see Appendix I since the same tariff system is followed in Syria with minor variations of which the following came in the above table: 350-a, 350-b: the same splitting which existed under Customs Union (see footnote in Table 5 for this same Tariff No.); 354-a, 354-b: the first part for buffed and suede leather from calf skins, the second for other skins; 363-a, 363-b: the first part for joints and belts, the second for other technical articles.

\*\* For leather shoes and slippers made in those countries.

\*\*\* For shoes and slippers made from foreign leather.

Source: Government of Syria, Ministère des Finances, Direction Générale des Douanes, Tableau des Droits Inscrits au Tarif des Douanes (Damascus 1952) with subsequent amendments; pp. 92-95 for tariff 349-364, and pp. 173-174 for tariffs 600-600.

TABLE 39

Tariff Schedule in Jordan for Leather and Leather Products  
(as of September 30, 1958)

Tariff No.*	Unit	Duty
349	adv.	15%
350	adv.	15%
351	adv.	15%
352	adv.	15%
353	adv.	15%
354	adv.	15%
355	adv.	15%
356	adv.	15%
357	adv.	15%
358	adv.	25%
359	adv.	15%
360	adv.	25%
361-362	adv.	15%
363	adv.	2%
364:		
A-watchbands	adv.	30%
B-others	adv.	20%
600-602	adv.	35%

\* For tariff contents see Appendix I (the same tariff system is followed in Jordan with minor variations).

Source: The official Journal of Jordan, No. 1170 (February 1, 1954), p. 30-31 and 51.

TABLE 40

Tariff Schedule in Saudi Arabia for Leather and Leather

Products  
(as of December 31, 1958)

Tariff No.	Commodity	Unit	Duty
13/9	A. Patent and chamois leathers	adv.	20%
	B. All other kinds of leather	adv.	15%
14/9	A. Shoes from patent leather	adv.	25%
	B. All kinds of rubber shoes and slippers	adv.	10%
	C. All other kinds of shoes and slippers	adv.	20%
	D. All other leather products not mentioned elsewhere	adv.	20%

Source: Government of Saudi Arabia, Ministry of Finance, Directorate General of Customs, Customs Tariff (Jedda 1956), pp. 40-41.

TABLE 41

Tariff Schedule in Iraq for Leather and Leather Products

(As of August 31, 1958)

Tariff No.	Commodity	Unit	Duty
41/2	Leathers from cow and horse hides:		
	A. Sole leather	kg.	180 fils
	B: Other:		
	1. Tanned only	kg.	180 "
	2. Finished:		
	a. calf skins	kg.	500 "
	b. other	kg.	350 "
41/3	Leathers from sheep and goat skins:		
	A. Tanned only	kg.	350 "
	B. Finished	kg.	500 "
41/5	Leathers from other skins:		
	A. From reptiles and fishes	adv.	25%
	B. Other	adv.	20%
41/6	Chamois and parchment leathers	kg.	ID.1
41/8	Patent and coated leathers	kg.	500 fils
41/9	Leather scraps	adv.	10%
42/1	Saddlery products	adv.	33%
42/2	Luggage from natural or synthetic leathers	adv.	50%
42/3	Garments (including gloves) from natural or synthetic leathers	adv.	50%
42/4	Natural or synthetic leathers for technical uses:		
	A. Transmission belts		5%
	B. Other		8%

(continued on next page)

TABLE 41

(continued)

Tariff No.	Commodity	Unit	Duty
42/5	Other products from natural or synthetic leathers	adv.	50%
64/2	Shoes with outsoles from natural or synthetic leathers and leather uppers:		
	1. Boots with outsoles 17 cm. long or more	pair	ID. 1
	2. Shoes with outsoles 17 cm. long or more	"	800 fils
	3. Children boots and shoes with outsoles less than 17 cm.	adv.	40%
	4. Leather slippers:		
	a. with outsoles 17 cm. long or more	pair	400 fils
	b. other	"	400 fils
64/5	Leather shoe-parts	adv.	50%
64/6	Leather leg-coverings	"	33%

Source: Government of Iraq, Ministry of Finance, Directory of Customs and Duties, Law of Customs Tariff No. 77 for the year 1955 as Amended by Law No. 4 for the Year 1956 (Baghdad 1956), pp. 59-62 and 102-103.

TABLE 42

Trade Agreements of Lebanon

Country con- cluded with	Date of conclusion	Terms accorded to leather	Terms accorded to leather products	Remarks
<b>A. Preferential agreements:</b>				
Iraq	19/2/51	none	none	
Egypt	2/9/51	free entry	same	
Jordan	27/8/52	full exemption, free entry	1/3 reduction, free entry (shoes excepted)	
Syria	5/3/53	50% reduction, free entry to tariffs 349-353	normal tariff, free entry	
Members of the Arab League	7/9/53	25% reduction, sub- ject to import licenses	same	
Egypt	27/6/56	50% reduction, free entry	same	Replaced agreement of 2/9/51.
Saudi Arabia	13/8/57	none	none	Not yet in effect.
<b>B. Agreements for balancing trade:</b>				
Czechoslovakia	12/7/52	free entry, no quota	none	
East Germany	14/12/53	free entry, no quota	none	
Soviet Union	30/4/54	free entry, no quota	none	
<b>C. Agreements for facilitating trade:</b>				
<b>1. Admitting specified quotas:</b>				
Italy	27/5/50	\$ 300,000 quota of processed skins	none	
France	30/4/55	60 million francs quota including raw hides	none	
Italy	4/11/55	250 tons of processed skins	none	Replaced agreement of 27/5/50.

(continued on next page)

TABLE 42

(continued)

Country con- cluded with	Date of conclusion	Terms accorded to leather	Terms accorded to leather products	Remarks
2. No specified quotas:				
Greece	6/10/48	no special terms	same	
West Germany	16/11/51	free entry	none	
Yugoslavia	28/7/53	free entry	none	
Brazil	12/5/54	no special terms	same	
West Germany	12/6/54	free entry	none	Replaced agreement of 16/11/51 and was denounced by Lebanese government in 2/11/56.
Argentine	6/4/55	no special terms	same	
Communist China	31/12/55	none	none	
Poland	4/1/56	free entry	none	
Rumania	6/1/56	free entry	none	
Nationalist China	6/4/57	free entry	none	

\* Full exemption from customs duties.

\*\* All reductions are from normal tariff.

Source: Government of Lebanon, Ministères de la Justice et des Affaires Etran-  
gères et des Libanais d'Outre-Mer, Recueil des Traités et Conventions  
Bilatérales, V. I (Beirut 1951), pp. 241-272; 293-297; and 339-343.  
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