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ASSET-LIABILITY MANAGEMENT  
IN LEBANESE COMMERCIAL BANKS

A Research Topic  
Presented to Business Division  
Beirut University College

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Science in Business  
Management

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By  
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August, 1991

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APPROVAL OF RESEARCH TOPIC

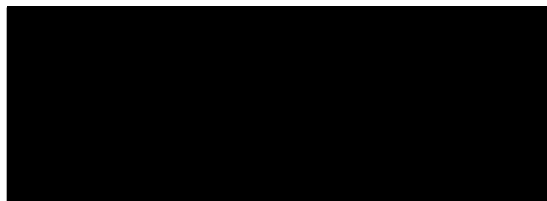
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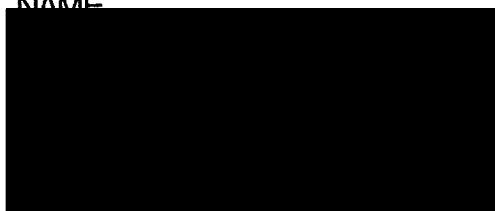
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SIGNATURE

To My Father

Daoud

### Acknowledgement

I give many thanks to Dr. Youssef Shibl, who helped me from the beginning of the project, and who made great efforts to solve many obstacles that faced me in the completion of the study. Also, I am very grateful to Mr. Youssef Al-Khalil, deputy Credit Manager in the Central Bank of Lebanon who was the professional guider for the study. Finally, I thank all bankers that gave their precious time to provide the research by their invaluable information.

## Table of Contents

	<u>Page</u>
<u>Introduction</u>	
A. The Problem	1
B. Purpose of the Study	4
C. Research Methodology	5
D. The Scope and Contents of the Project	9
 <u>Chapter I</u>	
The Lebanese Banks Situation During the Crisis	
1. The Lebanese Economy Relevant to Macro-economic Indicators.	
A. Basic Macro Indicators	11
B. Crisis Impact on Banking Sector	13
2. The Monetary Policy (BDL Regulations)	14
3. The Current Situation of the Lebanese Banks	20
 <u>Chapter II</u>	
Review of Literature- Asset - Liability Issues	
A. Profit and Risk	34
B. Approaches for Asset Liability Management	35
C. Assets Management	36
1. Primary Liquidity Reserves	37
2. Secondary Liquidity Reserves	37

Page

3. Loans	37
4. Investments	38
D. Bank's policies concerning Asset Management	39
1. Lending Policy	39
2. Portfolio Policy	40
3. Portfolio Strategies	41
E. Approaches In Asset Management	42
1. Fund Pooling Approach	42
2. Specification Approach	43
F. Liability Management	44
Factors Affecting Deposits	45
G. Borrowing Instruments	46
1. Central Bank Discounts	46
2. Repurchase Agreement	47
3. Certificate of Deposits	47
H. Capital Management	48

Chapter III

Sources of Funds In The Lebanese Commercial Banks

A. Introsuction	50
B. Deposits	52
1. Theoretical Background	52

	<u>Page</u>
2. Analysis of The Banking System	
In Lebanon	55
C. Capital	65
1. Theoretical Background	65
2. Amount of Capital	66
3. Capital Adequacy of The Banking System	67
D. Loans and Borrowing	70
<u>Chapter IV</u>	
Uses of Funds in The Lebanese Commercial Banks.	
A. Introduction	74
B. Liquidity Management	76
1. Cash Management	78
2. Sources of Liquidity	81
3. Liquidity Measurement	86
C. Loans To Customers	89
D. Size Analysis of Banks	95
Conclusion	100

## List of Tables

	<u>Page</u>
1. Table (1.1) Internal public debt	12
2. Table (1.2) Central Banks Share in public debt	12
3. Table (1.3) Money supply and its relative growth	13
4. Table (1.4) Consolidated Balance sheet of Lebanese commercial Banks	24
5. Table (1.5) Deposits	25
6. Table (1.6) shareholders equity. Measure of capital adequacy	27
7. Table (1.7) Assets Allocations	30
8. Table (3.1) Deposits: Type and Currency Structure	57
9. Table (3.2) Growth of Deposits	59
10. Table (3.3) Deposits percentages of Types	61
11. Table (3.4) Interest Rates on Deposits in L.L.	61
12. Table (3.5) Rates on Treasury Bills	63
13. Table (3.6) Average Rate on Deposits for 3 months in Eurodollar Market in London	64
14. Table (3.7) Bank's Application of Article 153 of the Code of Money and Credit	68



	<u>Page</u>
15. Table (3.8) capital Adequacy	69
16. Table (3.9) claim of the Bank of Lebanon on commercial banks	71
17. Table (3.10) Liabilities to non- Resident Banks	72
18. Table (4.1) Change in Deposits	84
19. Table (4.2) Liquidity Ratio	89
20. Table (4.3) Loans and advances	93
21. Table (4.4) Interest Rates on Loans and on Treasury Bills in the secondary market	94
22. Table (4.5) Items from the balances sheet of large, medium and small size banks in 1988	97
23. Table (4.6) Ratios of banks	98

## Introduction

### A - The Problem:

Historically, the Lebanese banking sector has been successful and competitive with other regional and international banking sectors. This was due to many factors - mainly, the relative stability of the Lebanese political regime, and the Banking Secrecy Law which attracted deposits from many individuals in the region, especially from the Gulf and socialist Arab countries. Despite the civil war which has continued since 1975, the Lebanese banking sector continued to be effective. The destruction of the infrastructure of the Lebanese economy and the severe decrease in GNP did not affect the sector sharply due to several factors:<sup>1</sup>

- 1) The solid financial situation.
- 2) The continuing increase of Lebanese assets abroad.
- 3) The strong currency position.

This situation prevailed until 1982, the year which witnessed a major deterioration in the political and security situation.

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1. Andre Sheaib: "The Solvency of the Lebanese banking system during the crisis". The Lebanese Banks Facing the Crisis (Beirut: Union of Arab Banks; 1985)

Beginning from 1984, the Lebanese pound began depreciating severely vis-a-vis foreign currencies while the budget deficit began to increase. This led the government to search for financing instruments such as the sale of treasury bills and advances from the Bank of Lebanon, both of which have inflationary effects. Consequently, internal public debt increased and so did the money supply, which led to an increase of banks liquidity. This, coupled with a sharp decline in credit activity, led to excess cash which stimulated unproductive activities like speculation, that practiced by banks and by clients.

In order to control such practices, the monetary authorities adopted a new monetary policy which forced banks to underwrite most of their Lebanese pound deposits in treasury bonds. This affected the credit abilities of banks even more. In addition, the security situation increased the risk of all investments in general, so the banks maintained their foreign currency deposits, which until then weren't under any legal reserve restrictions in guaranteed investments, like time placements with foreign correspondents. The rates for these deposits were determined by the international markets. These new practices in allocating uses of funds by Lebanese banks caused a

decrease in profits, as loans are a major source of revenues for banks. Consequently, the loans/deposits ratio decreased throughout the years of crisis. The deterioration of the Lebanese pound, and the trend of converting deposits to foreign currencies led to a severe drop in the solvency ratio of banks. The security situation in the country, which caused a severe drop in the volume of economic activities, was the main reason for an increase in doubtful debts. Many establishments were not able to repay their debts because of the continuous war operations.<sup>2</sup> Consequently, banks were obliged to increase their total provisions, severely affecting their profits. The persistent influence of the political and security risk, in addition to deterioration in the monetary and financial situation, led foreign banks to cease their activities in Lebanon. This caused what is known as the "Lebanization" of the Lebanese banking sector.<sup>3</sup> It is worth mentioning here that the development in the financial and monetary situation affected the structure of the balance sheets of Lebanese banks. The foreign currency side

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2. Information privately held Interview conducted with Mr. Tony Sheweiry - General Manager of the Bank of Lebanon and Kuwait.

3. Freddie Baz, Bilan banques (Beirut: Bank Data Financial Services; 1988)

constituted the majority of the total balance sheet. Despite the huge figures in the consolidated balance sheet, the real volume of bank assets was declining. These figures were in fact due to the depreciation of the Lebanese pound against foreign currencies.

With respect to profits or asset allocations of banks, the profit margins were not the same among the banks. This was due mainly to the differing cost of deposits for different banks. The cost of deposits depend on many factors, the most important being good management, sound financial practices, good investment decisions, respectable name and the size of the bank. So, the profit margin varies among banks based on the factors mentioned.

#### B - Purpose of the Study:

The main purpose of this study is to evaluate the management practices of the Lebanese banks with respect to asset allocations and liability management practices. I will present a study of these practices under the conditions forced by the Lebanese Civil War and the deterioration of the financial situation. In addition, the study will try to propose some corrective measures in handling this problem based on the findings.

## C - Research Methology:

The asset-liability management of Lebanese commercial banks is mainly a study to show the sources and uses of funds in Lebanese commercial banks. The balance sheet approach is used to analyze the developments in the management of bank funds and liabilities. The data used in the analysis are based mainly on two sets of published annual reports. The first is the Annual Report of the Central Bank of Lebanon, and the second is the editions of "Bilan banque" published by the "Bank Data Financial Services." These two reports provide data about the consolidated balance sheet of all banks in Lebanon. In addition, interviews with some Lebanese bankers are held because the opinions of these banks are the bases for understanding the bank practices and the recommendations offered by this research.

The content of the interviews are the following:

Question 1: How can a banker maintain safety and profitability in the employment of bank funds?

This is a general question for bankers aimed at revealing the degree of risk available in the banking sector. Also, this question aims to reveal banks' ability to allocate their funds to profitable assets.

Questions 2, 3 and 4 are technical questions about managing liquidity. These questions are

2 - What procedures do banks pursue to manage liquidity position, as well as sources and measurement of liquidity?

3 - What are the factors affecting liquidity?

4 - If banks are in shortage of liquidity, what actions can be taken to replenish their positions in different currencies?

Question No. 5 what are the procedures pursued to estimate interest rate.

The interest rate is of great importance in managing banks assets and liabilities. It is a major determinant in choosing maturities of investments and in granting fixed rate loans. Moreover, interest rate must be studied in the liability side of balance sheets because costs of liabilities are not fixed. So, any change in these costs must be treated as another exposure of interest rate.

Question No. 6: Is there any measure for the interest rate?

The aim behind this question is to reveal the techniques used by banks to estimate interest rates.

Question No. 7: Can a bank change its liquidity without affecting interest rate exposure? This question aims to reveal the different techniques used by Lebanese banks to match their liquidity positions with their interest rate expectations. Banks can choose to have a surplus or a shortage of liquidity according to their expectations about interest rate changes.

Questions 8, 9 and 10 are open-ended questions concerning liability acquisitions and asset allocations. These questions are as follows:

8 - Is there any policy in your bank concerning management of deposits and other borrowing instruments?

9 - Are there any practices in Lebanon for CDs RPs and Central Bank discounts?

10- What are the investment opportunities for a Lebanese bank (i.e. T. Bills, lending to different sectors, portfolio securities and others)

Question No.11: What is considered as adequate capital for a bank?

This question is asked to reveal the opinions of Lebanese bankers about capital adequacy and functions of capital.



Questions 12 and 13 are about the rules and regulations under which Lebanese banks deal with the Central bank of Lebanon, and with correspondents. The aim of these questions is to reveal the effects of these rules and regulations on the operations of Lebanese banks.

12- What regulations of BDL affect bank operations?

13- What restrictions imposed by correspondents affect bank operations?

Question No. 14: What are the differences in Lebanese banks practices between the following two periods:

from 1975 to 1982

from 1983 till the present

Question No. 15: What recommendations can you give for banks to survive the economic crisis and to prosper in the near future?

Another main source of information is the seminars organised by the union of Arab banks and published in a number of booklets. These seminars were conducted by several professional Lebanese bankers.

The legal side concerning the Lebanese bank practices is based on three main references:

1 - The Circulars of the Central Bank of Lebanon.

2 - The code of money and credit.

3 - The code of commerce.

D - The Scope and Content of the Project:

The scope of the study includes all the Lebanese commercial banks as one system of operations while dividing them into three levels according to size.

Studies of some particular cases are used to show the different opportunities for banks.

**Contents of the Study**

The study consists of four chapters and a conclusion as follows:

**Chapter One** covers the Lebanese banks situation during the crisis. This chapter covers the :

Macroeconomic indicators relevant to the Lebanese economy, as well as the monetary policy or BDL regulations. This part handles all circulars that had an effect on the Lebanese banks operations. The last section in this chapter covers the current situation of the Lebanese banks. This part analyses the development of Lebanese banks from 1982 to 1988.

Chapter Two covers "Asset-Liability Issues. This chapter is a literature review of the theories concerning asset-liability management.

Chapter Three presents the sources of funds of Lebanese Commercial banks (Liability Management). This chapter discusses deposits (kinds, structural analysis, bankers opinions), capital adequacy (theoretical background, analysis of statistical data and bankers opinions), as well as other borrowing instruments used by Lebanese banks.

Chapter Four presents uses of funds in Lebanese Commercial banks. This chapter handles subtopics of liquidity management (theoretical background, Lebanese bank practices), interest rate exposure (theoretical background, Lebanese bank practices), and allocation of assets (policies of banks, practices of banks, analysis of funds uses).

## Chapter I

### The Lebanese Banks Situation During The Crisis

#### 1. Macroeconomic Indicators Relevant to The Lebanese Economy

##### A - Basic Macro Indicators

Since 1983 the Lebanese economy has been suffering from a serious crisis, due mainly to the huge spending of the government. Some periods of relative prosperity were witnessed, but they were too weak to change the declining trend in the economy. In fact, the origin of the crisis goes back to 1975, when the Civil War broke out. Two periods can be identified since 1975. The first from 1975 to 1982, witnessed the destruction of the infrastructure accompanied by a severe decline in the GNP. However, this period had a good financial situation characterized by an increase in the external assets of Lebanon, a small public budget deficit, and a strong national currency.

The second stage, from 1983 up till the present, is characterized by a strong deterioration in the economy and a consequent recession. The main characteristic of this stage is the multi-digit cumulative inflation rate which reached a thousands percent. Furthermore, the Lebanese pound

depreciated severely against foreign currencies. This is accompanied by a deterioration of the financial situation and a strong decrease in Lebanese assets abroad. This stage of high inflation is leading to the high figures in the internal public debt showed in (Table 1.1).

Table (1.1)  
Internal Public debt at the Year end  
In billions L.L.

<u>82</u>	<u>83</u>	<u>84</u>	<u>85</u>	<u>86</u>	<u>87</u>	<u>88</u>
14	21.1	30.8	54.4	81.8	193.6	521.5

Source: Annual Reports of Bank of Lebanon from 1982-1988

The debt was financed partly by the Central Bank. The major contribution of the Central Bank was in 1984, 1986 and 1987, when the percentages were 40.27%, 44.96% and 67.7% respectively (Table 1.2). These high percentages indicate the inflationary trend in financing the public debt. Granting more loans by BDL affects the money supply, resulting in more inflation than if the financing were carried out by the banking sector.

Table (1.2)  
Central Bank' Share in Public Debt.

<u>82</u>	<u>83</u>	<u>84</u>	<u>85</u>	<u>86</u>	<u>87</u>	<u>88</u>
12.42%	24.41%	40.27%	29.47%	44.96%	67.72%	21.40%

Source: Annual Reports of Bank of Lebanon from 1982-1988

The money supply recorded high percentages of increase during the crisis years, beginning with 1982 (Table 1.3). This was due to the government's continuous budget deficit, the depreciation of the national currency, and the method of financing of internal debts. The percentage increase of money was 56% in 1985, 172% in 1986, 354% in 1987 and 48% in 1988. This was due mainly to the improved security situation in the country, the relative increase in industrial production and exportation and the relative decrease in the fluctuations of the Lebanese pound.

Table (1.3)  
Money Supply and its Relative Growth  
In billions L.L.

<u>82</u>	<u>83</u>	<u>84</u>	<u>85</u>	<u>86</u>	<u>87</u>	<u>88</u>
48,557	61,620	76,277	119,102	323,898	1,471,309	2,174,605
20%	26%	23%	56%	172%	354%	48%

Source: Annual Reports of Bank of Lebanon from 1982-1988

B - The Impact of the Crisis on the Banking Sector

The current economic crisis has the following characteristics which are strongly related to the banking sector.<sup>4</sup>

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4. Andre Sheaib: "The Solvency of the Lebanese Banking System During the Crisis." The Lebanese Banks Facing the Crisis. (Beirut: Union of Arab Banks; 1985).

First it is the longest crisis affecting the Lebanese economy. Second the end of the crisis doesn't seem to be in the near future unless changes occur in the people's attitudes, in the balance of payments and in the public finance situation. Third the crisis has severely affected the traditional role of the private sector which constituted the base of the Lebanese economy. Fourth the crisis has enlarged the role of the public sector. This led to a change in the structure of the Lebanese economy making it more dependent on the public sector spending. Fifth it is observed that the crisis, which previously affected many sectors of the economy, became a real danger for the Lebanese banking sector.

## 2. The Monetary Policy (BDL Regulations)

The current situation of the Lebanese economy led the Central Bank of Lebanon (BDL) to take exceptional measures to face the consequences of the crisis. Basically, the fluctuations in the foreign exchange rates and the great increase in inflation percentages began in 1984. So, BDL adopted restrictive monetary policy. It increased reserve requirements and imposed treasury bills ratios in order to achieve two objectives. The first was to finance the government expenditure by

this tool (Treasury Bills) which has a smaller inflationary effect than advances by BDL. The second is to absorb excess liquidity in the banking sector as much as possible in order to restrict speculation against the Lebanese pound. Moreover, BDL fixed a minimum levels and ratios of liquidity and solvency of the banking sector, in order to oblige the banks to properly maintain their liquidity positions and to increase their capital. In addition, BDL fixed limits on foreign currency positions held by banks and, consequently, limit speculation against the Lebanese pound. In order to maintain safety in the banking sector, BDL issued a number of circulars concerning the credits given by banks. Following are some of the important circulars issued by BDL during the last decade, and which have had an effect on the banking sector regarding their profits, an the freedom of expanding their activities.

The Central Bank of Lebanon issued a series of circulars concerning legal reserve requirements on deposits of commercial banks in Lebanese pounds. These circulars aimed at the beginning to ensure safety for depositors as is the case in any other normal country. However, the purpose of these reserves changed to include the problem of commercial banks excess liquidity that might be



used for non-economic purpose, such as speculation against the Lebanese pound. BDL, in carrying out its function as controller of excess liquidity and money supply, expanded the concept of legal reserves to include an obligatory under-writing of treasury bills. By using this tool, the Central Bank aimed at two things: (1) To finance the Government expenditure, and (2) To control and decrease the excess liquidity with commercial banks. What is meant by legal reserve is divided into two parts: First the idle cash that banks deposited in BDL with no interest, and second the special treasury bills that bear a 6% interest. The last circular to determine the legal reserve was circular No. 761 which cancelled circular No. 739. By circular 739, the legal reserve was raised to 16%, 4% of which can be underwritten in special treasury bills. Cancelling circular No. 739 revived circular 700 which had determined the legal reserve as 13% of total deposits in Lebanese pounds, 10% of which is idle cash and 3% of which is special treasury bills bearing the 6% interest. Treasury bills of the primary market were determined first by circular 657 in 1986. The fourth article of this circular stated that a bank with deposits in Lebanese pounds of less than L.L. 1 billion must purchase a treasury bills equal to 15% of its

deposits. If a bank has more than L.L. 1 billion in deposits, it must purchase treasury bills equivalent to 30% of its deposits. These ratios were raised to 30% for deposits less than L.L. 1 billion, and to 45% for deposits exceeding L.L. 1 billion. These changes were determined by circular 688 in 1987 which also stated in the third article that "as of 8/1/87, banks must under write treasury bills worth 60% of the deposits acquired since 4/12/1986." These ratios are still applied now. It is worth mentioning that the penalty rate for any shortage in legal reserve or treasury bills underwriting is now 150% per annum. This rate, determined by circular 761, is the same rate imposed on advances to banks by BDL which is determined by article 102 in the Code of Money and Credit.

In order to limit the ability of banks to speculate against the Lebanese pound and to limit demand on foreign currencies, the Central Bank of Lebanon issued a series of circulars beginning with circular 297 in 1981 and with circular 538 in 1985. With these circulars, the Central Bank determined the limits of foreign currency positions that can be held by banks. Circular 538 stated that a bank cannot hold debit or credit positions for more than 15% of its capital. It is worth noting that this

circular does not impose any restriction on the size of transactions during the day, but what is important is that the bank must not keep at the end of the day any foreign currency position that exceeds 15% of its capital. The penalty on the excess is the same as the penalty on legal reserve and treasury bills shortage - 150% per annum.

Regarding credits in Lebanese pounds, the Central Bank issued circular No. 539 in 1985 which determined the ceiling of credits that can be given by a bank. This circular stated that, "credits can be increased yearly up to 30% of the initial credit existing on 30/9/84." This circular was modified by circular No. 557 which stated that "banks can exceed circular 539 if they observe the following conditions:

1. The ratio of bank loans in Lebanese Pounds to deposits in Lebanese pounds must not exceed 60%, as of 30/9/84.
2. Bank must not give loans exceeding 5 times their capital beginning 1/1/85.

The Central Bank, by circular 761, prevented banks from accepting external debt in any currency except for that from solvent countries. Moreover, BDL obliged banks clients, in circular No. 817, to take a 15% margin from their documentary credits in the currency of the credit.

The Central Bank of Lebanon imposed minimum ratios of liquidity and solvency on banks. Banks, by circular No. 435 issued in 1983, must maintain a 25% liquidity ratio and a 3% solvency ratio. Liquidity, by circular No. 435, is defined as the liquid money to the total of deposits and other liabilities. The liquid money is cash in vault, bank current and time accounts, treasury bills, foreign notes, and precious metals. The denominator of this ratio (i.e. deposits and other liabilities) includes banks and correspondents, all kinds of deposits, debenture loans, miscellaneous creditors and dividends to be paid. It is worth mentioning that this ratio (25%) is no longer realistic, because other regulations of the Central Bank requires ratios that exceed those of this circular, especially in the case of treasury bills. In 1988, for example, the liquidity ratio reached 86% in Lebanese pounds, and 79% in foreign currencies.<sup>5</sup> Regarding the solvency ratio, it is defined as the ratio of private equity to total assets plus contingent liabilities. The private money is capital, reserves, profits carried forward, and the results (profit or loss) of the previous year. This ratio was determined by the BDL, due to the

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5. Fredie Baz, Bilan banques. (Beirut: Bank Data Financial Services WLL. 1989).

depreciation of the national currency and the inflation that led to huge figures in balance sheets. Thus, capital to total assets became very small and the ratio of solvency was significantly less than the minimum level of safety.

### 3. The Current Situation of the Lebanese Banks

The Lebanese banking sector, like any economic sector in the country, was severely affected by the war crisis. The past fifteen years have considerably altered the structure of the banking sector. Since 1974, banks have seen their activities totally modified. Till 1982, even though the banking sector was affected, it was still able to absorb shocks and to adapt to the crisis. However, since then the sector has not been able to maintain its financial structure or continue its normal activities. The main revenues of banks that were generated by loans and advances became extremely risky. Moreover, the new procedures adopted by the government in its spending and financing policies obliged banks, through the monetary authorities, to become financiers to government spending by under writing in treasury bills.

In reality the crisis has severely affected the growth of the banking system. The depreciation of the Lebanese Pound led to the re-evaluation of foreign currency items in the balance sheet, and this led to a nominal increase in the consolidated balance sheet of banks. Moreover, the continuous deficit of the public sector and its subsequent financing from the banking system led to an increase in liquidity and, consequently, to an increase in the monetary base. This means that the deposits of the banking sector will increase, but they will be lent to the public sector and will further depreciate the Lebanese Pound. However, these sources will not be used to advance a credit to the private sector.<sup>6</sup>

The important development, directly resulting from the war destruction and the deteriorating of security situation, is the severe increase in doubtful debts. In fact, many debtors were unable to repay their debts, not because of their solvency situation, but rather because of the security situation. Moreover, banks were not able to

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6. Andre Sheaib: "The Solvency of the Lebanese Banking System During the Crisis." The Lebanese Banks Facing the Crisis. (Beirut: Union of Arab Banks; 1985).

accumulate the necessary provisions for the bad debts, because they witnessed a severe drop in their profitability.

Moreover, the Lebanese banks have suffered a loss of experienced staff due to emigration during the crisis period. In addition, training of new staff became very difficult due to this emigration. It is worth mentioning that bank employee compensations were much better than other sectors. However, since 1983, these compensations deteriorated and this negatively affected productivity.

Furthermore, the crisis had a bad effect on the variety of bank activities. Banks cannot prosper where private economic activities fail to produce a margin over interest rates. The limiting of banks activities led them to advance credits to debtors who invest in non-economic projects characterized by high risk and big returns. These practices were the over-drafts in Lebanese pound that were granted by banks to a number of speculators who used the fluctuations in the Lebanese pound value to cover their interest expenses and achieve very quick profits. These activities threatened the situation of many Lebanese banks, which had exaggerated in financing of such activities, and which were directly

involved in such investments. Because of these factors and others, banks faced big problems concerning their profits, liquidity, and solvency.

The consolidated balance sheet of Lebanese commercial banks from 1982 to 1988, showed important developments as a result of the general economic situation in the country (Table 1.4). As a result of the security and political situation, the country witnessed a dramatic evolution in the monetary and financial situation. This caused the lack of confidence in the Lebanese pound. Thus, big conversions were recorded from Lebanese pound to foreign currencies. As table 1.4 shows, 1986 represented a reversal in the balance sheet percentages between Lebanese pounds and foreign currencies. The Lebanese pound side changed from 59% to 33% in 1986. This percentage continued decreasing to reach 14% in 1987, and then increased to 22% in 1988 due to the counter conversions to Lebanese pounds, which resulted from the relative improvement in the political situation. The nominal growth in the consolidated balance sheet recorded a significant change beginning 1985, as indicated by a 61.9% nominal growth. This growth reached a maximum increase of 386.4% of increase in 1987. This is mainly due to the double effect of the inflation rate, of 727.4%, and the exchange rate,



Table (1.4)

Consolidated balance sheet of Lebanese commercial banks at the Year end (In Million L.L.)

	82	83	84	85	86	87	88
Lebanese pounds	38.880	49.450	59.020	95.545	150.352	315.111	620.173
Foreign Currencies	22.835	29.045	41.015	66.4	305.251	1,901.86	2,256.268
Total	61.718	78.496	100.035	161.944	455.614	2,216.297	2876.441
Annual growth	16,5	27,2	27,4	61,9	181,3	386,4	29,8
Percentage L.L.	63	63	59	59	33	14	22
Percentage F.C.	37	37	41	41	67	86	78
Balance sheet in FC (USD)	5.990 2,2	5.380 -10,2	4.620 -14,1	3.670 -20,6	3.509 -4,4	4.178 18,9	4.257
B.S at fixed exchange rate and cost prices base, previous Year	62.390	65.534	71.863	88.928	120.855	401.570	2,422.542
Annual growth W.V.T. the Nominal B.S. of the previous year	17,8	6,2	-8,5	-11,1	-25,4	-11,9	9,3
End of period rate of L.L./USD	3,81	5,40	8,89	18,10	87	455	530
Price Index 1966=100	560,6	615,2	774,2	1314,2	3445,8	28510,5	36411

Source: Bilanbanques from 1983 to 1989. Published by Bank Data.

423%. If we eliminate the double effect of inflation and depreciation, we notice a decrease in the real growth in the balance sheet beginning with a decrease of 8.5% in 1984, 11.1% in 1985, 25% in 1986 and 11.9% in 1987. However, in 1988 a real growth of 9.3% was recorded, while the nominal growth was 29.8% of increase. (Table 1.4)

The foreign currencies of the balance sheet was 4.26 billion U.S. dollars in 1988, compared to 4.18 billion U.S. dollars in 1987. Despite this positive growth for the second consecutive year (18.9% in 1988 against 19.1 % in 1987), it was still much less than the 1982 level of 6 billion U.S. dollars. If we deflate the effect of depreciation of the pound, the consolidated balance sheet at a fixed exchange rate (base 1987) would reach 2,55.1 billion L.L. in 1988, that is, 15% more than that of 1987 (50% of the nominal evolution). Thus, we can conclude again that the depreciation of the pound is responsible for half of the nominal growth in the 1988 consolidated balance sheet.

The structure of deposits was also affected by the sharp depreciation of the pound and by the severe increase in the inflation rate (Table 1.5).

Table (1.5)

Deposits of Lebanese Commercial banks at the year end  
(L.L. Million)

	82	83	84	85	86	87	88
Deposits L.L.	32.153	41.129	48.386	72.631	92.146	122.464	452.939
Deposits F.C	13.287	16.841	25.224	44.837	244.539	1,465.954	1,784.700
Total	45.439	57.970	73.610	117.468	336.685	1,588.409	2,237.639
Percentage L.L.	70,8	70,9	65,7	61,8	27,4	7,7	20,2
Percentage FC	29,2	29,1	34,3	38,2	72,6	92,3	79,8
Dep F.C. (USD)	3.487	3.119	2.837	2.477	2.811	3.222	3.367

Source: Bilanbanques from 1983 to 1989. Published by Bank Data.

As (table 1.5) indicates, we can see that the nominal increase of total deposits is almost the same as the increase of the balance sheet. Until 1985, the deposits in L.L. maintained a ratio of total deposits that amounted to 60%. Since then, the foreign currency deposits constituted the majority of total deposits. In 1987 the percentage of Lebanese pound deposits reached a minimum share in this period, which was 7.7%. This is due to the huge conversions to foreign currencies. However, the year 1987 was characterized by the return of deposits previously transferred abroad. In fact the foreign currency deposits in U.S.D, which had dropped by 20% between 1982 - 1986, increased by 15% in 1987, from 2.81 billion U.S.D. to 3.22 billion U.S.D. In 1988, the deposits in Lebanese pound increased from 122.464 billion L.L. to 452.939 billion L.L., an increase of 269.8%, while foreign currency deposits increased from 3.222 billion U.S.D. to 3.367 billion U.S.D, an increase of 4.5% only. This evolution is the result of the sales of foreign currencies against the pound, following the expected improvement after the September election.

Finally, we can see that 1986 was the year of structural change in Lebanese bank deposits. It was characterized by the beginning of the severe

inflation period, conversion of the Lebanese pound deposits into foreign currencies, and the depreciation of the Lebanese pound.

The solvency ratio of the Lebanese banks was exposed to a severe drop in percentage due to the depreciation of the Lebanese pound, which inflated the foreign currency items of the balance sheet, while maintaining the shareholders equity at its actual value (table 1.6).

Table (1.6)

Shareholders equity: Measure of Capital Adequacy

(L.L. Million)

	82	83	84	85	86	87	88
Shareholders equity	2.162	2.978	3.384	3.783	4.186	5.368	11.267
Annual growth	29,6	37,7	13,6	11,8	10,7	28,2	109,9
Nominal balance sheet	61.718	78.496	100.035	161.944	455.614	2,216.297	2,876.44
Annual Growth	16,5	27,2	27,4	61,9	181,3	386,4	29,8
Shareholders equity Balance sheet	3,5	3,8	3,4	2,3	0,9	0,2	0,4

Source: Bilanbanques from 1983 to 1988. Published by Bank Data

During 1982 and 1983, the annual growth of shareholders equity increased more than the annual growth of the nominal balance sheet, maintaining a ratio of more than 3% (The ratio is defined as shareholders equity to total balance sheet. It is worth noting that the solvency ratio in U.S.A. is

computed in a different way. For each asset a level of risk is assigned and then a weighted average solvency ratio is computed). The severe drop in the capital adequacy ratio began in 1986 with a ratio of 0.9%. In 1987, the ratio reached a minimum percentage of 0.2%. The drop in capital adequacy ratio is due mainly, to the depreciation of the Lebanese pound where foreign currencies constituted the majority of the balance sheet. Since the shareholders equity is mainly in Lebanese pounds, resulted a severe drop in the ratio of capital adequacy. As we mentioned in the second part of this chapter, BDL issued circular 435 which obliged banks to maintain a 3% ratio as a minimum level of solvency, and to ensure minimum safety levels to depositors. As a result, some banks began to issue subordinated loans in U.S. Dollars from their shareholders to ensure safety to their banks, and to maintain the minimum level of solvency of 3%.

The crisis left its negative effect on all the items of the balance sheet of banks. However, the item most affected was the loans to customers and its structure. The new structure of the loan reduces the activity of banks to a mere collection of savings from the public, and their transformation into loans to the public sector or into deposits in foreign banks, thus deviating them from

their basic function, of financing commercial lending. This development certainly had an impact on the profitability of banks.

As for the distribution of loans according to currencies, the structure of loans has severely changed since 1986. The ratio of Lebanese pounds loans was between 67% and 79% of total loans in the preceding four years, while in 1986, the ratio declined to 42% for Lebanese pounds, against 57.9% for foreign currencies. The Lebanese pound ratio recorded a sharp decrease in 1987 and in 1988. The Lebanese pound loans to total loans became respectively 12.5% and 12.1% (table 1.7). On the other hand, foreign currency loans increased in 1987 and 1988 to 87.5 and 87.9% respectively. Actually, this resulted from some factors related to the financing policy of the government, and to the depreciation of Lebanese pound. The new circulars that were issued by the Central Bank of Lebanon concerning the underwriting of banks in treasury bills, caused a main shift in banks usage of resources from that of advancing loans to the private sector to that of a huge underwriting of treasury bills. For instance, banks started underwriting 60% of their Lebanese pound deposits in treasury bills. The depreciation of the Lebanese pound also had a major effect on the distribution

of currencies. In 1988, the annual growth of Lebanese pound loans was 43.3%, while foreign currency loans reached an increase of 311%. However, if we take into consideration that the depreciation in Lebanese pounds in 1986 reached 381%, we can conclude that the increase in foreign currency loans is due mainly to this factor.

**Table (1.7)**  
Assets Allocations at the year end  
 (L.L. Million)

	82	83	84	85	86	87	88
Loans in L.L.	21.481	27.109	34.613	43.066	61.752	77.965	106.282
Loans in F.C	5.825	9.540	11.575	20.667	85.014	547.404	770.012
Percentage L.L.	78,7	74,0	75,0	67,6	42,1	12,5	12,1
Percentage F.C	21,3	26,0	25,0	32,4	57,9	87,5	87,9
Loans in FC(USD)	1.529	1.767	1.302	1.142	977	1.203	1.453
Reserves L.L.	4.568	4.396	5.292	8.848	9.681	18.653	72.516
Treasury bills L.L.	10.223	13.978	14.496	27.352	36.266	50.261	296.590
Demand Deposits L.L.	2.377	3.135	5.961	8.547	55.522	336.519	N.A
Investments F.C	5.821	6.378	9.995	21.967	127.030	750.031	N.A
F.C Assets USD	2.152	1.762	1.795	1.686	2.098	2.388	N.A

Source: Bilanbanques from 1983 to 1988, published by Bank Data.

N.A: Not Available

Moreover, the percentage change in foreign currencies loans in U.S. dollars reached a decrease of 14.4%. The ratio of loans to the total balance sheet decreased from 46% in 1983 and 1984, to 30.4% in 1988. This is another proof of the shift in lending loans to customers to the underwriting in treasury bills and foreign currency placements with foreign banks. The two ratios in table 1.7, namely

(1) The ratio of reserves in Lebanese pound (cash in vault and demand deposits in Central bank of Lebanon) to loans in L.L., and (2) The ratio of Treasury bills in L.L. to loans in L.L., reveal that they increased sharply over the last seven years. The ratio of reserves to loans increased from 21.2% in 1982 to 68.2% in 1988. Also, the ratio of treasury bills to loans increased from 47% in 1982 to 279% in 1988. These ratios indicate the great uses in liquid assets. The structure of assets in foreign currencies also changed from granting loans to demand deposits and placements with foreign banks. Loans in foreign currencies fell from 1.142 billion dollars in 1985 to 977 Million in 1986, while placements and demand deposits increased from 1.686 billion U.S.dollars in 1985, to 2,098 billion U.S.dollars in 1986. The new allocations of assets in these highly liquid investments increased the liquidity ratio in commercial banks. The liquidity ratio (Reserves in L.L. + Treasury bills L.L. + Demand deposits F.C + Investments F.C. to total balance sheet) increased from 57.5% in 1982 to 77.2% in 1987. Thus, banks lost a great source of revenue due to this shift in investments.



## Chapter II

### Review of Literature

#### Asset - Liability Issues

Asset-liability management in the banking sector is mainly related to the relationship between sources of funds, basically capital, demand and time deposits and the allocation of these funds among liquid assets, loans and investments. However, there are constraints on this coordination process. The bank must know how to manage its assets and liabilities, and to maximize profits, while maintaining liquidity and keeping interest rate exposure at an acceptable level.

Banking liquidity and solvency are extremely important for the economy. Thus, restrictions must be imposed on bank policy concerning deposits acquisitions, and credit granting.

There are factors other than balance sheet items which are considered asset - liability issues. Different risks associated with banking activity should be taken into consideration when evaluating any banking activity. Banks planning on achieving reasonable profits cannot avoid risks. Liquidity positions of different currencies in a

bank are a major function for treasurers. Liquidity must be held in such a way as to secure sufficient funds for expected withdrawals without overestimation. Managing banking risk also encompasses lending policies and procedures which might include customers defaulting on their loans.

Bank capital has two locations in the asset - liability sides. Although capital is a source of funds for a bank, it is the last line of defense in case of withdrawal pressure by depositors. Factors, other than stocks, constitute the capital of a bank, such as retained earnings and reserves for loans.

The main issue in managing bank assets and liabilities is how to attract deposits and to invest in profitable and safe assets. Banks should determine the different concepts, policies, and procedures in handling such issues. They must have definite policies in managing lending practices, portfolio instruments, and deposits acquisitions.

All these issues will be discussed theoretically in this chapter. I will give a comprehensive idea about the different policies, procedures and concepts involved in asset - liability management of commercial banks.

A - Profit and Risk:

One of the commercial banks objectives, like that of any industrial, manufacturing or other type of business, is to earn profits. Banks, like other business firms operate under a state of risk and sometimes under uncertainty. Risk in banking arises from three sources<sup>7</sup>. First: every loan a bank grants, has a credit risk, that is the risk that the borrower will default on the loan. Second: for loans made at a fixed rate for a certain period (fixed-rate term loans), there is the risk that the cost of funding might escalate during the term of the loan, this is the interest rate risk. A third risk banks face is the liquidity risk. Liquidity risk is the risk that the bank might, at some point, be unable to buy the money it needs at a reasonable price or at any price. For example, the customers demand for funds might require a forced liquidation of credit worthy assets. Moreover, the disability of a bank to meet liquidity needs will affect its reputation and might lead sometimes to bankruptcy.

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7. Marcia L. Stigum And Reno O. Branch Jr. Managing Banks Assets and Liabilities (Strategies for Risk Control and Profit) Dow Jones - Irwin, Home Wood, Illions 1983, p. 71

Every bank establishes credit standards to limit credit risk. Once it has done this, the bank will normally do everything possible to meet the legitimate loan demands of any customer who fulfills these standards. Loans are a key source of bank profits, and loans to customers normally provide a bank with deposits as well as other business. Taking risks can almost be the business of bank management. A bank that is run on the principle of avoiding all risks, or as many of them as possible, will be a stagnant institution. On the other hand, a bank that takes excessive risks will surely run into difficulties.<sup>8</sup>

**B - Approaches for Asset Liability Management:**

A strong link exists between asset management and liability management. Banks can ensure necessary liquidity by maintaining sufficient amounts of cash and liquid assets. Moreover, liquidity needs can be acquired by purchasing new money deposits or on borrowing from other financial sources.

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8. Howard D. Crosse and George H. Hempel. Management Policies for Commercial Banks. Prentice - Hall, Englewood Cliffs, New Jersey, 1980, p. 59.

For a long time, banks' efforts stressed asset management, neglecting the importance of liability and capital management. However, managing liabilities and capital attracted increased attention lately, due to many developments which affected the financial market.<sup>9</sup> These developments are

- 1 - Customers' knowledge of the yield on deposits during the present period of inflation.
- 2 - Development of new non-banking financial institutions which compete with commercial banks in rendering new and developed financial services.
- 3 - Increased client awareness of the economic and financial situation.
- 4 - Steep fluctuations in interest and exchange rates of foreign currencies, which increased the importance of asset and liability balance.

C - Asset Management:

Asset management includes allocating resources of banks in different investment opportunities, in such a way as to ensure both liquidity needs and profit. These assets are allocated in the following items.

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9. Fouad Seniora. "Asset - Liability Management." The Lebanese Banks Facing The Crisis (Beirut: Union of Arab Banks; 1985).

### 1 - Primary liquidity reserves

These reserves include items in the asset side which are "cash and banks". These reserves must be sufficient to cover the following needs:

- Legal reserves.
- Clients withdrawals of demand deposits
- Withdrawals concerning lines of credit (or contingent liabilities.)
- Operating expenses of the bank.

It is worth mentioning that the revenues from these items are very small, so banks must keep a minimum level of these reserves in order to invest larger amounts in worthy assets.

### 2 - Secondary Liquidity Reserves:

Assets which constitute the secondary liquidity reserves are time deposits with banks, financial papers, and investments. These reserves should meet the liquidity needs and should consist of interest - earning liquid assets, which can be converted into cash with little or no loss when liquidity needs arise.

### 3 - Loans:

After specifying the amounts needed for primary and secondary reserves, the banks' management will be able to determine and allocate

the amount of credit facilities to its customers. These facilities are considered as one of the most profitable investments. Loans should have the priority in the employment of funds. However, the ability to lend also requires other convertible assets which can be liquidated when needed, without resorting to loan conversion, which is not a good policy for securing liquidity needs. Given adequate liquidity and capital protection, a bank's ability to increase its loans is limited only by the volume of its relatively stable deposits.

#### 4 - Investments:

Banks can invest funds in long-term or short-term investments. These investments secure a sizeable revenue for the bank. In addition, they become liquidity reserves as they approach maturity. Investments are not confined to the purchase of investment securities; they also include acquisitions of any earning assets outside the credit market.

D - Bank's Policies Concerning Asset Management:

1. Lending Policy

Lending is an essential function of commercial banking. Through lending, the bank's management tries to satisfy the legitimate credit needs of the community. Furthermore, bank loans contribute materially to bank profitability by providing a higher return than that of other assets, and by being a key element in the creating of depositor relationships.

Bank lending policy is influenced by subjective factors, such as, an evaluation of the borrower's character, the history of the borrower's relationship with the bank, and his possible influence on prospective new business.<sup>10</sup>

Not all credit needs can be appropriately fulfilled by commercial banks. Some are not eligible for bank credit because of their capital or long term nature. Although most commercial banks take their highest risks in their loan portfolio, the yield on loans has historically been higher than the yield on investments.<sup>11</sup>

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10. opcit, p. 183

11. opcit, p. 194



Bank loans are also important means of creating and maintaining depositor relationships, particularly, with business firms. Most banks lend only to firms that keep deposit balances at the bank, and most firms maintain deposits primarily at banks that they believe are willing to fulfill their borrowing needs.

Generally, a bank must take into consideration two things in evaluating its loans. First, the means and timing of the repayment of loans, and second, loans must be made only when a borrower agrees in advance to a repayment program related to a realistic appraisal of his abilities.

## 2. Portfolio Policy

Portfolio investments become a necessity to a bank when it has excess funds. Funds not needed for lending or liquidity protection in the foreseeable future, and those not available for lending because they must be used to secure public deposit, constitute the source of bank's investment portfolio.

In communities where the demand for credit is high, the investment portfolio may consist almost entirely of pledged securities. If the demand for credit is moderate, the bank's portfolio is usually larger and more flexible.<sup>12</sup>

The primary aim of bank portfolio policy is to obtain the maximum amount of income with the minimum exposure to risk. Maximizing income does not mean simply purchasing instruments with the highest yields available at the time. Income has to be computed over the longer run. Both the amount of income and the degree of risk in any investment will be directly affected by (1) The probability of default, (2) the general level of interest rates at the time of purchase, (3) its maturity, and (4) its marketability.<sup>13</sup>

### 3. Portfolio Strategies

A standard practice for a bank is to invest some fraction of its fund deposits in government securities, that could be sold to meet increases in loan demand or depositor withdrawals. In other words, the bank's portfolio should provide liquidity, as well as some earnings on the side.

In managing portfolio strategies, banks face fluctuations in interest rates as a result of cyclical swings in economic activity and shifts in central bank policies. What banks found was that as

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12. opcit, p. 229

13. opcit, p. 234

loan demand slackened, interest rates fell sharply, and as loan demand picked up, interest rates rose sharply. Thus, a bank viewing its bond portfolio as a source of liquidity, found the latter to be an automatic money loser. Over time, the portfolio provided some interest income and a lot of capital losses. One way a bank can seek to protect its earnings against this natural interest rate exposure, is to buy high yield, long term securities and to hold them as rates fall.<sup>14</sup> A large bank following this strategy will finance the securities acquired in the RP (Repurchase Agreement) market and profit from the positive return it earns once rates start to drop.

#### E - Approaches In Asset Managemet:

In matching their assets and liabilities, with banks use one of two approaches:

##### 1 - Fund Pooling Approach:

This approach is a classic one. It is usable in periods where the supply of funds exceeds demand, and where there is an ease in deposit acquisitions. In this approach, funds are collected regardless of their sources, and then channeled into the various uses of bank's funds.

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14. Stigum and Branch, p. 292

15. Stigum and Branch, p. 292

## 2 - Specification Approach:

This approach ties the liquidity needed by the bank with the sources of funds maturities. Moreover, this approach makes a correspondence between liquidity and maturities of liabilities. Based on this approach, the liquidity needed by the bank differs by changes in legal reserve rates and fluctuations in financial sources. It is worth mentioning that some countries impose higher legal reserve rates on demand deposits than on savings deposits. Thus, the ratio of demand deposits used in primary and secondary reserves must be higher than the ratio used in loans and in other investments. Regarding capital, which does not need any liquidity, it can be used totally for fixed assets and for long term investments.

Banks have to be concerned about interest rate exposure and liquidity risk. Matching asset and liability maturities as much as possible, would appear to be a way for a bank to limit both risks. However, it's impossible to find a banker who professes to follow this strategy. One reason is that it would be difficult, if not impossible, for a bank to do so. Few, if any, assets on a balance sheet have a definite maturity.

All bankers profess to follow the pool, concept of funding, instead of matching specific assets against specific liabilities. They think of all the funds raised by the bank as a pool that, in the aggregate, finances the bank's assets.<sup>15</sup>

#### F - Liability Management:

Liability management represents all activities aimed at securing fund sources for a bank from depositors and creditors, and determining the suitable mix of these funds regarding quality and maturity. Deposits acquisition is the least costs source of liquidity for a bank. What is important for a bank is the spread between the cost of funds and the return from investing these funds, taking into consideration the risk factor. The main source for a bank in liability management is deposits. The other sources are capital, loans, and bank's acceptances.

Although asset management is still important, the steady rise in loan demand, the strong competition among banks, and the shortages of deposit funds, forced banks to place greater emphasis on attracting deposits. Terms such as liability management came into common usage.<sup>16</sup> This

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15. Stigum and Branch, p. 76

16. Crosse and Hempel, p. 122

shift can be seen in the more creative use of existing sources of funds and in the aggressive development of new sources of funds often referred to as "purchasing money".

### Factors Affecting Deposits

A single bank cannot affect the size of deposits in the whole banking sector. Deposits size is determined by the loans granted and by the fiscal and monetary policies of the government. However, there are internal factors that can be determined by every bank, some of which are the following:

#### 1 - Staff Quality:

This factor is very important, because bank's customers prefer good service and accuracy in handling their accounts and needs. This requires employees of good quality and experience in the banking sector.

#### 2 - Variety and Quality of Services:

Banks' ability to attract customers depends largely on the variety and quality of services rendered. Accuracy and speed of operations are very

important for customers' satisfaction. Moreover, the reputation of the bank in the market is an important factor in attracting clients.

### 3 - The Economic Activity

Usually, during economic prosperity, deposits grow in higher ratios than in periods of recession.

### 4 - Geographical Location of Branches:

Banking researchers indicate that debtors are willing to search for bank credit, while bank depositors and creditors are affected by the bank's location. So, the good distribution of bank's branches and the choice of good locations are very important for the growth of a bank.

### 6 - Borrowing Instruments

Besides deposits, banks can acquire funds by borrowing from banks and financial companies. However, in more advanced countries that have developed financial markets, banks use other instruments for borrowing. These instruments are:

#### 1 - Central Bank Discounts

Commercial banks resort to The Central Bank for borrowing to finance part of the legal reserve, and consequently the liquidity position. This

source of funds is not a permanent one. The Central Bank requires guarantees to grant such discounts. These guarantees may be financial papers, bank's acceptances, treasury bills and others.

## 2 - Repurchase Agreement (Repo)

This agreement take place when a bank sells a financial asset and then repurchases it on a specific date and at a specific price. This agreement is used to replenish the bank's liquidity. Treasury bills are the most used instrument in this agreement. In addition, sometimes banks sell notes and debts of good customers.

## 3 - Certificate of Deposits:

There are many corporations and large investors that have hundreds of thousands, even millions in currency that they can invest in bank time deposits. Few do so however, because they lose liquidity by making a deposit with a fixed maturity. The illiquidity of time deposits led banks to invest negotiable certificates of deposits. A CD is evidenced by a formal negotiable receipt, issued inreturn for funds left with the bank for a specified period of time on which the



bank pays interest if left until maturity. A key factor of a bank's ability to rely on issuing CDs is the confidence that the community has in it.

#### H - Capital Management

The ultimate strength of a bank lies in its capital funds. The capital funds of a commercial bank may include debt subordinated to deposits, preferred stock, common stock, retained earnings and various equity reserves. The bank depositor may favour the maximum amount of capital as protection against the risks inherent in the banking business. The bank stockholder may based on a short - range desire to maximize profits, wish to operate with as little stockholder capital as possible, in order to gain the greatest leverage in earnings from the employment of deposits.<sup>17</sup>

#### Functions of Capital

Capital serves many important functions. First, it protects depositors and other bank creditors in the event of failure. Second, it permits a bank to withstand occassional losses. A third function of capital is that it enables a bank to assume risk.

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17. Crosse and Hempel, p. 67

The arguments about bank capital arise with respect to the question of how much capital a bank needs? No satisfactory answer has been given to this question. A well managed and profitable bank can get along with an extremely low capital ratio, whereas, no amount of capital is sufficient to guarantee the solvency of a poorly managed bank.

The adequacy of bank capital is a dynamic concept. Capital adequacy is influenced by the prevailing and expected economic condition of the entire economy, the specific area served by the bank, the quality and liquidity of the bank's assets, and the quality of bank management.

## Chapter III

### Sources of Funds in The Lebanese

#### Commercial Banks

##### A - Introduction

The sources of funds of any banking system are totally related to the liability side of the balance sheet of a bank. These sources provide the funds that are used by banks in liquid assets, loans and investments; that is, in the asset side of the balance sheet.

The main sources of funds in the Lebanese commercial banks, like any other banking system, are the deposits. Deposits from clients constitute the major part of the liability side of the balance sheet. A certain percentage of the Lebanese pound deposits must be kept in the Central Bank as legal reserves. The remaining part is invested in loans, investments and other uses. The other source of funds is capital. The basic function of capital is to cover the fixed assets of the bank and its participation in securities, and to cover loans

granted to directors and associates in the bank. These functions are stipulated by the Lebanese Code of Money and Credit. (Article 153).

Another instrument used by banks is overnight loans. This instrument is usually used daily by treasurers for liquidity needs. Also, it is used by a bank either for lending or borrowing, depending on the surplus or shortage of funds available. Overnight fund operations with foreign banks have a further purpose of adjusting accounts placed with correspondents. Foreign banks use this instrument in order to compute interest on a daily basis.<sup>18</sup>

Banks can also take short-term loans from each other, usually on a monthly basis. They use these loans to provide for lines of credit and to replace certain late investments until their maturity.

Under certain conditions, banks can obtain discounts and advances from the Central Bank of Lebanon. Usually, banks do not resort to this instrument, because it is not a good indicator for the bank. Lately, some banks resorted to this instrument by pledging or selling real estates to the Central Bank.

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18. Information Privately held. Interview conducted with Mr. Imad Shehimi, Principal Controller of Treasury Department In Bank Al-Madina.

Regarding other borrowing instruments, like CDs and RPs, Lebanese bankers have no experience in using them. Lebanese banks don't deal with repurchase agreements as all treasurers interviewed stated. Also, using certificates of deposits in Lebanon isn't practiced. Many bankers justified their absence by pointing to the simplicity of the Lebanese market.

Regarding foreign currency needs that might arise, banks are not granted credit facilities from foreign banks. On the contrary, they face restrictions in dealing with foreign banks. Lebanese banks must freeze a certain amount of idle funds in order to begin operations with correspondents. Banks can go short with foreign correspondents only for speculation purposes.

## B - Deposits

### 1 - Theoretical Background

Deposits are the most important source of funds. They are the principal source of bank funds and account for a major part of bank liabilities. When discussing deposits, one should distinguish between deposits of the individual bank, and the deposits of the banking system. Individual banks

have no absolute control over the deposits of the banking system where the level of deposits depends to a certain extent on the amount of credit extended by the banks in the form of loans and investments. If banks don't engage in lending and investing they will have deposits equal only to the amount of currency left with them by depositors. However, this rule is not applicable in actual banking practices. This is mainly due to two factors. The first is the case where public spending exceeds the public revenues. This is a budget deficit which is financed by loans from the Central bank. The second factor affecting the size of deposits is the surplus or deficit in the balance of payments.

In discussing the types of deposits, different classifications of deposits are attracted by varying techniques and have widely varying liquidity requirements and levels of profitability.<sup>19</sup> The most meaningful classifications reflect ownership, security, and form of withdrawal. When classified by ownership, deposits may be private, public or interbank. Private deposits are those owned by individuals, partnerships, corporations and other private

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19. Crosse and Hempel, p. 122.

institutions. Public deposits are the deposits of all levels of government funds. Deposits can also be classified as secured or unsecured. In the U.S.A., there is the F.D.I.C. the Federal Deposit Insurance Corporation. In Lebanon, there is the National Institution for Deposit Insurance which was founded on May 9th, 1967. This institution is a mixed one. Its premium is determined yearly by a legislative decree from the Ministry of Finance. Deposits are finally classified as demand, savings, or time deposits. Demand deposits may be withdrawn by check, or transferred to someone else by the depositor at any time without previous notice to the bank. Since 1930 interest payment on demand deposits has been banned by law in U.S.A.<sup>20</sup> Lebanese banks pay interest on this type of deposits. Savings deposits have indefinite maturity, receive interest, and can be withdrawn by a passbook. Savings deposits can be used by individuals and it is not subjected to income tax. Time deposits are interest-drawing deposits left with the bank for a stated period of time. Because of the maturity, the interest rates on these deposits are usually higher than the rates of savings deposits.

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20. Crosse and Hempel, p. 123.

## 2 - Analysis of the Banking System in Lebanon

There is a strong competition among banks for attracting deposits which have gained increased attention from bankers. The relatively large number of banks in the sector is a main reason for this strong competition. In Lebanon, there were around 83 banks in 1988, while market needs could be met by a smaller number of banks. So, bankers made efforts to attract deposits. The methods used differed among banks. Large banks with good reputations made less efforts and plans to acquire deposits. On the other hand, smaller or developing banks used other methods. For example, some of the smaller banks offered higher interest rates than the bigger ones, while others depended on better client service and more attractive site. These types of banks usually narrow the profit margin of their investments. They react directly to any increase of interest rates in the market. As a further example, some banks increased their private funds in order to be more solvent, as capital has a great effect on public attitudes in choosing a bank.

The Lebanese banking system witnessed great changes in its deposits volume due to many economic and financial developments that occurred in the last



decade. Table 3.1 shows the developments that occurred in the level of deposits from 1982 to 1988, according to type and currency. Before the analysis of deposits, it is worth mentioning that some developments in economic indicators will lead to a more reliable analysis. The period following 1982 witnessed a severe increase in inflation rates and monetary base. The continuous public spending led to an increase in monetary base in its two constituents of demand and savings deposits. The severe depreciation of the Lebanese currency had two effects on the structure of deposits. First, the public reacted to the depreciation in Lebanese currency by converting their L.L. deposits to foreign currency deposits. Secondly, the depreciation of the national currency led to a sizeable nominal growth in the foreign currency side which was very far from the real growth. From Table 3.1 we can observe the huge nominal growth of deposits between 1982 and 1988 both in the Lebanese currency and in foreign currencies. The Lebanese pound deposits increased 13 times, while foreign currency deposits increased 133 times. Time saving deposits in Lebanese pound recorded the greatest growth among the L.L. items, between 1982 and 1988, during which they grew 16 times, while demand deposits grew 11 times and saving deposits 8 times.

Regarding foreign currency deposits, the growth was greater than the L.L. deposits growth. The demand deposits in foreign currency increased by 87 times between 1982 and 1988.

**Table 3.1**  
**Deposits: Type and Currency Structure**  
**(In Million L.L. and U.S.D.)**

	1983	1983	1984	1985	1986	1987	1988
Current A/C L.L.	5.769	6.173	6.410	8.084	12.319	24.068	67.560
Saving Deposits L.L.	8.028	9.864	10.160	14.808	16.408	19.282	69.526
Time Saving L.L.	17.568	24.245	31.022	46.567	58.433	71.145	305.836
Deposits Fixed Mat. L.L.	787	847	794	729	1.131	1.598	6.754
Misc. Creditors				2.443	3.856	6.320	3.263
Current A/c F.C.	2.370	3.181	4.549	4.682	26.133	149.120	208.743
Saving Deposits F.C.	1.459	2.084	3.260	7.231	49.454	305.559	311.396
Time Saving F.C.	8.573	10.417	15.131	26.196	136.883	846.136	1099.034
Deposits Fixed Mat. F.C.	885	1.159	2.284	3.491	13.390	64.189	75.837
Misc. Deposits F.C.				3.237	18.679	100.940	89.690
Total L.L.	32.152	41.129	48.386	72.631	92.147	122.413	452.939
Total F.C.	13.287	16.841	25.224	44.837	244.539	1465.944	1784.700
Grand Total	45.439	57.970	73.610	117.468	336.686	1588.357	2237.639
F.C. Deposits (USD)	3.487	3.119	2.838	2.478	2.810	3.223	3.368
Percentage L.L.	71%	71%	66%	62%	27%	6%	20%
Percentage F.C.	29%	29%	34%	38%	73%	92%	80%
	-----	-----	-----	-----	-----	-----	-----
	100	100	100	100	100	100	100

Source: Annual Reports of Bank of Lebanon from 1982 to 1988.

While savings deposits increased by 212 times, time savings deposits increased by 127 times between 1982 and 1988. These large differences in nominal growth between Lebanese currency and foreign currency deposits were due to the increases in foreign currency exchange rates against the national currency. Also, by looking at Table 3.1 we can see that total deposits in L.L. constituted 71% of total deposits in 1982, while foreign currency deposits constituted only 29%. These ratios nearly reversed in 1988, where L.L. deposits became 20%, and foreign currency side constituted 80% of total deposits. Regarding foreign currency deposits evaluated in U.S.D., we can observe that they declined by 3% if you compare 1982 with 1988, this indicates that the increase in deposits was due mainly to the depreciation of the pound. Table 3.2, indicates that there was a growth in all types of deposits in L.L. between 1987 and 1988. On the foreign currency side, the biggest increase was between the two periods: 1985-1986 and 1986-1987. In fact the reason for the increase in L.L. deposits was the increase in the internal public debt which reached L.L. 521.5 billion in 1988, compared to L.L. 193.6 billion in 1987 (Table 1.1). Regarding the foreign currency, the reason for

increases in the two mentioned periods was the depreciation of the Lebanese pound which recorded L.L.87/U.S.D. and L.L. 455/U.S.D. in 1987 and 1988 respectively. The parity was L.L. 18.10/U.S.D. in 1986.

Table 3.2  
Growth of Deposits  
(In Percentages)

L.L.	1982	1983	1984	1985	1986	1987	1988
Current A/C L.L.	7	4	26	52	95	180	
Saving Deposits L.L.	23	3	46	11	18	260	
Time Saving L.L.	38	28	50	25	22	330	
F.C.							
Current A/c F.C.	34	43	3	458	471	40	
Saving Deposits F.C.	43	56	122	584	518	2	
Time Saving F.C.	22	45	73	423	518	30	

Source: Table 3.1

Regarding the type structure of deposits, either in the L.L. side or the foreign currency, it is observed that each type maintained nearly the same percentage throughout the years of study (Table 3.3). It is worth noting here that time savings deposits in L.L. increased by 14% between 1982 and 1988. This increase was taken from the

decrease in demand deposits, which declined by 3% and from savings deposits which decreased by 10% between 1982 and 1988. Demand deposits on the foreign currency side decreased by 6% between 1982 and 1988, while savings deposits increased by the same percentage. Time savings deposits nearly maintained the same percentage, 64% and 62% in 1982 and 1988 respectively.

The interest rates on the Lebanese pound deposits increased sharply during the years of the study up till 1987. This year witnessed the maximum rates on deposits for the period of the study. (Table 3.4). Furthermore, this year (1987) witnessed the largest inflation rate and depreciation of the Lebanese currency. Also, in 1986, the greatest percentage change in average interest rate occurred. It is recorded as an increase of 35.62%, while the change was only 20.83% in 1987. Moreover, 1988 recorded a remarkable decrease in the average interest rate of 17.54%. This year witnessed an improvement in the economic and financial situations due to the relative improvement in the political situation.

**Table 3.3**  
**Deposits: Percentages of Types**

L.L.	1982	1983	1984	1985	1986	1987	1988
Current A/C L.L.	18	15	13	11	13	20	15
Saving Deposits L.L.	25	24	21	20	18	16	15
Time Saving L.L.	54	59	64	64	64	58	68
Deposits Fixed Mat. L.L.	3	2	2	1	1	1	2
Misc. Creditors L.L.	--	--	--	4	4	5	-
	----	----	----	----	----	----	----
Total	100	100	100	100	100	100	100
F.C.							
Current A/c F.C.	18	19	18	10	11	10	12
Saving Deposits F.C.	11	12	13	16	20	21	17
Time Saving F.C.	64	62	60	58	56	58	62
Deposits Fixed Mat. F.C.	7	7	9	8	5	4	4
Misc. Deposits F.C.	--	--	--	8	8	7	5
	----	----	----	----	----	----	----
Total	100	100	100	100	100	100	100

**Table 3.4**  
**Interest Rates on Deposits in L.L.**  
(In Percentage)

	1982	1983	1984	1985	1986	1987	1988
Current A/C	4.10	5.08	7.45	7.55	9.95	9.10	6.11
Saving Deposits	8.75	7.86	9.95	10.30	13.35	17.44	13.75
Time Savings/Time Dep.	11.70	10.10	13.00	13.40	18.25	23.36	18.62
Average Interest Rate	9.80	8.93	11.35	11.93	16.18	19.55	16.12
Percentage Change	---	-8.87%	27.10%	5.11%	35.62%	20.83%	-17.54%

Source: Annual Reports of Bank of Lebanon From 1982 to 1988

By comparing interest rates on deposits in L.L. with these of Treasury bills (Table 3.5), it is observed that the two rates moved in the same direction, but in different ratios. For example, treasury bill rates decreased by 2.44% in 1983, while deposit rates decreased by 8.87%. In the same manner, in 1984 the Treasury bills rate increased by 61.16%, while deposit rates increased only by 27.10%. Thus, until 1985, the rates on deposits were directly proportional to the rates on treasury bills. However, in 1986, rates on deposits increased by 35.62%, while those of Treasury bills increased only by 13.09%, and the margin between the two rates was only 2.66 points. Moreover, in 1987, the rate on Treasury bills remained fixed, while the average rate on deposits increased by 20.83%, and the margin became negative, this is because the rate on deposits was 19.55% while that on Treasury bills was 18.84%. This is explained by the great fluctuation in exchange rates which reached the highest percentage in 1987, and which in turn resulted in great profits in foreign exchange. These profits occurred in two ways. The first occurred in foreign exchange department which realized great profits due to the big difference between purchase cost of foreign currencies and sales price. The second was in the credit

department, which gave some speculators credit facilities in L.L. with high interest rates, permitting them to hold positions in foreign currencies corresponding to their overdraft in Lebanese pounds. In 1988, the rates on deposits became more related to the Treasury bills rate. This is explained by the implementation of Central Bank regulations in 1987.

Table 3.5  
Rates on Treasury Bills

	1982	1983	1984	1985	1986	1987	1988
Rate on 3 Mth T.B.	10.24	9.99	16.10	16.66	18.84	18.84	18.84
Percentage Change	---	-2.44%	61.16%	3.48%	13.09%	0	0%
Rate on 6 Mth T.B.	11.08	10.80	16.80	17.39	22.22	22.22	22.22
Percentage Change	---	-2.52%	55.55%	3.51%	27.77%	0%	0%

Source: Annual Reports of Bank of Lebanon From 1982 to 1988

Regarding the interest rate on the Eurodollar (Table 3.6), the rates recorded a declining trend throughout the years of study. In spite of this decline, the depositors of the Lebanese pound lost a major part of their purchasing power due to the severe depreciation. For example, in 1983, the difference between the change in the Lebanese pound



interest rate and the Eurodollar rate was 18.13% in favour of the Lebanese pound rate. However, the Lebanese pound depreciated by 42% between 1982 and 1983 and this led depositors to invest in the dollar. It is also observed that a large loss in purchasing power occurred in the Lebanese deposit if you compare 1982 with 1988, while the interest rates on Lebanese currency deposits increased by 65%, and the Eurodollar rate decreased by 50%. These two rates are still too far apart to reward the Lebanese pound deposits, if considering that the Lebanese pound depreciated by 138 times. These ratios are further indicators of the change in the currency structure in deposits in the banking system.

Table 3.6  
Average Rate on Deposits for 3 Mth.  
in Eurodollar Market in London

	1982	1983	1984	1985	1986	1987	1988
Average Rate	13.15	9.60	10.78	8.33	6.63	7.18	6.56
Percentage Change	---	-27%	12.29%	-22.73%	-20.41%	8.30%	-8.64%
End of Period							
Rate of L.L./U.S.D	3.81	5.40	8.89	18.10	87	455	530

Source: Annual Reports of Bank of Lebanon From 1982 to 1988

## C - Capital

### 1 - Theoretical Background

In banking, the function of capital is primarily to serve as an insurance fund to absorb losses that may occur. As a source of funds for the acquisitions of physical assets, bank capital serves a secondary function. The greater the risk involved, the greater the capital should be. To acquire deposits is not a risk, but to invest deposits involves risk. Investing deposits in various assets doesn't mean investing in risky assets, as there are some investments which involve a little risk or which are risk free. So, it seems that a good measure of capital adequacy is to compare capital only to risky assets. However, most regulations determine capital adequacy by comparing capital to total assets as practised in Lebanon. Most bankers interviewed insisted that the availability of a sufficient amount of capital to total assets is a necessary condition. However, it isn't a sufficient one to insure funds, since good management is a must to have insured funds.

Regarding the source of funds for the acquisitions of physical assets, Article 153 of the Code of Money and Credit stated that, "The total assets of a bank representing the expenses of

primary establishments, installations, furniture, real estate investments, associations, or participation quotas under any form, as well as advances to directors and associates, must not exceed the total amount of private funds at any time. The Banking Control Commission requested banks, via circular 110, to provide it with the necessary information determined by the mentioned article.

## 2 - Amount of Capital

The rule regarding minimum amount of capital required for banks has been amended many times by the monetary authorities in the last fifteen years. In 1977, the monetary authorities determined the lower limit of a bank's capital. The Article stated that "Any bank that has been established before May 9, 1977, must have a minimum capital of L.L. 3 million for investments in Lebanon." Furthermore, "every bank established after May 9, 1977 must have a minimum paid in capital of L.L. 15 million, where L.L. 7.5 million must be blocked out of this amount in the Central Bank of Lebanon, in the banks account on behalf of the Lebanese Treasury. In 1986 the Central Bank reset the minimum for the capital of bank in circular No. 652 which stated that:

"Banks must have L.L. 20 million for the Head Office, and L.L. 10 million for every branch". In 1989, by circular No. 863, the Central Bank of Lebanon determined the minimum requirements as L.L. 200 million for the Head Office and L.L. 50 million for every branch.

### 3 - Capital Adequacy of the Banking System

Capital is considered as an important factor in the banking sector in Lebanon. Most of the Lebanese banks stressed the availability of a sufficient amount of capital for safety purposes and for deposits acquisitions, because banks having large capital represent more assurance to the public than those having lesser capital. All Lebanese bankers interviewed stressed the necessity of increasing capital either by underwriting more shares or by the acquisition of subordinated loans in foreign currency. Table 3.7 indicates that the banking system was able to apply Article 153 of the Code of Money and Credit until 1986. After that the system violated this article, and the equity funds in 1987 and 1988 failed to cover the fixed assets. This was mainly due to the high inflation that has occurred since 1987. In 1987, fixed assets

exceeded private funds by LL 608 million. The difference was greater in 1988, in which it reached L.L. 2.257 billion. This indicated the severe

Table 3.7  
Banks Application of Article 153  
of the Code of Money and Credit  
(in Million L.L.)

	1982	1983	1984	1985	1986	1987	1988
(1) Equity	2.162	2.978	3.384	3.783	4.186	5.368	11.267
(2) Fixed Assets	N/A	1.156	1.276	1.836	2.507	5.976	13.524
	-----	-----	-----	-----	-----	-----	-----
Difference (1-2)	N/A	1.822	2.108	1.947	1.679	(0.608)	(2.257)

Source: Bilanbanques From 1983 to 1989. Published by Bank Data

deterioration of private funds for banks. It is worth mentioning that fixed assets evaluated in the banks in Lebanese pounds at the date of purchase were not re-evaluated after that date even if they were paid in foreign currency. Table 3.8 shows the capital adequacy of banks from 1982 to 1988. It is seen that 1986 represents the beginning of a severe decline in capital adequacy, which registered a ratio of private funds to total balance sheet of 0.9%. This ratio decreased even more in 1987 to reach 0.2%. These ratios are very far from the

legal ratio and from the professional requirements. The Central Bank of Lebanon determined the minimum solvency ratio for banks to be 3% by circular 435

Table 3.8  
Capital Adequacy  
(In Million L.L. And In Percentage)

	1982	1983	1984	1985	1986	1987	1988
Private Funds	2.162	2.978	3.384	3.783	4.186	5.368	11.267
Concolidated B.S.	61.718	78.496	100.035	161.944	455.614	2216.196	2876.441
Deposits	45.439	57.970	73.610	117.468	336.686	1588.357	2237.639
Private Funds/B S	3.5%	3.79%	3.38%	2.33%	0.9%	0.2%	0.4%
Deposits to private Funds	21	19	22	31	80	296	198

Source: Bilanbanques From 1983 to 1989. Published by Bank Data

in 1985. It is worth noting that European banks are planning to reach a solvency ratio of 8% in the near future.<sup>21</sup> In comparing deposits with private funds, it is observed that this ratio changed from 19 to 1 in 1982, 296 to 1 in 1987, and 198 to 1 in 1988. These ratios indicated the very weak role of capital in securing the deposits of the public.

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21. Information privately held: Interview conducted with Mr. Adnan Noueihed- Financial Manager In Banque Beyrouth pour Le Commerce

## E - Loans and Borrowing

Banks can get funds by borrowing from each other or from the Central bank. The banking system balance sheet does not show the amount of loans, either from the Central Bank or from the other banks. However, the balance sheet of the bank of Lebanon, shows the advances to commercial banks. Recently, the new accounting system has been showing this data but it still has not been published in its new form. Regarding the foreign correspondents of the Lebanese banks, all bankers interviewed agreed that no facilities are given to Lebanese banks from their correspondents.

A general policy followed by Lebanese banks is that, throughout their history have avoided resorting to the Central Bank of Lebanon. The Bank of Lebanon made advances to banks during difficult economic periods and to a few number of banks that had some difficulties. As shown in Table 3.9, the loans and advances by the Central Bank to banks were almost negligible before 1984, which witnessed some developments in a number of banks. This led the Central Bank to provide them with the necessary funds. These funds were given to banks on condition that they pledge real estate or they sell a number of them. Between 1984 and 1988, the figures re-

Table 3.9  
 Claim of the Bank of Lebanon on  
 Commercial banks from 1982 to 1988  
 (In Millions L.L.)

	1982	1983	1984	1985	1986	1987	1988
Discounts	--	--	--	--	--	--	--
Loans & Advances	101	119	1.114	1.332	1.366	1.476	1.444
Special Advances	13	6	6	6	6	6	7
Total	114	125	1.120	1.338	1.372	1.482	1.451

Source: BDL Annual Reports from 1982 to 1988

mained almost the same due to the ability of the banks to manage their sources and uses of funds. Regarding discounts in the Central Bank, it is shown that Lebanese banks didn't use this instrument in acquiring funds throughout the years of the study. There were several reasons for this. One of them was that once banks put their signatures on the notes, the customer can lose confidence in the bank. Second, the operation of discount is considered a complicated one because the notes discounted needed a signature from the bank, and the signature of a solvent individual or firm.

The relation between the Lebanese banks and the foreign correspondents recorded a continuous drop throughout the years of the study. Facilities



by correspondents were always declining in real value due to the security situation in Lebanon, which led foreign banks to classify Lebanon as a risky country. Liabilities to non-resident banks started to deteriorate as of 1983 which recorded a decrease of 10.3% (Table 3.10). The great decline in liabilities was recorded in 1986, when it reached U.S.D. 429 million, compared to U.S.D. 1.130 billion in 1982. In 1987 and 1988, the liabilities recorded an increase which reached U.S.D. million 603, but it was still too far from

Table 3.10  
Liabilities to non Resident Banks  
(In Millions L.L. and U.S.D.)

	1982	1983	1984	1985	1986	1987	1988
Evolution L.L.	4.306	5.475	7.322	9.777	37.312	233.049	319.699
Annual grow	2,6	27,1	33,7	33,5	281,6	578,2	26,3
Evolution U.S.D.	1.130	1.014	824	540	429	556	603
Annual grow	24,2	-10,3	-18,7	-34,5	-20,6	29,6	8,4

Source: Bilanbanques from 1982 to 1988 published by Bank Data

the original figure of 1982. It is also observed that there is a continuous positive annual growth of these liabilities in Lebanese pound; however, this didn't reflect the real value because this was

attributed to the high depreciation of the Lebanese pound. All bankers insisted on the existence of restrictions imposed by foreign correspondents on Lebanese banks to deal with them. For example, Lebanese banks must deposit U.S.D. 250,000 in order to begin operations with an American bank. for various bank services like clearing, transfers and exchange. Also, concerning letter of credit, Lebanese banks must have a 100% collateral account that covers the whole amount of the credit. Moreover, any bankers check is returned from the correspondent unpaid, if there are not sufficient funds available in the bank's account,. It is worth noting also that the liabilities to non-resident banks that are shown in Table 3.10 constituted the speculation accounts that are usually offset by other credit accounts.

## Chapter IV

### Uses of Funds in the Lebanese Commercial Banks

#### A - Introduction:

An essential problem in banking activity is resolving the conflict between safety and profitability in employment of bank funds. If excess liquidity is maintained, banks will be foregoing income. However, if too little liquidity is maintained, safety might be compromised.

Banks should have sufficient liquidity to provide for different possible withdrawals by depositors and to extend lines of credit. At the same time, banks must invest the maximum amount possible in loans and other investments. There are two major types of banking assets, liquid assets and earning assets, liquid or cash assets are the amount of cash that is always ready in the bank's vaults, deposited with banks and the Central bank. Usually these assets either don't earn any interest or they earn small rates. On the other hand, earning assets constitute assets that generate the major part of revenues for the bank. These assets are loans to customers and investments. Some are classified as risky assets.

In Lebanon, during the last decade, banks granted customers loans and advances for speculation against the Lebanese pound rather than directing these loans to economic sectors. This motivated the Central Bank to issue circulars aimed at preventing such practices. These circulars obliged banks to increase their legal reserves and to subscribe in treasury bills as much as 73% of their deposits in Lebanese pound. In general the policy of lending became tighter due to the high risk inherent in the Lebanese market, which resulted mainly from the security situation. Many borrowers had sufficient collateral covering their loans. However, many of these collaterals became worthless due to the continuous war operations.

On the other side, banks achieved reasonable profits in foreign exchange operations due to the severe fluctuations in the foreign rates against the Lebanese pound. Currently, investment activities of the Lebanese banks is restricted to purchasing Lebanese Treasury bills. Bankers we interviewed reported that banks don't engage in purchasing foreign securities. This was mainly due to the risk involved in such practices which need special expertise in these fields. Investments abroad are restricted to placements with correspondents which are classified as first-class

banks. Moreover, the Central Bank prevented banks from purchasing foreign securities except for securities of solvent countries. (Circular No 761).

B - Liquidity Management:

Liquidity management in the Lebanese commercial banks is extremely important nowadays due to the political and economic situation. Liquidity management is considered a simple task for treasurers. Based on interviews with some Lebanese bankers, no strategies are adopted in Lebanese banks to manage liquidity in accordance with other factors that influence liquidity. Regarding the interest rates on foreign currencies, the treasurers job is only to monitor current interest rates on international screens given by agencies like Reuter and Telerate. There are no estimates of future changes on rates. However some bankers take into consideration some indicators that might have an impact on interest rates.

In an interview with Mr. Fouad Saad the Treasury Manager in the Mediteranee' Bank, Mr. Saad said that indicators like unemployment, the producer price Index, the consumer price Index and others in U.S.A., are monitered and studied by his department to obtain estimates on changes of

interest rates. However, he added that these indicators are not enough to produce accurate expectations of interest rates. To have accurate and reliable expectations of interest rate, banks must have professionals that are grouped in committies as is the case in the U.S.A. and Europe.

Regarding interest rates on the Lebanese Pound, the major determinant of these rates is the Central Bank. Usually, the rates the Central Bank uses in its loans from banks are the rates that are used on loans among banks. Some Lebanese treasurers can adopt a strategy in dealing with the liquidity - interest rate issue. Treasurers can have excess liquidity and lose early investments of these funds, if they expect a higher future interest rate. However, they can hold a short position of liquidity and invest early if they expect a decline in interest rate. In the two cases, bankers have to deal with interest rate exposure and liquidity risk in order to achieve higher profits. In the Mediteranee Bank, Mr. Saad said that, he once kept L.L. 5 billion as idle funds expecting an increase in the interest rate of treasury bills.

## 1. Cash Management

The maintenance of minimum reserves in the form of deposits with the Central Bank of Lebanon or cash in vault with legal reserves requirements is known as the money position. These reserves are deposited in the same account which serves as a clearing account. Banks may increase their reserves balance by depositing checks, and currency, as well as by transfers from other banks. They may also draw down these balances by drawing checks on them or by authorizing a debit to them in payment for exchange currency or as remittance for a customer's account.

Despite the fact that reserve accounts are used on working balances over every reserve period, the Central Bank regulations provide that the average amount of reserves that must be held at the closure of each business day for a week, starting from Thursday to Wednesday, is computed on the basis of a weekly average. These reserves are determined as 13% of deposits (circular No. 657) outstanding two weeks ago. Furthermore, the average balance of legal reserves is divided into two periods in the same week. The first is the average of the period from Thursday to Sunday, and the second from Monday to Wednesday. Each bank must

maintain an average reserve balance and vault cash totalling 10% of its deposits, on condition that it underwrites 3% of its deposits in special Treasury bills which bears a 6% interest rate. Managing the money position can be done by collecting a number of balances that are used to reach the actual balance at the Central Bank. These balances are:

- 1 - The balances of a bank in the different branches of the Central Bank.
- 2 - Transfers in or out on payment against foreign currencies.
- 3 - Maturities of investments, that is overnight and loans.
- 4 - Checks issued by the bank on different branches of the central bank.
- 5 - Estimates of the clearing balance that might be debit or credit.

By collecting the above items, treasurers are able to reach the final balance, which is either a deficit or a surplus, after specifying the legal reserve requirements. Upon finding the final balance, the treasurer either invests the surplus of the Lebanese pound position by lending to other banks on an overnight basis, or he borrows to cover



the shortage . Moreover, treasurers have to provide the necessary funds in Lebanese Pounds in order to underwrite in treasury bills which constitute nearly 60% of liabilities in Lebanese pounds. The relation between the outstanding liabilities at any time and the treasury bills is the same as that of legal reserves. Any failure in underwriting the sufficient amount of treasury bills will expose the bank to a penalty rate of 150% per annum, that is, the same penalty rate on the shortage of legal reserves. Regarding foreign currency liquidity positions, Lebanese treasurers have to estimate transactions of checks either in or out of their balances. Checks in foreign currency sent for collection are assumed to take 10 to 20 days. Checks issued by the bank are also estimated to be withdrawn after a certain time. So, the amount of checks issued are not considered out of the bank's liquidity at the date of issue. It is worth mentioning that foreign banks request a minimum balance from Lebanese banks in order to begin operations. Also, letters of credit must be covered in full amount as collateral for any credit opened by the correspondent. Besides the procedures mentioned above, treasurers must be informed about daily transactions from branch managers and department heads, as soon as they become known to

them. Based on all the above, the treasurer will be in a position to control daily changes and to predict, to some extent, the money position. He will also be able to hedge against any liquidity need or surplus by borrowing from or lending to other banks.

## 2. Sources of liquidity:

Sources of liquidity in the Lebanese banks are the traditional ones, in which banks use simple techniques that are considered as the routine work of treasurers and managers. These sources are:

### a. Assets Maturing in the short term:

Most Lebanese banks arrange their placements and their invested securities in such a way as to always have a near maturity that covers any sudden withdrawals or transfers or exchange of foreign currencies by customers. With respect to Lebanese treasury bills, the Central Bank of Lebanon arranges the issue of treasury bills by a weekly circular. This enables banks to have a weekly maturity in Lebanese Pounds. Also, placements with correspondents in foreign currencies are also

arranged by treasurers in a way as to have near maturities. Certainly, this technique is not always sufficient to provide for sudden withdrawals. So, other techniques are used to provide necessary funds for liquidity needs.

b. Salable assets:

The only asset that can be sold by banks is the Lebanese treasury bills. Banks can discount these bills at the Central Bank through the "Societe Financiere Du Liban". This discount is rather expensive, since it forces banks to absorb losses to raise cash. Loan participation (selling a part of the bank loans) isn't practiced in the Lebanese banking industry. This is mainly due to the political and economic situation that led banks to be highly conservative in increasing their loan portfolio.

c. Loan conversion:

This approach is based on the idea that loans can be converted into cash when liquidity needs arise. This approach was not followed by Lebanese banks due to the political and

economic situation which increased the amount of bad debts and reduced the banks' ability to collect loans.

d. Access to purchasable funds (Liability Management):

Another source of bank liquidity is access to purchasable funds, that is the ability of a bank to write CDs. As all bankers replied, and as all balance sheets of banks revealed, there is no practice of selling CDs in Lebanon. The reason given by bankers is that the Lebanese financial market is not highly developed to use this instrument, and also because no real effort to market CDs was made.

As Table 4.1 reveals the change in deposits, that is the difference in amount between any year and the previous one. The change in Lebanese Pounds denominated deposits was always positive, that is deposits in L.L. constituted a source of liquidity for the banking system. However, the foreign currency deposits evaluated in U.S.D. recorded a negative changes in 1983, 1984, and 1985. This might have had an impact on Lebanese banks. in

securing liquidity needs. In these years, deposits caused a liquidity shortage rather than a source of liquidity. On the other hand, beginning in 1986, deposits in U.S.D. recorded a positive change and consequently a source of liquidity.

Table 4.1  
Change in Deposits  
(In Millions L.L. and U.S.D)

	1983	1984	1985	1986	1987	1988
Change in Dep L.L.	8.976	7.257	24.245	19.146	30.318	330.475
Change in Dep. U.S.D.	(368)	(282)	(360)	334	411	145

Source: Table 1.5

e. Last Resort Borrowing:

Every bank should have some last resort source from which it can raise funds. One source most banks use is lines of credit from other banks. Regarding the Lebanese Pound side, treasurers could secure any shortage in liquidity position through borrowing from other banks, usually on an overnight basis.

Sometimes, banks borrow on a monthly basis, but this practice is not frequently used. There are two main reasons for this. The first one is the lack of confidence among banks, the second is the high interest rate imposed on such loans. Resorting to the Central Bank of Lebanon for securing liquidity needs is not used by banks, since the central bank doesn't give any facilities to banks in normal periods. However, some banks may use some of their legal reserve funds, despite the fact that it is very expensive to do so, as banks must pay 150% penalty rate on any shortage. Except for real guarantees from a bank and under uneasy conditions the Central Bank may give some advances to certain banks that have liquidity problems. These practices are temporary and include very few banks. Regarding foreign currency, Lebanese banks in general can't resort to any foreign banks for securing liquidity needs, as foreign banks consider Lebanon a risky country. However, some large banks like Blom and Mediteranee which have affiliates abroad can borrow from their affiliates when exposed to shortage.

### 3. Liquidity Measurement:

In measuring liquidity, a bank must ask what its liquidity is at the present moment, and over longer periods. "It is in the short run that liquidity problems arise".<sup>22</sup>

As interviews with Lebanese bankers showed, treasurers don't depend on certain ratios to monitor their liquidity level. The task of treasurers is to secure the sufficient funds for daily expected withdrawals either for deposits or for loans and to maintain the necessary reserves at the Central bank.<sup>23</sup> Regarding foreign currency, treasurers try to arrange the maturity of investments in a way as to maintain near maturity at all times. The bad economic and financial situation that resulted from the political crisis in the country, forced the Central Bank to issue circular No. 435 which determined a minimum ratio of liquidity. This ratio was defined as current asstes / deposits and other liabilities.

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22. Stigum and Branch, p. 212.

23. Information obtained through an Interview conducted with Mr. Fouad Saad. (Treasury Manager In Mediteranee Bank).

In this analysis two ratios are measured. The first one is loans / deposits ratio, and the second one is liquid assets / deposits. The loans to deposits ratio is often used to demonstrate the degree to which banks have already used up their available resources. The higher the ratio of loans to deposits, the less is the ability of a bank to grant additional loans.

There are some weaknesses of loan / deposits ratio. First, it doesn't take into consideration the specification and the type of loans in the portfolio when estimating or evaluating the bank's liquidity. Moreover, the ratio reveals little about the bank's other assets that are available for conversion into funds, in order to meet withdrawals or to make additional loans. The ratio of liquid assets to deposits is a more accurate indicator of the amount of funds readily available to a bank than is the ratio of loans to deposits. The loan / deposit ratio in Lebanese Pound as shown by Table 4.2 remained at nearly at the same percentage level up till 1987. In 1988, the regulations of the Central Bank had explicitly affected the credit abilities of banks. This ratio was 66.8% in 1982 and reached 23.46% in 1988. On the other hand, the liquid assets / deposits ratio in Lebanese Pounds reached a maximum in 1988 in which it recorded



81.5% against 46% in 1982. These ratios are much higher than the ratio that was imposed by the Central Bank, which determined the liquidity ratio to be 25% by circular No. 435. Regarding foreign currency, the loans / deposits ratio remained at almost the same level except in 1986 and 1987 in which it recorded 34.76% and 37.34% respectively, whereas it was 43.83% in 1982.

The same phenomenon occurred in the liquid assets / deposits ratio, but in a reversed manner. This ratio recorded 61.7% in 1982, while it increased to 74.65% in 1986 and 74% in 1987. In 1988, the ratio returned to the 1982 value. It is observed in this analysis that neglecting the impact of doubtful debts, the banking system maintained the credit facilities to the private sector. However, part of these loans contained the compounded interest amounts on doubtful debts. The actual percentages of loans / deposits ratio could be derived if doubtful debts data were available.

**Table 4.2**  
**Liquidity Ratio**  
(In Million L.L. and in percentages)

	1982	1983	1984	1985	1986	1987	1988
Loans L.L.	21.481	27.109	34.613	43.066	61.752	77.965	106.282
Deposits L.L.	32.153	41.129	48.386	72.631	92.146	122.464	452.939
Reserve & T. Bills L.L.	14.791	18.374	19.788	36.200	45.947	68.914	369.106
Loans/Deposits L.L.	66.80%	66%	71.53%	59.29%	67%	63.66%	23.46%
Res & T.Bills/Deposit L.L.	46%	44.6%	41%	50%	50%	56%	81.5%
Loans F.C	5.825	9.540	11.575	20.667	85.014	547.404	770.012
Deposits F.C.	13.287	16.841	25.224	44.837	244.539	1465.954	1784.700
Demand Deposits and Invest F.C.	8.198	9.513	15.956	30.514	182.552	1086.550	N/A
Loans/Deposit F.C.	43.83%	56.64%	45.88%	46%	34.76%	37.34%	43%
Dem. Dep. & Inv./ Deposits F.C.	61.7%	56.48%	63.25%	68%	74.65%	74%	N/A

Source: Bilan banques from 1983 to 1989 published by Bank Data.

**C - Loans to customers:**

Historically, loans to customers contributed the major part of profit to the Lebanese banks. These were used in productive sectors that had a positive effect on the economy's growth. The beginning of the political and economic crisis, and consequently, the financial deterioration in 1984 led banks to be more conservative in their lending

policy. One of the major developments that happened in the eighties was the continuous increase in doubtful debts which resulted from the bad security situation. Collaterals for such debts were in most cases considered worthless because they usually real estate located in insecure regions. As a result, Lebanese bankers accepted to grant loans when covered by cash items and letter of guarantees from banks. Regarding the Lebanese Pound loans, banks' practices, beginning from 1984 deviated from the real goals of financing the economic sectors.

Banks used to give advance to borrowers for speculation purposes, achieving considerable profit from interests and commissions on such accounts. Borrowers were achieving high profits from the drastic depreciation of the Lebanese pound. Those practices caused further deterioration in the financial situation, thereby obliging the Central Bank to restrict bank partially by issuing, circular No 539, in 1985. It stated that "Credits in Lebanese Pounds must not exceed an increase of 7.5% per quarter". Other circulars issued concerning legal reserves and treasury bills aimed at decreasing the liquidity of banks in order to restrict their ability to grant excess liquidity for speculation purposes.

It is important to notice in this part of the study the customers' preferences to take loans in foreign currencies rather than in Lebanese Pounds assuming a stability in the Lebanese Pound. This was mainly due to the high interest rates on loans in Lebanese Pounds compared with foreign rates. However, the preferences of customers were opposite when there was a great depreciation in the Lebanese pound. This high interest was mainly due to the Central Bank's policy that determined a high yield on treasury bills to make deposits in Lebanese Pound more attractive for the public. This yield on treasury bills especially in the secondary market, was the major determinant of rates on loans in Lebanese Pound. It is worth noting here that the rates applied on loans both in Lebanese pound and in foreign currencies are floating rates. A bank can alter rates on loans at every change in the interest rate. Foreign currency rates are determined by the international markets. For example, the rates of loans in U.S.D. are determined by the prime rate in the U.S.A. A bank only informs customers about the change on rates applied, if it informs them at all.

As Table 4.3 shows, the currency structure of loans reversed between 1982 and 1988. Where loans in Lebanese Pounds in 1988 constituted 78.7% of the total loans, loans in foreign currency constituted 21.3%. However, in 1988 loans in Lebanese pounds constituted 12.1%, while those in foreign currency constituted 87.9%. This was due, to the high inflation rate and the depreciation of the Lebanese pound, as mentioned previous.

Comparing the annual growth of loans in Lebanese Pounds and in foreign currency, it is observed that the growth in foreign currency loans was much higher than that in Lebanese Pounds. The best example was in 1987, when foreign currency loans increased by 543.9% vs an increase of only 26.25% in the Lebanese Pound loans. However, this high growth in foreign currency loans was nominal. Looking at the growth of foreign currency loans evaluated in U.S.D., it is clear that, in most years there was a negative growth. In the years 1984, 1985 and 1986, the decline was 26.31%, 12.28%, and 14.4% respectively. The year 1987 recorded the highest inflation rate as compared to other years of the study. A real growth was recorded in foreign currency loans.

Table 4.3

## Loans and Advances

(In Million L.L. and U.S.D.)

	1982	1983	1984	1985	1986	1987	1988
Loans in L.L.	21.481	27.109	34.613	43.066	61.752	77.965	106.282
Loans in F.C.	5.825	9.540	11.575	20.667	35.014	547.404	770.012
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	27.306	36.649	46.186	63.733	146.766	625.369	876.294
Percentage L.L.	78.7	74.0	75.0	67.7	42.1	12.5	12.1
Percentage F.C.	21.3	26.0	25.0	32.4	57.9	87.5	87.9
Loans L.L. Annual growth		26,20	27,68	24,42	43,39	26,25	36,32
Loans F.C. Annual growth		63,77	21,31	78,58	311,35	543,9	40,66
Loans F.C. U.S.D.	1.529	1.767	1.302	1.142	977	1.203	1.453
Annual growth		15,56	-26,31	-12,28	-14,4	23	20,78
Loans/Total B.S.	44,24	46,68	46,17	39,35	32,21	28,22	30,46

Source: Bilan banques from 1983 to 1989 published by Bank Data.

Comparing the two tables (Table 4.3) and (Table 4.4) considering the conditions in Lebanon, especially with regard to defaulting of customers and to the accumulation of debts and interests, one can observe the following points.

In 1987 and 1988, the interest rates on loans in L.L. were very high 50.12% and 41.48% respectively, in addition to high inflation rates and the depreciation of the Lebanese Pound. The annual growth of loans in Lebanese Pounds was only 26.25% and 36.32% respectively. All these factors led to a drastic shortage in credits in Lebanese

Pounds in the economy. With regard to the ratio of loans to total balance sheet, this ratio was continuously decreasing throughout the years of study. This indicates the decrease of loans to total assets of banks.

Table 4.4  
Interest Rates on Loans And on Treasury Bills  
in the Secondary Market  
(In Percentages)

	1982	1983	1984	1985	1986	1987	1988
Rates on Loans	16,70	14,04	17,05	17,65	24,55	50,12	41,48
Effective Rate on 6 Mth. T. Bills	11,08	10,80	16,80	17,39	22,22	22,22	22,22
Effective Rate on 1 years T. Bills	N/A	12,48	15,54	19,04	24,98	24,98	24,98

Source: Annual Reports of Bank of Lebanon from 1982 to 1988.

Comparing interest rates on advances in Lebanese pounds with those in TBs in the secondary market, it is observed that rates on advances were always higher than those on TBs in the secondary market. This trend was not recorded in 1985 and

1986. This fact contradicted the opinion of Lebanese bankers that the secondary market was the determinant of interest rate on advances.

D - Size Analysis of Banks:

By dealing with the major items of the consolidated balance sheet of commercial banks, we have thereby covered the banking system in Lebanon. In this section, the banks will be divided into 3 groups: large sized, medium sized and small banks. The purpose of this analysis is to reveal the differences that might exist among banks of different sizes. Large sized banks must give more confidence to the public, however, size is not the only factor for a successful bank. The analysis will be completely based on statistical data. Banks are to be classified according to their deposits in 1988. The average for every group will be computed in order to have a reasonable comparison among groups. The classes of deposits are as follows:

- a. Small sized banks: L.L. 2 billion < deposits < L.L. 20 billion
- b. Medium sized banks: L.L. 20 Billion < deposits < L.L. 80 billion
- c. Large sized banks: deposits > L.L. 80 billion



Table 4.5, shows the names of banks that are classified in each category, and the data on their deposits, provisions, shareholders equity, liquid assets, loans and total balance sheet. Moreover, the average of each item is computed in the above mentioned table in order to be used in the analysis.

As Table 4.6 shows, the liquidity ratio of small sized banks is smaller than that of large and medium sized banks. This could be explained by the fact that small banks are less conservative in their credit policy than others. Large and medium sized banks have nearly the same ratio of liquidity, 86.39% and 85.87% respectively. Regarding the solvency ratio, the three categories were below the legal ratio of solvency. It is worth noting here that small banks have the highest ratio as compared to others, while medium sized banks had the smallest, 0.28% only. Thus it is required that all banks increase their private funds in order to reach a reasonable solvency ratio. Moreover, small banks also have the highest ratio of provisions to loans as compared to others. This ratio recorded nearly 30%. The ratio of medium sized banks was the smallest and was somehow far from the two other

ratios. Medium sized banks must increase their provisions to have a ratio close to that of large and small banks.

**Table 4.5**  
**Items from The balance sheet of large,**  
**medium and small size banks in 1988**  
**(In Million L.L.)**

Large Banks	Deposits	Provision	Shareholder equity	Liquid Assets	Loans & Discounts	Total B.S.
BLOM	250,720	14,145	626	214,812	62,777	281,095
Arab Bank Ltd.	142,798	9,987	378	140,596	13,346	155,004
Byblos Bank	119,769	5,229	471	94,808	41,289	138,155
BLF	117,294	15,284	1,518	94,514	54,220	149,248
<b>Total</b>	<b>630,581</b>	<b>44,645</b>	<b>2,993</b>	<b>544,730</b>	<b>171,632</b>	<b>723,502</b>
<b>Average</b>	<b>157,645</b>	<b>11,161</b>	<b>748</b>	<b>136,183</b>	<b>42,908</b>	<b>180,376</b>
Medium Banks	Deposits	Provision	Shareholder equity	Liquid Assets	Loans & Discounts	Total B.S.
BBAC	71,288	3,428	400	68,379	10,337	79,213
MEBCO	67,984	6,456	66	20,061	55,830	77,237
BLC	63,824	3,232	86	79,488	33,199	113,066
Saradar	59,136	4,780	61	58,128	12,353	71,019
Lebanon & Gulf	39,400	649	78	24,350	18,321	43,300
B.B.C.	37,687	2,646	505	31,067	11,248	42,798
<b>Total</b>	<b>339,319</b>	<b>21,191</b>	<b>1,196</b>	<b>291,373</b>	<b>141,288</b>	<b>426,633</b>
<b>Average</b>	<b>57,553</b>	<b>3,532</b>	<b>200</b>	<b>48,562</b>	<b>23,548</b>	<b>71,106</b>

Table 4.5 (cont'd)

Small Banks	Deposits	Provision	Shareholder equity	Liquid Assets	Loans & Discounts	Total B.S.
U.B.S.L	18,077	3,979	441	9,595	15,678	25,442
Allied Bus.	17,465	339	153	15,927	1,791	18,122
Globe	14,484	422	60	8,494	6,255	17,235
Syrian Leb. con.	14,166	7,519	150	13,594	8,600	22,261
Beirut	12,104	1,097	56	5,183	8,291	13,524
B.C.C.I.	11,917	1,016	203	7,948	5,176	13,203
Mawarid	11,492	974	59	11,062	1,443	12,606
Orient Credit	11,256	483	30	12,635	1,927	15,086
Capital Trust	11,198	559	31	10,419	4,060	15,388
Madina	8,867	517	60	5,577	4,035	10,043
Total	131,026	16,925	1,243	100,434	57,256	162,910
Average	13,103	1,693	124	10,043	5,726	16,291

Source: Bilan banques from 1983 to 1989 published by Bank Data.

Table 4.6

	Liquidity Ratio Liquid asset/Dep	Solvency Ratio S.H./Total B.S.	Provision/Loans
Large size banks	86,39%	0.41%	26,01%
Medium size banks	85,87%	0.28%	15%
Small size banks	76,64%	0.76%	29,56%

Source: Table 4.5.

Finally, what is observed here is that no large discrepancies exist among banks. All banks considered have good liquidity ratios. This is mainly due to the regulation of the Central Bank and the conservative policies of banks in granting new loans to economic sectors.

## Conclusion

The Lebanese banking system has been severely affected by the Civil war in the country. The deterioration in the economic and consequently in the financial situation has had a direct impact on the abilities and practices of the banking sector. No banking system can prosper without a strong economy and without financial and monetary stability.

The political and economic crisis changed the structure of the Lebanese economy. The public sector became the major borrower from the banking system, thus competing with the private sector for the resources of the banking system. It also affected the growth of the banking system, where no real growth was recorded in the credit abilities of banks. The large growth which is revealed in the consolidated balance sheet of banks is a nominal one caused only by the deterioration of the financial situation.

The continuous war operations had their impact on the ability of debtors to repay their debts. This led to a deterioration in the quality of

credit offered by banks to the private sector, since banks could no longer maintain the necessary provisions due to the decrease in profitability.

The crisis also left its impact on the productivity of the staff of banks. Emigration of experienced personnel was a major phenomenon and the training of new employees became a difficult process.

To improve their staff quality, banks must pay more attention to the training process, so as to provide all employees with the opportunity to acquire the necessary experience in the field. Managers in charge of the recruitment process must rely more on scientific measures for the employment of new staff. One of the important conditions should be a certain level of education and a minimum level of experience.

The economic recession left its impact on a variety of banking operations. It affected the quality of the banking system. The deterioration in the economic activities led banks to resort to some practices, such as investing in risky assets and advancing loans to speculators. Commercial banks didn't change their policy of advancing a small

percentage of loans to agriculture and industry since they need a long term loans and this violates the matching principle because bank's funds are a short term funds. Speculation had a bad effect on the banking system as a whole. Such practices prospered in the absence of a central and controlling system. In order to control these practices, the government must revive the controlling system, so, it would operate in an efficient manner.

The solvency ratio of the banking system was seriously affected by the financial deterioration. It reached very low ratios during the last period. Most banks couldn't secure the necessary solvency ratio required by the central bank of Lebanon. In addition, the financial deterioration caused an increase in doubtful debts which was another incentive for banks to increase their private funds. Moreover, Pasle committee, in order to enhance this increase, requested the central and controlling authorities in the O.E.C.D to require of all banks working under their control to increase their solvency ratio to 8%. Consequently, all banks in the world must have this percentage of solvency in order to operate with O.E.C.D banks. In 1989, the solvency ratio in Lebanon banks was

0.84%. This was substantially less than the ratio of Arab banks which was 6.0%, while in international banks it reached a value of 3.63%.<sup>24</sup>

On the other hand, the liquidity ratio of banks is very high due to the central bank regulations and due to conservation in the banking sector in granting loans that are considered risky. The high percentages of liquidity had an effect on the profitability of banks. However, in the order for banks to be able to have a reasonable liquidity ratios, two conditions must be achieved. The first condition is an improvement in the security situation in Lebanon and the consequent revival of the economic activities, which can normally absorb the liquidity of banks through productive activities. Second, the government must be able to finance itself without resorting to the banking system whose main role should be that of creditor to the private sector. It should be noted here, that the excess liquidity of the Lebanese pound resulted from under writing treasury bills, which are considered as liquid assets in the commercial bank balance sheet.

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24. Al-Massaref Al-Arabeiah Magazine, Issue No. 122-123, February - March 9, p. 150.



Regarding the structure of the Lebanese banks, the most significant issue is the average size of a Lebanese bank. Compared with the average size of an Arab or international bank, the banking unit in Lebanon is considered very small. At the end of 1989, the average size of a Lebanese banking unit amounted to less than 75 million U.S.D. The average size of an Arab bank, however, measured by total assets amounted to 4.613 million U.S.D, while it reached a value of 128.350 million U.S.D for an international bank.<sup>25</sup>

Moreover, there is a high degree of concentration in the Lebanese banking market, where a large number of banks constitute a small share of the market. Banks of such sizes cannot operate properly with foreign banks which required Lebanese banks to keep idle balances and full amounts of collaterals for documentary credits. In 1989, the first five banks in Lebanon, -BLOM (7.59%), BLF (6.64%), Byblos (5.3%), Fransabank (4.78%) and Mediteranee (4.43%) - constituted 28.7% of the total banking market, measured by total assets. The first ten banks constituted 50% of the total

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25. Al-Massaref Al-Arabeiah Magazine, Issue No. 122-123, February - March 9, p. 48.

banking market. This implies that less than 16% of the total no of banks performs half of the Lebanese activities.<sup>26</sup> In addition, there is a concentration in the bottom, where the last 35 banks constitute only 16.75% of the banking market, that is the average share for a bank in this category amounts to 0.48% only. All these factors led bankers and central authorities to propose plans for mergers or even forced mergers among banks. This is what should happen in the near future in the order to have a better banking system.

For Lebanese banks to avoid liquidity risks and to be able to have a sound credit policy, they must have what is known as a participation of loans. In adopting such a policy banks can have an integration in the banking system that enables them to resolve liquidity needs for loans. They can also distribute the credit risk among them.

Further more, Lebanese banks must adopt different strategies in managing their portfolio investments. The foreign security market may offer good investment opportunities for Lebanese banks. Instead of investing all their excess funds in the

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26. Al-Massaref Al-Arabeiah Magazine, Issue No. 122-123, February - March 9, p. 49.

from of placements with correspondents, they can purchase some foreign securities that have an acceptable degree of experts who can follow up the activities of the foreign economies.

Regarding the role of the central and controlling authorities, the central bank of Lebanon should alter some policies concerning banking activities. Keeping in mind the stability of the Lebanese pound against foreign currencies, and the difference in interest rates between the Eurodollar and the Lebanese pound, the central bank must decrease the interest rate on treasury bills. This rate reached an effective value of 35% for public (secondary markets) while the Eurodollar rate declined to around 6% for the same period. This high differential caused the elimination of credit in L.L, since banks had to charge any credit in L.L at around 40%, that is above the secondary market rate, while borrowers in dollars had their credits charged at only around 15%. Thus, the decrease of interest rate on treasury bonds by the central bank is a necessity that could be achieved on condition that government revenues can be collected to cover its budget. Furthermore, the decrease of interest rates, will have an effect on

the circulation of the Lebanese pound in the market and thus will decrease the dollarization of the Lebanese economy.

Despite the fact the deposits in foreign currency constitute the majority of deposits, the legal revenue is maintained in the central bank on L.L deposits only. In order to have real safety for deposits and for the banking system as a whole, the central bank must plan to control a certain percentage of bank deposits in foreign currencies. Such a decision may be temporary until a change in the structure of deposits occurs when the financial situation in the country so permits.

Moreover, insurance of deposits in foreign currency must be reviewed by the National Institution for Insurance of Deposits. This institution covers a portion of deposits in Lebanese pounds in the case of bankruptcy of a bank. Thus, the financial authorities which manage this institution must take into consideration the importance of foreign currency deposits in the Lebanese banking system and they must try to extend its coverage to encompass foreign currency deposits.

Finally, the Lebanese commercial banks need better co-ordination between their managerial bodies and the central and controlling authorities, so as to have a more effective sector with longer - range planning and a strong structure. The improvement in the security situation will have a major effect on the Lebanese banks, since all economic sectors will prosper in a state of peace.

## Bibiliography

1. Stigum Marcia. L. and Branch Rene O. Jr. Managing Bank Assets and Liabilities (Strategies For Risk and Profits) Dow Jones - IRWIN Home Wood. Illinois, 1983.
2. Crosse Howard D. and Hempel George H. Management Policies For Commercial Banks. Prentice - Hall, Engle Wood Cliffs, New Jersey, 1980.
3. Lebanese Banks Facing The Crisis. (Al-Massaref Al-Lubnaniea Fi Mowajahat Al-Azma). Siminar organized by Union of Arab Banks, 1983. (Published In Arabic).
4. Annual Reports of The Central Bank of Lebanon From 1982 to 1988.
5. "Bilanbanque" From 1982 to 1988. Published by Bank data Financial Services.
6. Code of Money and Credit.
7. Code of Commerce.

## Magazines

- Al Massaref Al Arabiah

## Thesis and Projects (AUB)

1. Fulayhan, Imad. Assets Liabilities Management in a Lebanese Commercial Bank Using Lineany Programming.

2. Bardawil, Maurice. Management of bank Funds in Lebanon.

## Interviews Conducted with the following Bankers:

1. Mr. Tony Sheweiry (Bank of Lebanon and Kuwait/ General Manager).

2. Mr. Adnan Noweihed (BANque Libanaise pour le Commerce/ Financial Manager.

3. Mr. Bassem Naamani. (Saudi Lebanese Bank/ Branch Manager).

4. Mr. Jaafar Jazar (Banque du Liban et D'Outre-Mer/ Consultant).

5. Miss Najla Hussami (BLOM/Treasury Department).

6. Mr. Jean Maamary (Bank Al-Madina/ Principal Manager/ Accounting Department).

7. Mr. Imad Shehimi, (Bank Al-Madina/ Principal Controller/ Treasury Department).

8. Mr. Fouad Saad (Mediterranee Bank/ Treasury Manager).

9. Dr. Fadi Ousairan (Mediterranee Bank/ Consultant).