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THE FISCAL CRISIS IN LEBANON

CAUSES, CONSEQUENCES, AND POSSIBLE CURES

1975-1992

BY

SALIM DIMASHKIEH

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BY

SALIM DIMASHKIEH

Approved:

Abdallah Dah

Prof.

(First Reader)

Yusif OTHIBL

Prof.

(Second Reader)

Date of Project Presentation: July 27, 1993

BEIRUT UNIVERSITY COLLEGE

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A B S T R A C T

Before the eruption of the civil war in 1975, the Lebanese economy was one of the healthiest and most developed as compared to other developing and even some developed economies, with important industrial, agriculture, financial, and services sectors.

Lebanon occupied an important cultural, financial, and industrial position in the Middle East. Government involvement in economic affairs was minimal, and free enterprise reigned supreme. Economic growth was accompanied by relative price-level and financial stability, a strong national currency, and a considerable inflow of capital due to relative political stability in the country.

However, since 1975, the civil war has been main determinant on the country's economic and social life. The economy has been experiencing a drastic decline in real output, investment, and the exchange value of the Lebanese Pound, coupled by massive fiscal deficits, ever-increasing public debt, rapid and variable inflation, and a shift away from the Lebanese Pound to foreign currencies. The worsening of economic and political conditions in the country has led to severe worsening of the social conditions:

Lebanon now has entered a state of poverty among low- and middle-income groups.

In fact, the fiscal crisis has been a permanent aspect accompanying economic activity in Lebanon since 1975, which implied and still implying adverse consequences on the economy. The present purpose of this thesis is to investigate the fiscal process in Lebanon during the 1975-1992 period: it's roots (causes), consequences on both the economic and social levels, as well as suggesting some policy measures to halt it .

This thesis is composed of an analytical part and an empirical part. The first part deals with the causes and consequences of the fiscal crisis in the Lebanese economy and some recommendations to halt this phenomenon. The second part provides empirical investigation of the major sources of the fiscal crisis in Lebanon.

More precisely, the thesis is composed of five chapters. The first chapter presents an historical account of the state of public finance, during the 1964-1974 period. The second chapter presents a historical account of the fiscal crisis in Lebanon during the 1975-1992 period and

its causes. The third chapter clarifies the policy measures undertaken by domestic authorities to cease the burden of the fiscal crisis. The fourth chapter exhibits the major consequences of the fiscal crisis in Lebanon, both on theoretical and empirical levels. Finally, the last chapter gives the conclusion of this thesis as well as some policy measures that could help in halting the phenomenon of fiscal crisis in Lebanon.

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LIST OF INTERVIEWS

- 1- Mr. ASSAF , Jean . Department Subhead, Ministry
of Finance .
- 2- Mr. BSAT , Raji . Head of Department, Ministry
of Commerce.
- 3- Mr. FAYED , Ahmad . Statistics Department, Bank of
Lebanon.
- 4- Dr. MOUNLA , Nadim . Head of Department, Ministry
of Commerce.
- 5- Mr. Radi , Rabah . Head of Department, Ministry
of Finance.
- 6- Miss. SAADE , Claude. Statistics Department, Bank of
L e b a n o n .
- 7- Mr. SHEHAB , Imad . Statistics Department, Union
of Arab Banks.
- 8- Miss. ZAYDAN , Maha . Statistics Department, Chambre
Du Commerce Et De L'Industrie.

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CHAPTER I

THE STATE OF PUBLIC FINANCE PRIOR TO 1975:

I - Economic Performance:

Prior to the onset of the war in 1975, the Lebanese economy was characterized by a rapid expansion and across a broad spectrum of activities, relative price stability, surplus in the balance of payments, a dominant role for the private sector, and a strong national currency.

The Lebanese liberal and unregulated development had led to an economy dominated by the services sector, although export - oriented light manufacturing industries were rapidly growing. Some economic indicators are shown in Table (1-1).

Prior to 1975, the Lebanese economy maintained relatively high rates of economic growth. The average annual growth rate of real GDP over the 1965 - 1974 period was about 6% (see Table 1 - 1), which is quite high as compared to, other developing and even developed economies. Lebanon occupied an important cultural, financial, and industrial position in the Middle East.

Table 1-1

Evolution of GDP and Prices Indicators
1964 - 1974 (In billions)

<u>YEAR</u>	<u>Real GDP</u>	<u>Real Gross Inv</u>	<u>Capital</u>	<u>CPI</u> <u>Base Year</u> <u>1974 = 100</u>
1964	4.6	1.0	12.1	69.97
1965	4.9	1.1	12.8	72.04
1966	5.2	1.2	13.6	73.96
1967	5.0	1.1	14.3	76.70
1968	5.6	1.0	14.8	76.18
1969	5.7	1.1	15.5	79.66
1970	6.1	1.2	16.2	79.66
1971	6.7	1.3	17.0	80.92
1972	7.5	1.5	18.0	84.91
1973	7.9	1.62	19.1	90.01
1974	8.1	1.64	20.1	100.00

Sources : Columns 1,4 Beirut Chamber of Commerce & Industry Columns 2,3 Saidi, N (1984) "The Effect of the war on Economic Activity in Lebanon: Quantitative Estimates" in the Bank of Lebanon. Quarterly Bulletin, 20 fourth Quarter 1984 pp. 5-13

The domestic economic expansion was spread all over the various sectors, but the dominant role was for the services and trade sectors, with its share in GDP exceeding 60% in 1974, as compared to about 20% for the industrial and construction sectors, and some 10% for the agricultural sector (Quarterly Economic Review of Lebanon, 1975, Annual Supplement pp2).

Economic growth was reinforced by a significant growth of real investment and the capital stock. Real investment tended to grow to about 5.4 % on average over the 1965 - 1974, and the capital stock at about 5.2 % on average during the indicated period (See Table 1-1).

Many other factors contributed to this growth, namely:

- 1- A high investment ratio (as measured by the ratio of gross investment to GDP) averaging over 20% per year, this led to an increase in factor productivity .
- 2- Considerable investment in human capital which resulted in the emergence of a highly skilled labor force.
- 3- Skilled labor force in conjunction with the availability of a low wage rate for the relatively unskilled immigrant labor force from neighboring countries, provided the basis for rapid growth.

4- The adoption of a liberal stance of economic policy led to the development of a competitive economy and facilitated the "absorption" of new technology from the rest of the world to help in the process of growth and development (Saidi op cit ,pp4). Adding to the above stated facts, the country's geographic location and its moderate climate that attracted a lot of tourists every year who contributed to the growth rates that were witnessed during the period under consideration.

The growth in real activity was accompanied by a relative price stability. Inflationary trends were generally moderate, and the rate of inflation did not exceed on the average 3.7% per year during 1965 - 1974. The moderate inflation rate was the result of many factors mainly :

- 1- A restrictive monetary policy and the matching of the growth rate of money supply (e.g. 5.2% on average for M1) by an almost equivalent growth of output (6% on average).
- 2- A relatively strong position of the Lebanese currency vis-a-vis major currencies of the world .

It is worth mentioning here that economic growth was coupled by low rates of unemployment of less than 6% on average during the indicated period which is

relatively low for a developing economy (Quarterly Economic Review of Lebanon 1975, Annual Supplement pp.10).

Lebanon has continuously maintained since the early fifties a liberal exchange system with complete freedom of capital transfers and a flexible exchange rate system.

During the prewar, the Lebanese Pound had been steadily appreciating against the U.S dollar and most foreign currencies . For instance, the average annual appreciation of the Pound vis- a -vis the U.S. dollar during the prewar was about 2.8% (See Table 1-1) .

This appreciation of the Pound was partially due to an economic policy adopted by President Nixon which led to a devaluation of the dollar vis-a-vis the other currencies of the world. (Quarterly Economic Review of Lebanon 1975, Annual Supplement p.p. 12).

The Balance of Payments continued to experience significant surpluses over the prewar period, the surplus was about \$ 424 million in 1973 and more than \$ 649 million in 1974. Essentially, these surpluses were the result of vast net influxes of capital (e.g remittances) into Lebanon from foreign destinations. The trade balance account was always in deficit due to the inability of exports to match the increase in the volume of imports (See Table 1-2).

Capital inflow into Lebanon (namely investment funds and remittances from Lebanese living abroad to their families) tended to compensate for the deficit in the trade - balance account, thus leading to surpluses in the the balance of payments over the prewar period. That inflow of capital was mainly due to the relative political and economic stability which prevailed in Lebanon during the indicated period .

II - Fiscal Performance

In accord with the Lebanese general liberal economic policy and a "laissez faire" approach, the prewar period reflected a limited role for the government both in terms of the size of the public sector and in terms of the scope of its activities.

The government did not play an active role in the development of the economy. That job was left mainly to the private sector which was characterized by an enterprising spirit and private initiative, nor were there any serious attempts of counter - cyclical economic policy .

During the prewar period, the size of the government sector relative to GDP averaged about 13% with relatively little variability; there was no uptrend in the share of the government in aggregate spending ; nor was there a counter - cyclical spending pattern, that is, no tendency for government spending to rise when aggregate output was below trend and vice versa.

In fact, the opposite was true: government spending pattern was procyclical, that is above average when income rose above trend and lower when income was below trend (Saidi (1986) :Op cit pp. 9 -10).

The prewar period was also characterized by relative fiscal stability. During this period total revenues grew at a stable pattern (6.9% per year) at about the same rate as GDP and thus the share of taxes did not display any trend. Furthermore, the share of government revenue was consistent with and compatible to the share of government spending, so that there was no tendency for systematic budget fluctuations (either deficits or surpluses) to emerge over time (See Table 1-3) .

As to the structure of taxation : indirect taxes accounted for over 56.9% of total revenue collections, customs revenue and trade taxes for over 37.5% direct taxes for nearly 16.7%, and taxes on persons or business income for about 11% (Ibid pp. 11-12).

Table 1-3

Evolution of Main Fiscal Indicators
1964 - 1974

<u>YEAR</u>	<u>Government Expenses</u>	<u>Government Revenues</u>	<u>Government Deficit</u>	<u>Customs Revenues</u>
1964	676	636	-40	N.A
1965	730	673	-57	N.A
1966	740	709	-31	N.A
1967	771	678	-93	N.A
1968	791	752	-39	178
1969	792	754	-38	192
1970	864	832	-32	192
1971	907	959	+52	205
1972	1005	1056	+51	305
1973	1133	1091	-42	361
1974	1218	1270	+52	477

- Deficit + Surplus

N.B: Gvt Exp, and Revenues and Deficit are in Real Terms at Constant 1974 prices.

Sources : Column 1: Saidi, N (1984) "Government spending and taxes. Anatomy of a Crisis 1964-1982"

Column 2: Bank of Lebanon. Quarterly Bulletin, 23, 4th quarter 1984. P. 5-11

Column 3: Beirut Chamber of Commerce & Industry.

As for the structure of government expenditure in 1974 current spending accounted for almost 64% and capital investment spending for nearly 36% .

The pattern of evolution of the budget state and public debt is consistent with the evidence on government spending, revenue, and deficits. Over the prewar period, the public debt, both in nominal terms and relative to total income, was small. The ratio of public debt to GDP fluctuated around an average of 1 -2 % with a tendency to fall over time .

Deficits or surpluses were small and rarely exceeded 0.42% of GDP .

The debt ratio and budget deficit tended to rise during recessions (as over 1967 - 1970) and to fall when income was above trend (as over the 1972 - 1974) (Ibid pp.13).

It is worthy indicating here that all variables, whether monetary, fiscal or economic did not display volatility and variability (as measured by the standard deviation of growth rate which is moderate if not small) during the prewar period (See Table 1-1), thus assuring that the Lebanese economy was growing at a stable pace .

CHAPTER II

BALANCED AND UNBALANCED BUDGET

Even governments use budgets to control and allocate amounts of money to record their fiscal affairs. For a given year the planned expenditures and expected revenues that government spending and tax program would yield is called a budget. The budget will contain a list of specific programs (education, welfare, defense, etc), as well as tax sources (individual income tax, social insurance taxes, property and wealth taxes etc).

In a given year, governments generally run either budgetary surpluses or budgetary deficits. A budget surplus occurs when all taxes and revenues exceed government expenditures. A budget deficit exists when all the expenditures exceed the government revenues. When government incomes and expenditures are equal the state of a balanced budget is there.

In general when the government incurs a budget deficit, it must either print money or borrow from the public by issuing treasury bills. The government debt (sometimes called the public debt) consists of total or accumulated borrowing by the government; it is hence the total dollar value of government bonds owned by the public, i.e., by households, banks, businesses, foreigners ...

The first distinction to be made is between an internal and an external debt. An internal debt is owned by a nation to its own citizens. Many economists argue that an internal debt poses no burden because "we owe it to ourselves.

An external debt, is the one owed by a nation to foreigners, does involves a net subtraction from the goods and services available to people in the debtor nation. Many nations in the 1980's like Poland, Brazil and Mexico labored under severe economic hardships after they incurred large external debts. They were forced to export more than they imported in order to service their external debts, that is to pay the interest and principle on their past borrowings. In the mid 1980's, countries like Brazil and Mexico needed to pay one-fourth to one-third of their export earnings to service their external debts. The debt service burden on an external debt represents a reduction in the consumption possibilities of a nation.

In the late 1980's, the United States was added to the list of debtor countries. Because the large federal budget deficit was financed by negative net foreign investment (that is by borrowing from abroad), the United States turned from a creditor nation to a debtor nation.

Evolution and Causes of the Fiscal Crisis in Lebanon:

1975 - 1992

Introduction:

Lebanon's state of public finance since 1975 was very weak due to the lack of central government authority in the country and the consequent inability of the authorities to collect revenues. At the same time, the authorities have attempted to provide a minimum of public services and have subsidized some commodities and public utilities.

In addition, two dynamic processes have at times accelerated the fiscal deterioration .

Firstly, domestic bank financing of the fiscal deficit, through the linkage extending from liquidity injection to exchange rate depreciation and inflation acceleration, has put cost-push pressure on government spending, particularly on petroleum and wheat subsidies (in the absence of full price passthrough), salary adjustments, and transfers to municipalities and other agencies .

Secondly, the compounding of interest on the large and rapidly growing stock of internal public debt has added to the fiscal deficit and the amount of new borrowing.

The Lebanese fiscal-deficit experience shows as clear pattern of massive fiscal deficits for the public sector continuing recurrently and in an accelerated

manner leading to rising public debt that tends to produce adverse economic consequences.

Erosion of the revenue base, coupled by explosion of public expenditures, are responsible for the fiscal crisis in Lebanon .

I- Institutional Arrangements:

The public sector in Lebanon consists of the Central Government, various agencies at the central government level, municipalities, and nonfinancial public enterprises, most of which have financial autonomy. The predominant entity of the public sector is the Treasury, which executes its financial operations through five basic channels: (i) the general budget of the central government, (ii) the attached budgets of the three government agencies without financial autonomy, namely, the Cereals and Sugar Beet Office (CSBO), the post, telephone, and telegraph office (PTTO), and the national lottery, (iii) The independent budgets of some 50 financially autonomous government agencies and enterprises; (The government agencies with financial autonomy include the Council for Development and Reconstruction (CDR), the national social security fund, railroad companies, port authorities, water supply agencies,

research establishments, irrigation administrations, and the Electricity Du Liban (EDL)).(iv) the budgets of the municipalities.

(In principal, the budgets of the central government and the three agencies without financial autonomy must be approved annually by the legislature, those of the autonomous agencies and enterprises and the municipalities are subject to approval by, respectively, the Ministers of Finance and Interior / and (v) several extrabudgetary special accounts.

(Relating mainly to debt service payments, advances to government agencies and enterprises, and municipalities, as well as the subsidy for petroleum products). The Treasury performs the role of cashier and banker for the public sector, and receives the surpluses and finances the deficits of public sector entities.

Some financially autonomous agencies and enterprises (notably the CDR, National Social Security Fund, and EDL), as well as some municipalities, hold accounts with commercial banks. Exceptions to the principle of centralized public sector cash accounts occur both for historical reasons and because of administrative convenience. For example, a number of agencies which deal extensively with the public maintain their own accounts with the Bank of Lebanon and commercial banks .

However, the Treasury, from time to time, receives payments originally from surpluses of these agencies and makes payments to cover their deficits. Furthermore, taxes collected directly by the Municipalities are deposited with the Bank of Lebanon as well as with the Treasury). The Treasury is entitled to borrow from the Bank of Lebanon and has the power to issue securities to the public. With legislative approval, it may also contract foreign loans for the Central Government or on behalf of agencies under the direct financial control of the Central Government.

Receipts of the general budget consist mainly of revenues from the government concessions and property, tax revenues, fees and dues, as well as profit transfers from the Bank of Lebanon. Revenues of government agencies consist mainly of user fees and charges. Most of the financially autonomous agencies receive transfers from the general budget .

Receipts of the Municipalities consist almost entirely of municipal tax revenues. More than half of the municipal taxes are collected by the Central Government on their behalf; the proceeds are held in transit accounts and are subsequently turned over the municipalities .

Municipalities have in recent years received substantial advances from the Treasury against the balances in these transit accounts. The extrabudgetary special accounts are intended either to link certain expenditures with specific sources of revenue or to provide financial flexibility, mostly for special expenditures .

Expenditures in the general budget are divided into two main categories. Current expenditures (salaries and general administrative expenses) are covered in Chapter I. Chapter II (a) contains expenditures for investment projects expected to be completed during the fiscal year, including the purchase of equipment, while chapter II(b) comprises projected expenditures in the current fiscal year for the investment programs that will extend over more than one year. Under the law, expenditures budgeted under Chapter I of the general budget cannot exceed expected receipts, and there is also a similar stipulation in respect of the budgets of the government agencies and municipalities. Expenditures in Chapter II may be financed from any surplus of receipts over expenditures in Chapter I, surpluses accumulated in past years, and by borrowing. In practice, the authorities have not been able to adhere to this law ; there have also been considerable extrabudgetary outlays .

In the general budget and the budgets of other public sector entities, receipts and expenditures are recorded on a cash basis.

Expenditures are those actually paid in the fiscal year, except that, during a short "complementary" period beyond the fiscal year (usually one month) bills for transactions in the fiscal year can be submitted for payment and the payment are recorded against that fiscal year. Due to the security situation, a budget was not approved during 1984 - 89, and consequently most categories of budgetary expenditure during this period were restricted to the amount in the last approved budget . However, there are important Exceptions, including salaries and wages, which are covered by separate legislation.

Moreover, extrabudgetary outlays related to interest payments, treasury advances, and the petroleum subsidy have become the largest expenditure categories. A budget was once more prepared in 1990 , although only in the second part of the year so that it did not play an effective role in fiscal management. Committees are currently preparing the budget for 1991. In the absence of an effective budget process, the Bank of Lebanon has attempt to restrain the growth of expenditures through postponing government payments and resisting demands for the credit by the Central Government and other agencies .

II - Fiscal Developments during 1975 - 1992:

A - REVENUES:

The magnitude and structure of public revenues in Lebanon had been highly dependent on the security situation since 1975, and at least till the end of 1990 . Because the Central Government had been unable to exert its authority over the entire country, revenues collection (mainly tax collection) was weak. In addition, exchange rate depreciation as well as inflation upsurge tended to exert a negative impact on the revenue base, thereby shrinking that base, due mainly to the non-indexation of taxes to price increases, which means that as inflation rises, the real tax revenues tends to decline. The inability and inefficiency of tax collection was also caused by the lack of operational judicial system and law enforcement, due mainly to the dominance of parties and militias over significant portions of the revenue base. Such lack of been enforcement encouraged tax evasion.

Moreover the war induced decline to real economic activity also contributed negatively to the growth of the revenues base, as taxation in Lebanon is progressive; that is, taxes tend to increase in flourishing economic conditions, and tend to decrease as economic activity slows down .

Another reason for the decline of revenues has been the failure of the legislature to enact budget laws (and therefore revenue measures) during 1989 period; such measures were approved by the legislature in August 1988 (outside the budget laws) and again in the context of the revised budget exercise in 1990, 1991 and 1992 .

Such negative factors had adverse consequences for the revenue base which experienced drastic erosion in real terms during 1975 - 1992 period. Though, nominal revenues which increased from L.L. 798 million in 1975 to L.L. 850 billion in 1992 i.e. by more than 1065 times yet when evaluated in real terms, it is observed that revenues declined from L.L. 726 million in constant 1974 prices to almost L.L. 260 million in 1992 i.e the 1992 level stood at nearly 36% of its 1974 level.

Nevertheless, real revenues when measured in dollar terms, it is observed that revenues did only increase by nearly 41% between 1975 and 1992, but those revenues represent in 1992 only 58% of its 1983 level.

Public revenues which decreased substantially in 1976 due to the eruption of the war, increased thereafter since 1977 and reached its maximum level in 1983 after which came the Israeli invasion to cause a stop and continuous decline in public revenues coupled by the dramatic decrease in the exchange value of the L.L. as

well as accelerated inflation. The declining trend in revenues continued till 1990 whereby it reached historically low levels. Relative improvements in revenues was observed during 1991 and 1992 as the government enacted annual budgets, enhanced tax collections, increased taxes and fees on several items (on alcohols, car registration, fuels, property registration, ...etc..)

The 1975 - 1992 period experienced a major shift in the structure of revenues, which transfers of profits from the Bank of Lebanon (BDL).

Accounting for almost one half of total revenues since 1987. On the other hand, custom duties, traditionally the largest source of government revenues, have been reduced to near insignificance. Direct taxes decreased substantially during the above mentioned period due to emerged difficulties in their collections.

The decline in the role of customs revenues has reflected the steep drop in the ratio of customs duties to estimated imports from 8% in 1983 to 1.1% in 1985 and less than 0.2% in 1990 and 3% in 1992.

Customs receipts have been curtailed due to the diversion of imports to illegal ports operated by the various factions, and the application of an exchange rate of customs valuation that has remained unchanged to L.L.6 = US\$ 1 since early 1985 .

Previously, the customs valuation rate had been based on the exchange rate, for it was rated recurrently to L.L 100 and then to L.L. 200 in 1991 and later to L.L 800 in 1992. There was some increase in customs collections in 1989 because of increased flows through legal ports and efforts to collect revenues in the illegal ports. Over 90% of customs duties are currently generated by car imports, as duties on cars must be paid prior to official registration . Even in this case, customs receipts has been substantially below potential since importers have been taking advantage of the option to pay lower customs duties based on the weight of the car rather than its value. Such measure was later in 1991 and 1992 modified to take into account the value of cars.

A number of customs duties were raised in the context of 1990 - 1992 budgets but the customs exchange rate was maintained unchanged at L.L. 800 in 1992 .

Customs duties whose share in indirect taxes accounted for nearly 70% and for almost 42% of total government revenues in 1975, tended to shrink to no more than 57% and 12% respectively. Such duties which approximated \$ 207 million in 1974 fell to nearly \$ 1 million in 1987 and \$ 2 million in 1990 after which those duties recovered to more than \$ 100 million in each of 1991 and 1992 .

Collection of direct taxes was difficult in Lebanon, even before the security situation deteriorated and the effective rate of income taxes on salaries and wages did not exceed 15% on average during 1975 - 1992 which remains relatively low compared to rates of 30 - 50% in other developing and even developed countries. Nevertheless, collections began to recover in 1988 due to the requirement that taxpayers pay their estimated obligations when they file their returns rather than wait for a notice from the treasury after their returns have been reviewed. The rising trend continued in 1989, as indirect taxes were buoyed by payments of increased profits from the previous year when economic activity had risen substantially. Direct taxes fell in 1990 due to increased collection difficulties caused by the renewal of military operations particularly in Beirut.

Relative improvement in the collection of direct taxes, was observed during 1991 and 1992 as the government introduced new modifications on revenues, especially taxes as indicated carrier. The share of direct taxes in total revenues almost doubled between 1975 and 1992 whereby thoses taxes increased from 10% of revenues in 1975 to more than 23% in 1992.

Receipts from fees and dues, which currently represent an important source of revenues, rose consistently during 1986 - 1992 reflecting the large increase in real estate prices (real estate is usually priced in foreign exchange) and the consequent good performance of the 6% advalorem fee charged for registering real estate transaction. Purchasers of real estate and land continued to register such transactions and to pay the registration fee so as to have clear title to their property. However the large increase in the pound value of real estate in 1987 should have resulted in much higher receipts from registration fees; moreover, exemptions were granted on penalties for late payment and a 15% reduction was given if the areas incurred in 1987 were paid by July 31-1988 .

The moderation of growth of these revenues in nominal terms since 1988 reflects the more gradual depreciation of the lebanese pound and a stagnant real estate market. Government fees and dues, whose share in total revenues approximated 18.8% in 1982 decreased to more than 14% during the past few years.

The main source of "other" revenues are transfers of profits from the Bank of lebanon (excluding drawing on the exchange revaluation account).

These are largely normal operating profits steaming from foreign exchange operations, and interest on foreign exchange assets and on holding of TBs.

The increased earnings of the Bank in recent years have reflected mainly the impact of the depreciation of the Pound on interest receipts from foreign exchange reserves , and interest earned on the growing stock TBs held by the Bank. However, profits were constrained in 1986-1988 by the policy of discounting TBs at a higher interest rate than the government .

The timing of the transfers of profits to the government is at the discretion of the Bank of Lebanon and is usually carried out with a lag. The BDL revenues transferred to the government which contributed to nearly 23% of total revenues in 1981 increased gradually to reach 55% in 1990.

Such revenues are expected to maintain a share of nearly 40 - 50 % of total revenues in 1991 and 1992.

In the official presentation of government accounts, drawings on this account, which record the counterpart of the increase in the Lebanese Pound value of the Bank's net foreign assets from the depreciation of the Pound, are treated as revenue. For the purposes of this report, however they have been treated as financing rather than revenue because they arise from book-

keeping adjustments by the Bank so that the economic impact of the drawings is the same as borrowing from the bank .

Government revenues from foreign grants were seized during the war period due to the state of political and security instability which dominated the country between 1975 - 1990. Such revenue display a significant role, in sometimes, in backing the revenue base as it experienced nearly 8.6% of total revenues in 1982 .

B - EXPENDITURES:

Public Expenditures experienced sharp and accelerated increases since 1975 due to the combination of several factors that exerted all together as explosionary impact on government spending .

1- The war induced destruction in the country obliged the government to spend heavy amounts on reconstruction programs.

2- The expansion in BDL advances to public enterprises and agencies in war times has exerted enormous pressure on expenditures growth, though some of them were inconsistent with the public accounting degree.

3- The recurrent increases in wages and salaries of employees in the public sector, due to continual upsurge of price inflation, tended to explode government spending.

4- The tendency of the government to borrow from internal as well as external sources to finance its spending exerted an upward pressure on its expenditures.

5- The government policy of subsidizing some consumer necessities, such as petroleum and wheat, contributed significantly to the explosionary state of its spending.

6- And the most important is the absence of government inaction of annual general budget and its supplementary attached budgets during 1986-1989 had paved the way for irrational spending, whereby advances for the treasury and public enterprises inclined to increase sharply, thereby exploding current government spending.

7- The accelerated increase in the domestic general price level and the drastic exchange rate depreciation exerted enormous pressure on government spending on goods and services.

Public spending was growing moderately between 1975 and 1980, at levels that did not exceed 50% annually.

But since the beginning of 1980's, public spending started to increase sharply at levels that exceeded 100% annually, and such levels were accelerating since mid 1980's with the sharp decline in the exchange value of the L.L. accompanied by exploding price inflation.

For instance, public spending in nominal terms has expanded by 91% in 1985, 319% in 1987, 92% in 1988, 85% in 1989, 20% in 1990, 145% in 1991, and 47% in 1992 .

The tendency for public spending growth to decline during the last few years can be attributed to the eruption of severe military operations during 1989 and 1990, and recurrent government attempts to control its expenditures during 1991 and 1992 .

To sum, during the past 18 years, public spending has expanded by more than 2155 times when measured in nominal terms.

Public spending, in real terms, has shown a tendency to increase recurrently during the period extending between mid 1970's and mid 1980's for it increased from L.L. 929 million in 1975 in constant 1974 prices to L.L. 3428 million in 1985, and it expanded from \$ 420 million in 1975 to \$ 2433 million in 1982. But with accelerated price inflation, and exchange rate depreciation since mid 1980's, public spending experienced sharp volatility, with its trend rising and declining, but the major trend was downwards.

For example, public expenditures declined from L.L. 3428 in 1985 when measured in constant 1974 prices to nearly L.L. 631 million in 1990, and it declined as well from \$ 2433 million in 1982 to almost \$ 1197 million in 1992.

By this the 1992 level of price spending stands at nearly 18% of its 1985 level when measured in constant 1974 prices, and stands at almost 49% of its 1982 level when measured in \$ terms.

When considering the 1975 - 1992 period, public spending has expanded by more than 185% times when measured in \$ terms, while it has declined by 32% when measured in 1974 constant price .

Public expenditures as shown in Table (2-1) is composed of two components: Budgetary expenditures that involve government spending authorized by the budget degree, and extrabudgetary expenditures that are based largely on unexpected needs to be covered by advances and transfers from the BDL to the treasury and its public agencies and enterprises.

Budgetary expenditures include wages and salaries, capital (investment expenditures), advances and transfers, and other current expenditures.

Extrabudgetary expenditures comprise petroleum subsidy spending, interest payments on BDL loans, TBs, internal and external public debts, as well as advances and other expenditures.

It is evident from Table (2-1) that the share of extrabudgetary expenditures in total government expenditures has increased remarkably during the period between 1982 and 1992 while the share of budgetary expenditures tended to decline during that period. For instance, extrabudgetary spending which constituted nearly 35% of total public spending in 1982 and 1983 climbed to 43% in 1984, 63% in 1986, 75% in 1987 then tended to decline to almost 61% in 1988, 63% in 1989 and 46% in 1990, and remained within a region of 50-60% in 1991 and 1992.

During the above mentioned period, budgetary spending declined from 65% in 1982 to nearly 54% in 1990 and fluctuated around 40-50% in 1991 and 1992.

Such figures are presented to indicate the easy tendency of the government to spend irrationally and its inclination to base such irrational spending on sources outside the budget, a factor that contributed largely to the explosionary growth of government spending .

Also, public spending is composed mainly of two major components, current spending and capital spending.

What is admiring here is that during 1975 - 1992 period, capital expenditures share in total spending declined from nearly one-fourth in mid 1970's to nearly 5-6% during the period extending between mid 1980's and early 1990's.

Table 2-1
EXTRABUDGETARY EXPENDITURES

YEAR	SALAR'S & WAGES	CHAPTER II	ADVANCES & TRANS	OTHERS CURRENT	PETROL SUBSIDY	INT. ON BDL	PAYMENT LOANS	INT. PAY ON TBS	INT. PAY ON INTERNAL PUBLIC DEBT	INT. PAY ON EXT. DEBT	ADVANCES	TOTAL	NOMINAL	REAL 1	REAL 2
1975	567	243										1021	1021	929	420
1976	516	29										642	642	455	219
1977	682	601										2007	2007	1338	669
1978	841	840										2260	2260	1215	753
1979	1091	971										2506	2506	1088	769
1980	1193	1229										3868	3868	1426	1080
1981	1400	1660										5220	5220	1598	1132
1982	2139	1267	2288	293	776			1393	9			9269	9269	2588	2433
1983	2973	2270	1627	582	788			1884	17			11426	11426	3074	2081
1984	3350	2616	500	1112	1000	305	2102		20	1586		13379	13379	2873	1505
1985	4400	2112	1075	1344	5823	994	4849	749	55	2100		25564	25564	3428	1412
1986	6738	1388	797	3741	50100	1712	8914	101	176	3800		34263	34263	1854	394
1987	20598	5064	4417	5530	46847	1647	21795	20	1128	36457		143503	143503	923	315
1988	61635	18462	16100	11715	39550	1046	77658	80	1257	48284		275787	275787	699	520
1989	94700	32700	34450	24390	99264	4718	146622	48	704	71722		509318	509318	806	1008
1990	215000	34500	48000	36500	12000		56400		10000	156000		612000	612000	606	727
1991												1500000	1500000	989	1706
1992												2200000	2200000	631	1197

REAL 1 : Nominal Exp. deflated by CPI (1974=100)
Real 2 : Nominal Exp. deflated by the L.L./US\$ exchange rate

SOURCE : Annual Reports and B.D.L. and the Ministry of Finance.

In comparison, current expenditures - which are by nature inflationary - its share in total spending increased from nearly 75% in 1975 to more than 90% in 1991. This implies that the government seized its expenditures on capital items of the budget and shifted the larger part of its spending to current items, thereby exerting an upward pressure on prices.

This fall in expenditures during the past few years is the result of considerable effort by the authorities to curtail spending, coupled with negative real interest rate on government borrowing. The behavior of total outlays has come to be dominated by interest payments, salaries and wages, the petroleum subsidy, and advances and transfers to the various government agencies.

Domestic interest expenditures increased from L.L. 6.6 billion in 1985 to L.L. 10.7 billion in 1986, L.L. 23.5 billion in 1987, L.L. 78.8 billion in 1988, and L.L. 152 billion in 1989 and totaled L.L. 56.4 Billion in 1990 despite negative real interest rates. The rise reflects a number of factors.

First as a result of the large fiscal imbalance, the internal debt rose sharply during 1975 -1992 period.

Second, in an attempt to reduce the inflationary impact of this deficit, in 1988 - 1992 the authorities attempted to finance a large portion of the deficit through issuing TBs to commercial banks and the nonbank public, which carried higher interest rates than some of the direct facilities with the Bank of Lebanon.

Third, increase in interest rates through February 1986 contributed somewhat to the rising interest outlays, since 1986 there have been no changes in interest rates paid by the government. In 1990, however, domestic interest payments fell by almost two thirds due to a shift in government borrowing from TBs to an overdraft account with Bank of Lebanon (with an interest rate of only 1%), and an extension in the maturity of TBs which pushed payments forward in 1991. In 1991, monetary and fiscal authorities tended to lower interest rates as accompanied by economic recovery. But in 1992, interest rates were raised to cope the emerging monetary crisis. What is observed here is that domestic interest share in total spending declined from 26% in 1985 to almost 10% in 1992. Foreign interest through increasing from L.L. 9 million in 1982 to L.L. 10 billion in 1990, yet its share in total spending increased from 0.1% in 1985 to 2% in 1990.

The large petroleum subsidy evident through 1989 was the result of government effort to stabilize prices in this market. Retail prices for petroleum products were until 1988 entirely set by the authorities which also imported all petroleum products since private sector importers were not competitive given the low prices changed by the government.

In order to limit increases in the cost of living, price adjustments often lagged behind costs, particularly during periods of rapid depreciation of the pounds resulting in large subsidies in recent years. Moreover, at times the subsidy was enlarged by the illegal export of petroleum products induced by the differential in retail prices between Lebanon and neighboring countries. Thus, the petroleum subsidy surged from L.L. 5.8 billion in 1985 to L.L. 46.8 billion in 1987 (over 30% of total outlays).

It was reduced to L.L. 40 billion in 1988 due to elimination of the subsidy on gasoline by turning over imports to the private sector.

Despite the decision of the government in late 1988 to limit purchases of petroleum products to only fuel oil for the EDL, in 1989 the subsidy rose to L.L. 99 billion, due to only partial implementation of this policy and the failure of the refineries and other users to fully reimburse the government for the imported products.

In 1990, the policy was implemented more vigorously and the subsidy was reduced to L.L. 12 billion.

In addition to the subsidy on fuel oil, public utilities (water and electric plants) received a transfer from the budget to pay wages and salaries (not counted as part of the petroleum subsidy), because of their inability to collect full charges for their services.

Advances and transfers are loans and grants, respectively, from the Treasury, mostly to public sector agencies, they are made both through and outside the budget. Payments under this category, which are essentially subsidies, arise mainly from the difficulties uncounted by municipalities and other public sector entities in collecting user charges and other revenues.

A large part of these transfers is used to pay wages and salaries.

In addition, the finances of the CSBO which is responsible for importing and distributing subsidized wheat, are especially susceptible to the effects of the depreciation of the pound; the wheat subsidy reached L.L. 70 billion in 1990 .

Transfers to the PTT0 have also reflected the impact of the depreciation of the pound on the foreign debt payments by this organization as well as the effect of the increase in the wage bill at a time when difficulties were uncoun ted in collecting service charges.

Advances and transfers have shown particularly rapid growth in 1986 -1992, and fell far more slowly in real terms than other expenditures categories . Total advances and transfers increased from nearly L.L. 2 billion in 1984 to L.L. 3.2 billion in 1985, L.L. 4.6 billion in 1986, L.L. 40.8 billion in 1987, L.L 64 billion in 1988, L.L. 106.2 billion in 1989, and to L.L. 204 billion 1990. Hence, its share in total outlays had increased from almost 16% in 1984 to 28% in 1987 and to 33% in 1990.

Salaries and wages adjustment for public sector employees corresponded fairly closely to the rate of inflation until 1986. However, in 1986 the salary adjustment (40% on the portion of salary below L.L 6000 per month and 25% on the remainder paid retroactively to mid - 1985) lagged behind the rate of inflation which was 95% in that year. In 1987, due to the fast pace of domestic price increases, three salaries adjustments were effected which almost quadrupled wages.

Nevertheless, real central government wages declined steeply in 1987. To compensate for this fall in real income, wages were increased threefold again in 1988, resulting in a modest increase in real income for the government employees .

After containing the rise in the wage bill to 57% in 1989, outlays for wages and salaries increased by 120% in 1990 and the 60-80% wage increase granted in December 1989 was backdated to June.

Again in 1991 wages increased amounted to almost 50% followed in 1992 by 60% .

Hence, the wage bill in the public sector increased sharply during the 1975 - 1992 period from L.L. 567 million to L.L. 800 billion i.e by more than 1411 times in 18 years and almost doubled when measured in real \$ terms . Since the beginning of 1985 there has been a freeze on hiring for government positions that have become vacant from registration, retirement, or promotions, with exceptions only for judges, a few other essential positions, and the armed forces. It is estimated that only 15% of the government work force of some 28 000 reports to work on a regular basis due to lack of incentive and difficulties in getting to work .

Before the conflicts broke out in 1975, 47 000 worked for the Central Government (80 000 including the armed forces).

Spending encompasses capital expenditures by ministries including the Ministry of Defense. In the mid-80's, an important part of capital spending was undertaken by the Council for Development and Reconstruction (CDR) which is not reflected in the fiscal accounts; it increased from L.L. 1.6 billion in 1985 to L.L. 8.8 billion in 1987. In fact, the large increase in spending by the CDR in nominal terms and the corresponding fall in chapter II expenditures by the Central Government during 1985-1986 reflected the transfer of certain projects (Telecommunications and Airport Equipment) from ministries to the CDR. Since 1988, however, the CDR has lost some of its importance, and its spending has reportedly been reduced (Data have been reported since 1987).

The increase in chapter II outlays in nominal terms in 1988-1989 primarily reflected the sharp upward revision of project costs due to inflation and the depreciation of the pound, as no new major projects were undertaken and spending on existing projects was kept to a minimum.

In 1990, capital expenditures rose only 6% in nominal terms as a result of implementation difficulties under worsened security condition. In 1991 and 1992 and due to relative economic recovery, the capital expenditures increased in nominal terms mainly on the infrastructure rehabilitation.

C- FISCAL DEFICITS:

The Lebanese fiscal crises experience shows the clear pattern of even increasing public spending in proportions exceeding by far revenue increases, thereby inducing massive fiscal deficits continuing for several years, and leading overtime to accelerated growth in the public debt.

The fiscal deficits, usually referred to as public sector deficit, can be measured by two approaches in Lebanon.

The first approach adopted by the Ministry of Finance measures public-sector deficit by the difference between public revenues and total public spending; this latter comprises the sum of budgetary and extrabudgetary spending.

The second approach adopted by the Bank of Lebanon measures the fiscal deficit according to its sources of finance, both domestic and foreign.

Table (2-2) shows the evolution of public sector deficit according to the first approach and Table (2-3) shows such evolution according to the second approach .

Table 2-3

Evolution of Public Sector Deficit by Sources of Finance
1985 - 1990 (in Millions of L.L.)

YEAR	1985	1986	1987	1988	1989	1990
Internal Financing	21419	29215	119232	257959	466100	535000
i) Non-Banks	3063	1623	2742	73072	66000	25000
ii) Banking System	18356	27592	116490	184887	399600	510000
a) BDL	1718	22638	101744	- 89958	120400	
b) Comm. Banks	12816	9086	14610	275212	279000	
c) Leb. Fin. Corp.	3822	- 4132	136	- 367	2000	
Foreign Financing			- 6984	- 2065	- 2000	- 1000

: Banque Du Liban

In Table (2-2), the difference between public revenues and budgetary spending builds up the budget deficit, which when added to extrabudgetary spending give rise to public - sector deficit. The fiscal deficit has increased sharply during the 1975-1992 period as it grew from L.L. 223 million in 1975 to L.L. 1.4 billion in 1980, i.e by more than 6 times, to L.L. 21.2 billion in 1985 i.e by more than 15.5 times, to L.L. 525 billion in 1990 i.e by more than 24.7 times, and reached L.L. 1000 billion in 1991 thereby expanding by nearly double its level one year earlier, and accounting to almost L.L. 1350 billion in 1992 with an increase of 35% over its 1991 level. The curtail in the fiscal deficit growth in recent years is attributed mainly to the serious measures undertaken by domestic authorities to curb expenditures explosion accompanied by complementary measures to increase public revenues .

In part, the budget deficit increased from L.L.4.7 billion in 1982 to L.L. 9.1 billion in 1984, L.L. 15.5 billion in 1987, L.L. 86.5 billion in 1988 , L.L. 140.3 billion in 1989, L.L. 246.6 billion in 1990 and exceeded L.L. 500 billion in each of 1991 and 1992. However , it is observed that the ratio of budget deficit to public-sector deficit which was 71.2 % in 1982 increased to almost 83.5% in 1984 then declined sharply to 12.6% in 1987 , then increased to 34% in

1988, later decreased to 30.3% in 1989, and increased to 47% in 1990 and remained within a range of 50% during 1991 and 1992 .

In sum, the share of budget deficit in public-sector deficit has declined from more than 71% to nearly 50% between 1982 and 1992, thereby pointing to the rise of extrabudgetary spending and its share in the fiscal deficit, from almost 28.6% in 1982 to nearly 53% in 1990, while the share of budgetary spending declining from 112% to 64% during the mentioned period. Such development points to the expansion of spending by the public sector from sources outside the budget , a matter that reflects fiscal indiscipline.

When measured in real terms, the public-sector deficit increased sharply and in an accelerated manner between mid 1970's and mid 1980's whereby it grew from L.L. 203 million in 1975 in constant 1974 prices to L.L. 2.8 billion in 1985, while it expanded from \$ 92 million to \$ 1.2 billion during that period. By this, the fiscal deficit has expanded by almost 14 times in 11 years when measured in constant 1974 prices, and by more than 13 times when measured in \$ terms.

Ever since that date, the public-sector deficit has been experiencing a curtail as influenced by the accelerated depreciation of the Lebanese Pound accompanied by a sharp upsurge of inflation.

The fiscal deficit has retarded from almost L.L. 2.8 billion when measured in constant 1974 prices and from \$ 1.2 million in 1982 to L.L. 371 million and \$ 735 million respectively in 1992, which means that the current level of the fiscal deficit stands at respectively 13% and 1% of its 1982 level, and increased by more than 83% and 690% respectively as compared to 1975 levels.

When detecting the evolution of public-sector deficits, according to its sources of finance during the 1985-1990 period where data are available, it can be easily shown in Table (2-3) that the major reliance of the government to finance its deficits is on internal rather than external borrowing. Net internal borrowing increased from L.L. 21.4 billion in 1985 to L.L. 29.2 billion in 1986, L.L. 119.2 billion in 1987, L.L. 258 billion in 1988, L.L. 466.1 billion in 1989 and reached L.L. 535 billion in 1990.

It is worth indicating here that values of fiscal deficit embodied in Table (2-3) may differ from these in Table (2-2) due mainly to the inclusion of "settlement items" in the first approach Table (2-2) to equate the values with the second approach Table (2-3).

The Central Government deficits have been financed domestically, with financing being provided mainly by the Bank of Lebanon and the commercial banks, and to a lesser extent by the nonbank public. The government has borrowed from the Bank of Lebanon through various facilities.

In 1987, and again in 1989, the Bank relied increasingly on purchases of TBs to finance the Central Government. In addition, the Government has relied on direct loans to finance fuel purchases (especially in 1989) and on overdraft account, especially in 1990 (Account Number 36). In 1986, the Treasury also drew on the Bank of Lebanon's foreign exchange revaluation account (Account Number 115) for the amount of L.L. 900 million.

However, this practice has since been discontinued. In 1991 and 1992 the government reliance on borrowing from the BDL increased further due to the rapid expansion in public spending. BDL finance has increased from L.L. 1.7 billion in 1985 to L.L. 22.6 billion in 1986, to L.L. 101.7 billion in 1987, and further to L.L. 120.4 billion in 1989, thereby its share in public sector deficit increased from 8% to 26% during that period.

Government borrowing from the commercial banks both directly and indirectly through the Societe Financiere du Liban (SFL), has been almost entirely in the

form of subscription to TBs. The share of financing by the commercial banks has varied considerably from year-to-year, depending on Bank of Lebanon requirements to hold TBs, and to a lesser extent, on the liquidity of banks and their expectations regarding the exchange rate of the Lebanese Pound.

When the banks were highly liquid from inflows into pound deposits, and the Lebanese pound were appreciated (at various times during 1985 and 1988-1989), they finance a large part (or even all) of the public sector deficit . However, in 1986 and 1987, the absence of such financing forced the Bank of Lebanon to finance by far the largest part of the budget deficit. Nonbanks (The Deposit Insurance Fund, the CDR), and up to 1987, the National Social Security Fund) have generally been a small source of financing through subscription of TBs. In 1988 and 1989, individually bought TBs as a result of rising confidence in the pound and were a significant source of financing for the Government.

In 1990, BDL subscription in TBs increased due to the seizure of banks and the non bank public to increase their subscription in TBs. But in 1991 and 1992, banks as well as the non bank public increased their subscription in TBs due to relative improvement in the exchange value of the Lebanese Pound where as BDL tended to lower its participation .

Commercial banks share in financing the fiscal deficit increased from L.L. 12.8 billion in 1985 to L.L. 279 billion in 1989, hence its share stabilize at 60% during that period. Non bank public financing increased in turn from L.L. 3.1 billion in 1985 to L.L. 25 billion in 1990, hence its share decreased from 14.6% to 4.8% during that period.

By this, the banking sector is financing nearly 86.8% in 1985, 97.9% in 1986, 94.4% in 1987, 72.7% in 1988, 86.2% in 1989, and 97.1 in 1990 thereby indicating that financing from the banking systems constitutes the bulk of government finance .

In the absence of foreign borrowing by Central Government in recent years, net foreign financing has been negative due to modest amortization of earlier loans.

Year to year changes in this category may reflect changes in coverage, rather than changes in the size of repayments.

D- PUBLIC DEBT:

In the absence of any radical fiscal reform, recurrent and accelerated increases in the government fiscal deficit has induced during the 1975-1992 period an increasing inclination of the government to borrow from both domestic and foreign sources, thereby generating an explosionary growth in the public dept .

Government total public dept, which was less than L.L. one-half billion in 1975, started to increase gradually since 1976 and averaged less than L.L. 2 billion during the 1976-1978 period, and its level was, in general moderate and acceptable till 1981 whereby it approximated L.L. 7.9 billion, but it started to expand in an accelerated manner since 1982 whereby it totaled L.L. 15 billion, L.L. 33 billion in 1984, L.L. 99.7 billion in 1986, L.L. 762 billion in 1988, L.L. 1803.8 billion in 1990, L.L. 2987.8 billion in 1991, and reached L.L. 7194.5 billion in 1992. By this, total public dept had increased by more than 2433 times during the 1979-1992 period .

Even when evaluated in dollar terms, total public debt of the government increased sharply from \$ 907 million in 1979, \$ 1.4 billion in 1980, \$ 3.9 billion in 1982 and maintained this level in 1992.

Hence, total public dept had multiplied by nearly 4.3 times.

As known, government public dept is usually financed by borrowing from domestic as well as foreign sources, though internal borrowing is more favorable to avoid the induced adverse consequences on domestic prices and the exchange rate of the national currency . But in Lebanon, financing the public dept is heavily based on domestic sources, from BDL (the largest source of inflationary implications), commercial banks, and the non-bank public.

Domestic borrowing comprises direct loans to the treasury as well as subscription in treasury bills (TBS) to finance the ever-increasing public spending. Foreign borrowing, though remaining small as compared to domestic borrowing uptill 1991, had recently started to accelerate due to reconstruction needs.

As far as the internal public dept is concerned, it is observed that prior to 1982, its level was relatively moderate for it was less than L.L. 7 billion in 1981, but started to increase in an accelerated manner ever since 1982 whereby it totaled L.L. 4.4 billion in 1980, L.L. 14 billion in 1982, L.L. 31.4 billion in 1984, L.L. 81.7 billion in 1986, L.L. 521.5 billion in 1988, L.L. 1568 billion in 1990, L.L. 2548.4 billion in

1991, and reached L.L. 5060 billion in 1992, hence increasing by more than 33075 times during 1975-1992 period. When evaluated in dollar terms, the internal public dept had increased from \$ 63 million in 1975 to \$ 1.5 billion in 1981, to \$ 3.7 billion in 1982, and totaled \$ 2.7 billion in 1992.

Hence, the internal public debt had multiplied by more than 44 times during 1975-92 period.

The recent tendency for the public dept to decline in dollar terms reflects the sharp increase in price inflation as well as the rapid and drastic depreciation of the L.L.

With regard to components of the internal public dept, it comprises both the treasury's dept financed mainly by direct loans from BDL and subscriptions (of BDL, commercial banks, public and financial institutions, and the non-bank public) in TBs, and loans from BDL and commercial banks to public enterprises.

It is evident from Table (2-4) that the treasury's dept constitutes the major component of the internal public debt, whereby its share exceeds 97%, compared to nearly 3% for public enterprises debt. The treasury's debt had increased sharply since 1982 whereby it expanded from L.L. 14 billion to L.L. 4943.6 billion in 1992, i.e by more than 352 times .

TABLE 2-4

Evaluation of Public Debt
1975-1992 (in Millions of L.L.)

	1992	1991	1990	1989	1988	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978	1977	1976	1975	
4943600	2522083	1552328	976215	516372	190593	79784	52220	30766	21163	14031	-	-	-	-	-	-	-	-	A) Treasury Debt
199600	198904	529316	189799	90536	63386	23549	15039	11635	5307	1752	-	-	-	-	-	-	-	-	1 - BDL loans
4744000	2333179	1023012	786416	425826	127206	36205	39181	19131	18856	12279	4910	2476	1166	-	-	-	-	-	11- TIS
142700	68154	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	of which: BDL Portfolio
117000	16287	15684	5910	5167	3053	1965	1148	631	579	74	-	-	-	-	-	-	-	-	B) Debt to Public interprises
100300	9286	8360	3226	4583	1561	1288	584	-	-	-	-	-	-	-	-	-	-	-	1 - BDL loans
16700	7001	7324	584	548	1419	677	564	631	579	74	-	-	-	-	-	-	-	-	14- Commercial banks loans
2753	2899	1862	1945	984	103	939	3004	3532	3961	2702	1494	1209	815	635	503	280	63	-	C) Internal Public Debt
442600	276344	611780	221634	111588	131129	36787	16020	12645	5307	1752	1982	1952	1487	-	-	-	-	-	D) BDL loans to Public sector
1161	500	280	422	454	562	207	180	182	242	273	226	239	92	-	-	-	-	-	E) External Public Debt
3914	3399	2142	2367	1438	665	1146	3184	3714	4203	3975	1720	1448	907	-	-	-	-	-	F) Total Public Debt
8.7	10.8	39.0	17.7	21.4	67.7	43.0	29.5	40.3	24.4	12.4	28.7	44.1	56.0	-	-	-	-	-	G) Ratio of BDL loans to total Public Debt (%)
82.2	72.5	82.9	72.5	79.4	94.4	90.5	91.1	89.8	92.1	100.0	89.5	90.0	-	-	-	-	-	-	H) Share of the banking system financing Internal Public Debt (%)

Source: Shehab, I (1991, Sept. 4), The Public Debt in Lebanon. Al-Taqir P.14

Public enterprises' debt intern, increased from L.L. 74 million in 1982 L.L. 16.7 billion in 1992, i.e by more than 225 times .

The treasury's debt is composed of BDL direct loans and total subscriptions in TBs, BDL direct loans to the Treasury increased sharply from L.L. 1.7 billion in 1982 to L.L. 1996 billion in 1992, i.e by more than 117 times.

TBs in circulation amounted to L.L. 4744 billion in 1992 as compared to L.L. 1.2 billion in 1979, i.e it increased by more than 3953 times during that period. The major source of financing the Treasury's debt remains subscription in TBs, which contributes to almost 96% of total Treasury's debt.

Subscription in TBs is done mainly by the banking system whose share exceeds 80%, against 20% for public and financial institutions as well as the non-bank public. Observed since 1981 is a major shift in TBs decomposition according to subscribers as well as terms of maturity.

Commercial banks, whose share in total TBs subscription was more than 84% in 1981, decreased to nearly 78% in 1992.

BDL started to subscribe in TBs since 1984, whereby its share totaled 5.3% and was later decreased to almost 3% in 1992. Public enterprises' share had decreased sharply from 15.6% in 1981 to almost 2% in 1992.

Financial institutions, whose share in TBs subscription amounted to 5% in 1983 and 12% in 1984, declined substantially to almost 0.1 % in 1992.

By this, the major source of financing government debt through TBs subscriptions in the commercial banks subscription.

Concerning the term of TBs maturity , it is observed that the share of short term TBs (up to one year) had declined remarkably from almost 88% in 1981 to nearly 62% in 1992, at the time medium and long-term TBs share increased from 12% to 38% during that period. Such an evolution reflects a tendency to favor medium and long-term subscription as interest rates on such subscription remains higher than rates on short-term subscription.

For instance, effective interest rates on 3 months, TBs reached an average of 35.4% (in the primary and secondary markets) in 1992 as compared to nearly 18.8 % in 1988.

Similarly, effective interest rates on 6 months TBs were raised from 22.2% to 35.3%; for one year from 28.3% to 34.2%; for 18 months to 33.1 % and for 24 months to 33.6% .

Turning to public enterprises borrowing from the banking system, it is observed that such borrowing increased drastically from L.L. 74 million in 1982 to L.L. 117 billion in 1992, i.e by more than 1581 times during that period. BDL loans remain the largest source of lending public enterprises whereby its share reached 86% in 1992 after being 50% in 1985, against commercial banks' share which decreased from 50% to 14% during that period.

To conclude, the major source of financing the government internal public debt is the banking system, both the BDL and commercial banks, that together finance more than 82% of the total debt, though that ratio decreased from more than 90% during the early 1980s .

Commercial banks do finance nearly 74% of the total internal debt, against nearly 8% for the BDL.

It is observed that the share of BDL financing of the internal public debt, though increased from a value of L.L. 1.5 billion in 1979 to L.L. 442.6 billion in 1992 (by more than 295 times), yet its share declined substantially from 56% in 1979 to almost 8.7% in recent years, a trend that reflects BDL inclination to cloter lending to the government, for the sake of avoiding inflationary consequences in the economy .

External Public Debt , on other hand ,whose level was moderate and even ranging around \$ 200 million till 1986, had increased to a range of \$ 400-500 million during 1987-91 period, and had increased further in recent years mainly 1992 to more than \$1 billion. By this, the level of the external public debt had expanded by almost 2.4 times between 1980 and 1992. Moreover, the share of external debt which was minimal during the 1970s and 1980s (10% in 1979, and 17.8% in 1989), started to increased substantially with the beginning of 1990s as it amounted to almost 30% in 1992.

By this, Lebanon has entered recently the vicious circle of foreign indebtedness influced by an urgent and increasing need to borrow from foreign sources, side by side which a sharp domestic indebtedness, though not as dangerous as foreign indebtedness that involves further economic dependence on foreign governments and its institutions .

Much of Lebanon's external civilian public and publicly guaranteed debt was negotiated and administered by the Council for Development and Reconstruction on behalf of government departments and agencies through 1987; since that time several agencies were responsible for various aspects of external debt management, and there was no central agency responsible for

monitoring and control. Lebanon's major creditors include the World Bank, the Arab development funds, the European Investment Bank, France, Italy, and the United States; loans from these sources are on both concessional and commercial bases.

In March 1986, the Bank of Lebanon limited its guarantee of repayment of civilian external public debt signed after that date to only trade credits for cereals and petroleum.

Lastly, interest payments on total government public debt had increased sharply from L.L. 95 million in 1978 to L.L. 1.6 billion in 1983 L.L. 10.7 billion in 1986, L.L. 24 billion in 1987, L.L. 80 billion in 1988, L.L. 152 billion in 1989, and totaled L.L. 66.4 billion in 1990 .

By this, such interest payments had expanded by more than 698 times between 1978 and 1990: Interest payments on the internal public debt constitute the bulk of total interest payments, as they contribute to more than 85% of the total , against nearly 15% for interest payments on the external public debt .

E- THE CRITICAL SITUATION OF PUBLIC FINANCE:

The existence of a fiscal deficit and public debt is not the problem by itself, but the problem is in the rise of such fiscal indicators as compared to the economic indicators , such as GDP or the governmental stock of internal reserves.

The Lebanese experience shows a clear pattern of increasing fiscal deficit and public debt, for exceeding the growth of GDP or even country's stock of international reserves.

Nevertheless, interest payments on the public debt have reached a stage of exceeding public revenues thereby leading to an exponential growth in that debt .

Table (2-5) shows the evolution of some major fiscal indicators as compared to key economic indicators. It is evident from the table that the fiscal deficit ratio (i.e the ratio of fiscal deficit to public spending) had increased gradually and in an accelerated manner since 1975, rising from almost 21.8% in 1975 to 40.5% in 1981, 70.9% in 1982, 81.4% in 1984 , 86% in 1987, 92.2 % in 1988, then dropping to 90.9% in 1989, 85.7% in 1990, 66.6% in 1991 and reached 61.3% in 1992, as the government acknowledged the necessity of curbing in fiscal deficit in recent years.

By this, the deficit expenditure ratio had almost tripled between 1975 and 1992 .

The gradually increasing rise in the fiscal deficit ratio could be well explained by the apprevating imbalance between public spending and revenues . The ratio of revenues to expenditures had experienced a major and sharp drop during the period extending between mid 1970s and late 1980s.

Such ratio had dropped gradually 78.1% in 1975 to 59.4% in 1981, 29.1% in 1982, 18.5% in 1984, 17.7% in 1986, 13.9% in 1987, 7.7% in 1988, and reached a minimum of 9% in 1989, then rising gradually 14.2% in 1990, 33.3% in 1991, and amounted to 38.6% in 1992.

By this , the Revenue/ Expenditure ratio had dropped by almost 50% between 1975 and 1992 when comparing the fiscal deficit with GDP, it is easily evident that the deficit had increased substantially and in an accelerated manner since 1975 for it rised from a low level of 2.7% in 1975 to 11.8% in 1981, 51% in 1982, 54.1% in 1985, then declined gradually to reach 20.3% in 1992. The recent improvement in the ratio is attributed to the relative recovery of the country's GDP as well as the curbing of government fiscal deficit growth.

The gradual rise in the Deficit /GDP ratio could be explained by the continual rise in public spending as compared to GDP as well as the decline in public

revenue as compared to GDP. The Revenue/GDP ratio declined drash drastically from 19-20% between 1977 and 1983 to almost 11% in 1984 and 1985, then declined dramatically to 1-3% during 1986-1990, but later improved to 12-16% during 1991 and 1992.

In comparison, the Expenditures/GDP ratio increased gradually from 12.4% in 1975 to almost 20% in 1977 and 1978, 22-29% between 1979 and 1981 , 71.9% in 1982, then declined gradually to 59.7% in 1984, to 14.7% in 1986, 9.5% in 1987, after which it rised to 14.2% in 1988, 30.5% in 1990, 49.5% in 1991 and totaled 33.1% in 1992.

This ratio of critical implication: the government absorbs more than 30% of GDP, while contributing to only 13% to GDP.

This further implies that the government rise in economic activity had increased during the war period, but in an unproductive manner, and contributed significantly in aggravating the inflationary pressures experienced during the war period .

The continual and accelerated increase in the fiscal deficit over the 1975-92 period has led to an exponential growth in public debt as compared to GDP. The Public Debt/GDP ratio which was nearly 1.9% in 1975 increased gradually to 13-16% during 1976-1978, then to

23-44% between 1979 and 1981, more than 100% during 1982 -85, then a dropped sharply to 20.2% in 1987, then increased gradually against 39.2% in 1988, 71.7% in 1989, 28.6% in 1991 , and reached 108.2% in 1992 by this Lebanon is now in the position of having a public debt that exceeds its GDP.

Nevertheless, when comparing the public dept with the BDL stock of international reserves (gold and foreign exchange), it is evident that the ratio of public debt to the stock of international reserves has increased gradually from 4% in 1975 to 16.6% in 1976, 90.4% in 1981, 133% in 1982, 185% in 1983, 356.4% in 1984, then declined to 221% in 1985, 134.7% in 1986, 30.4% in 1988, then increased to 51.4% in 1989, 75.6% in 1991, and totaled 103.3% in 1992. By this, Lebanon is now in the position of having public debt that exceeds its stock of international reserves.

In addition, the recurrent increases in the public debt had triggered an out burst of interest payment on that debt. The interest payment on the public debt as a ratio of GDP had increased sharply from less than 1% during mid 1970s to more than 10% during mid 1980s, then declined substantially to nearly 2.5% in 1990, but believed to be in the range of 10% during 1991 and 1992. By this, Lebanon has reached a stage whereby the interest payments on its public debt absorb nearly 10% of its GDP.

To conclude, Lebanon has recently entered a stage of experiencing extremely high levels its fiscal deficit and public debt as compared to its GDP, a fact that points to an increased (unproductive) role of the public sector in the economy .

Such high ratios to point to the fact that Lebanon is now regarded as one of the countries that has a very high debt ratio, a fact that implies tremendous inflationary pressures.

CHAPTER III

POLICY MEASURES UNDERTAKEN TO CURB FISCAL CRISIS:

Several measures have been undertaken by the domestic authorities to deter the explosionary and deteriorating state of public finance since 1975

However, all those measures remained of little effectiveness in curbing the accelerated increase in both the fiscal deficit and public debt .

After serious and efficient role played by the supervisory and control systems at the Ministry of finance, prior to 1975 both within (internal control) and outside (external control), resulted in rationing public expenditures and increasing public revenues. But those systems started to face adverse difficulties and limitations since 1975 and especially since 1989 due mainly to recurrent eruption of military operations, paralysis of crossing between various lebanese regions, and the segmentation of public administrations and its employees; such negative factors led to a loss of government authority over the whole regions of the country thereby resulting in an increased exploitation of the government's right in collecting its revenues from various sources. Nevertheless, a state of corruption was wide spread among various employees in the public enterprises as well as among various citizens, a source of further exploitation to government revenues, at the time its spending was ever increasing, hence forming a mounting fiscal deficit .

1- Regaining Revenue and New Taxes

Lebanon used to achieve 65% of its government revenues from indirect taxes, particularly import duties, taxes on gasoline, and tobacco fees. Direct taxes such as income and inheritance taxes were rarely collected at appropriate levels, except from the salaries of fixed income employees. Although there was balance between revenues and expenses, the tax system need to be revised in total for better equity and easier collection which in itself improves returns.

Today our imports which have dropped, volume and value wise, to around \$ 1- \$1.2 billion can generate a revenue of \$ 60- \$100 million depending on rates of tariffs we choose. By contrast, gasoline consumption if taxed at \$ 2.5 per 20 liters, which is the profit skinned by those controlling import could produce \$ 150 million per year.

If a reasonable 10-12% turnover tax is instituted (T.V.A. or value added tax), then \$60 million to \$ 80 million per year could be reaped from this tax.

Taxes on tobacco yield in most advanced countries, 15-20% of the total yield of gasoline taxes. In Lebanon, this could be projected as a tax which would yield \$ 25- \$ 30 million per year.

Taxes on built-up property and property transactions could yield a pent up income that has been awaiting the return of order. Many transactions registered with notaries have been fully implemented due to diverse reasons. It is a conservative estimate to say that at least \$ 100 million would materialize on account of previous transactions and a yearly income of \$ 50 million is reasonable to anticipate.

2- Better Use of Assets:

This important subject can be subdivided into two important sections:

A- Goods assets management of financial and gold assets available in Lebanon.

B- Transfer of certain activities and their assets to the private sector with a view to improve efficiency and achieve higher economic growth

Lebanon's financial assets are represented by its gold reserves and foreign currency reserves with the Central Bank. Also in recent years, the Central Bank, in the process of saving a number of banks from bankruptcy, acquired an important portfolio of banking shares and real estate. The face value of this estates in depressed circumstances was estimated at \$ 500 million. In case there is peace in Lebanon and conditions improve, this portfolio could very well double in value.

At current prices for gold and a minimum \$ 500 million of liquid reserves, Lebanon can work on achieving a return on \$4 million of assets. The gold, which equals 922 ounces, could be sold provided the total value of the sale becomes, by law, an untouchable principal. That means that Lebanon could achieve, if it were to invest this fund in ECU solid bills, 10% a year or at least \$ 400 million per year. This availability in itself, goes a long way toward covering the overhanging deficits. The remaining deficit of \$ 100 per year or less is easy to cover from gradual liquidation of assets secured by the Central Bank for loans already made.

In addition to gold reserves standing idle and financial and real estate assets acquired by the Central Bank against facilities provided to bankers, the government owns substantial valuable properties that remain idle and are often usurped because of lack of attention. There should be an inventory of these assets and a policy for transforming many of them into income-earning instruments.

Thus far, the question of transforming public activities and assets to the private sector has not been broached. There are three such activities which urgent improvement and which affect adversely the level of economic activity. These are electricity generation and distribution, water purification and distribution, and the telephone network. In addition, also, there are the Zah-rani and Tripoli refineries that are costing the state a fortune to run.

After gasoline prices were adjusted to cover costs , the major items of deficits in the budgets has been fuel for electricity. Subscribers do not pay their fees and electricity supply is erratic and insufficient for home use, let alone office use and factory requirements. In the mean time, families have adjusted to the shortages by installing their generators or by subscribing to supply from a large neighborhood facility.

1- Measures Undertaken by the Council of Ministers:

The Council of Ministers has undertaken several measures to halt the explosionary growth in both the fiscal deficit and public debt .

The Council has seized, or at least limited, its spending on equipping and construction (Capital expenditures), and employing of employees in public enterprises and administrations as well as issuance of Treasury advances and transfers.

The Council also lifted the subsidization of wheat and fuel products except for fuel oil that is necessary for the Electricity Company.

The Council of Ministers further issued recurrent circulars and memorandums to public enterprises and administrations as well as municipalities demanding the limitation of spending except for necessary items and the seizure of signing any new spending contracts on new projects or equipments.

The Council has take further steps to limit the deteriorating state of public finance.

1- It authorized the Ministry of Finance to prepare necessary legislations that could encourage both its employees to improve their collection activities in an efficient way, and various citizens to take the step towards paying taxing obligations to the government, based on a system of financial and tax incentives for each one of them .

2- The Council also authorized the Ministry of Foreign Affairs in getting appropriate foreign loans with favorable terms, for the sake of providing various ministries with the necessary financial resources to continue their work as well as to spend on Capital items.

The Council also authorized the mentioned Ministry to pay back, gradually, the balance of foreign loans as well as its service to the donor Arab and foreign countries, so as to preserve the financial credibility of the Lebanese government.

The Council of Ministers took historic measures during mid 1992 that formed, in essence, a basic fiscal reform and resulted significantly in raising public revenues and limited the inflationary growth of its expenditures. The Council targeted a fiscal deficit ratio of

38% in 1992 as compared to a ratio of 56% in 1991, with

the tendency to reduce such deficit ratio over the coming years to reach a persistent Fiscal balance . To be able to attain a deficit ratio in 1992, the Council projected a level of spending ranging around L.L. 1930 billion, and a level of revenues reaching at least L.L. 1200 billion. To reach such an "ambitious" level of public revenues, the Council took several policy measures namely activation of tax collection; imposing taxes on construction illegal violations, public property, as well as increasing car mechanic duties; and raising the customs dollar price to L.L. 800 for all goods and services but keeping customs tariffs rates unchanged; and imposing a raise in gasoline fee by which it becomes L.L. 1000 per 20 litres. The Council also restricted Treasury advances and transfers from BDL to only 9% of total spending during the second half of 1992, and froze the balance of internal public debt as of mid 1992 for which it will be introduced within a global program for liquidating that debt during several coming years.

The Council further admitted a recurrent monthly review of the general budget to cope with emerging conditions and via serious coordination with monetary authorities. In addition, the Council adopted the policy of "privatization" i.e transforming public enterprises, totally or partially to the public sector, mainly the sectors of electricity, telecommunications, ports, Casino de Liban, Regie, Petroleum refineries ..., and a special committee was formed for that goal.

Lastly, the Council admitted the Law for lifting am-
nunity of employees in public enterprises and administra-
tions, as a step towards "cleaning" the public sector in
order to provide it with the necessary and qualified man-
power for an efficient work of Public enterprises and ad-
ministrations. Such measures did result in a relative im-
provement in the state of public finance during 1992 as
shown earlier.

2 - Measures Undertaken by the Parliament:

The Parliament , in turn, took several measures to
face the emerging fiscal situation. The Parliament issued
several laws that included numerous tax incentives to en-
courage tax collection.

For instance, the 1985 general budget law comprised
several tax incentives, as well as imposing new taxes and
dues, together with raising some existing taxes and dues.
The 1980 general budget law included a reconsideration of
the income tax law with regard to capital companies (which
were submitted to progressive taxation) and imposing taxes
on its annual profits, as well as obliging those companies
to hold accounting works and auditing according to the new
general accounting system .

3 - Measures Undertaken by Monetary Authorities:

The major burden of fiscal crisis was laid on the shoulders of the BDL and the commercial banks. It tended to undertake restrictive monetary measures during highly unstable and adverse periods, namely that of 1986-1988. The period witnessed paralysis in governmental activities whereby the Government did not meet to discuss the emerging conditions during that period. In 1988-1990 period of two governments, one civilian and the other military, were conflicting on the central authority over the whole country. Also it was a period of legal absence of annual general budgets and its attached budgets.

The BDL started to finance the Treasury's deficit through its advances and direct loans as well as subscription in TBs mainly by printing money that produced adverse and inflationary consequences on economic activity. The BDL started then to advice the Government not to depend on its credit facilities to finance its deficit since that activity does not fall within its responsibilities. BDL then started to shift the ultimate burden of financing the deficit to the commercial banking system, mainly by issuing recurrent circulars modifying banks legal subscription in TBs, as a step towards achieving double goals: the first goal was to finance an increasing share of deficit financing, and the other goal lies in deterring banks from speculating against the Lebanese Pound especially since 1984.

Such circulars, however, resulted in a basic conflict between monetary authorities and the Bankers Association in Lebanon which claimed that, some of those circulars were strongly harsh and illegal. That conflict reached in some years high degrees of harshness and it was raised to the court, in which the Association demanded the abortion of such circulars that restricted the activities of commercial banks and its role in providing economic sectors with the necessary credit facilities. For instance, the circular # 739, which obliged banks to deposit at BDL nearly 91% of new banking deposits after July 6, 1987 in the form of legal reverse requirements subscriptions in TBs and cash reserves, was later cancelled and replaced by the circular # 761 that deduced the return to circular # 700 .

BDL was obliged in several years to provide interest rates on TBs in the secondary market relatively higher than those rates in the primary market, in an attempt to encourage the non-bank public to subscribe in TBs to allow for the compensation of the banks declining share in such subscription.

The Treasury's fiscal situation was highly aggravated when BDL seized its loans and advances to the Treasury and public administrations in 1986 when its credit facilities bypassed the legal ceiling of L.L. 17.5 billion in April 1986 with such seizure, BDL stopped paying the Treasury's debt to various lenders as well as paying the fuel bill in

May 1986 that resulted in a severe fuel crisis and in a major conflict between BDL and the Ministry of Finance .

Such conflict was further expanded when BDL stopped for the first time in history, paying the Treasury's share (80%) of total BDL profits resulting from currency depreciation for 1984 and 1985 evaluated at L.L. 10 billion, whereby BDL claimed that such profits were only book (not real) profits .

BDL started since 1988 restricting its credit facilities to the Treasury and public enterprises, and admitted only advances and loans for urgent and necessary needs such as the wage bills fuel and wheat credits for a certain time period after which the Government lifted completely its subsidy policy for the two commodities in 1991. BDL also admitted that it will subscribe in TBs only when a deficit is to be observed in the balance of TBs subscription .

To conclude, the destabilizing fiscal policy induced a destabilizing monetary policy during 1975-1992 whereby monetary authorities found itself obliged to provide the Treasury and its public enterprises and administrations with direct loans and advances as well as in subscribing in TBs in an unlimited manner, resulting at the end in generating explosionary and inflationary pressures on the economic activity, especially since 1984.

CHAPTER IV

ECONOMIC & SOCIAL CONSEQUENCES OF THE FISCAL CRISIS IN LEBANON 1975-1992

The continuous rise of both the Government budgets deficit and public debt to historical records and growth rates have become a major source and cause of serious economic & social crisis in Lebanon. They resulted in a sharp increase in the size of public sector in economic activity, expansion in money supply, increase in inflation rate, sharp depreciation in the exchange value of the Lebanese Pound, dollarization of the economy, misallocation of economic resources, capital flight, decline in real economic activity and in BDL stock of foreign exchange, negative real interest rates on the Pound, drop in the standard of living, degradation in the real value of wages, increase in unemployment, emigration and "brain drain".

Flowchart (1) shows a clear picture of the economic and social consequences generated by the fiscal crisis in Lebanon.

FLOWCHART (1): ECONOMIC AND SOCIAL CONSEQUENCES OF THE FISCAL CRISIS IN LEBANON
 SOURCE : SHEHAB, I. (1991, Sept 4), THE PUBLIC DEBT IN LEBANON. AL TAQRIR PAGE 18

I. ECONOMIC CONSEQUENCES

A: Monetary Expansion:

The large increase in the fiscal deficit has led to a rapid money growth that triggered the final inflationary outburst.

In fact, the way the fiscal deficit is financed in Lebanon, mainly by borrowing from the Bank of Lebanon, is necessarily inflationary because it involves printing more money, thereby leading to further monetary expansion. At the early stages of the War, the fiscal deficit was financed mainly by borrowing from the financial market. This borrowing had the effect of increasing domestic inflation modestly. However, total debt from the Bank of Lebanon to the public sector started to increase sharply as shown earlier since 1987, which constitutes a turning point in the history of deficit financing. This is because prior to 1987, debt from the Lebanese Banking system constituted the main source of deficit financing. This implies that the government is now relying massively on the Central Bank to finance its deficit.

In effect any borrowing from the Central Bank to finance the fiscal deficit leads to an expansion in the money supply by more than in proportion. Hence the money supply has been growing substantially and in an

accelerated manner since the end of 1984. Money supply M1 increased from L.L. 3.8 billion in 1975 to nearly L.L. 1199.4 billion in 1992, by more than 315 times in 18 years. Whereas money supply M2 increased from L.L. 10.6 billion to L.L. 11775.8 billion during the same period by more than 1110 times in 18 years, as shown in Table (4-1).

TABLE 4-1

Evolution of Money Supply
1975 - 1992 (in Billions of L.L.)

YEAR	Money Supply M1	Money Supply M2
1975	3.8	10.6
1976	4.9	11.2
1977	5.1	14.4
1978	6.1	17.2
1979	6.7	21.9
1980	7.7	28.8
1981	9.0	40.4
1982	11.1	48.6
1983	12.9	61.7
1984	13.8	76.3
1985	20.2	119.1
1986	30.3	323.9
1987	68.1	1471.3
1988	196.6	2011.8
1989	298.0	2940
1990	449.9	3822.3
1991	689.4	5499.5
1992	1199.4	11775.8

Source: Bank of Lebanon, Annual Reports.

B: GALLOPING INFLATION

Prior to the onset of the war in 1975, inflationary trends in Lebanon were generally moderate. The annual inflation rate during the 1964-1974 period ranged between a low value of 0% in 1970 and a high value of nearly 9% in 1974 (Estimates of the Central Directorate of Statistics). The average annual inflation rate during the 1964-1974 was thus nearly 4%. This moderate inflation was the result of the impressive performance of the Lebanese economy on the economic, monetary, and fiscal levels.

However, since 1975, Lebanon has been experiencing high and unstable inflation on monthly, quarterly, as well as on annual bases to the degree that it has become a seriously critical problem for the country from the standpoint of its economic and social consequences on the economy. This high and variable inflation has been the logical outcome of the fundamental disequilibrium rooted in the Lebanese economy as the result of the warfare state and the induced worsening of the economic, monetary, and fiscal conditions. From a value of 4.2% in 1975, inflation rose to 19.7% in 1976 (Estimate of the Ministry of Planning), to 29.1% in 1979, to 69.7% in 1985, to 162.2% in 1986, and to 731.0% in 1987. Price inflation further increased by 28% in 1988, by 70% in 1989, by 60% in 1990, 45% in 1991, and by 150% in 1992.

The seemingly high inflation in recent years has pushed economic and non-economic analysts in Lebanon to speak of the economic as experiencing "hyperinflation" since the annual inflation rate was nearly 731% by the end of 1987. So, to what extent is this claim true ?

The literature on inflation categories inflation, with regard to its level of severity, under three groups: "Moderate", "Gallopig", and "Hyperinflation". Moderate inflation occurs when prices are rising slowly, at a single-digit rate, these less than 10% per year . Gallopig inflation occurs when prices are rising at double or triple-digit rates, these less than 1000% per year. When prices rise at four or more-digit rates, these more than 1000% per year, then this situation implies hyperinflation (Samuelson and Nordhaus, Op. Cit, pp.229-230). Cagan asserts that for hyperinflation to exist in an economy, the inflation rate must be at least 50% on a monthly basis, and that this rate must extend for a considerable interval with a tendency to increase over time (Cagan P., "The Monetary Dynamics of Hyperinflation ", in Studies in the Quantity Theory of Money, by Friedman, M. (ed.), Chicago, 1956, pp. 23-117.)

To test for hyperinflation in Lebanon, Tables (4-2, 4-3) were derived which show the monthly evolution of the inflation rate in 1987 and 1988. As indicated in

TABLE 4-2

Monthly Evolution of Inflation Rate
in 1987 (%)

----- INFLATION RATE -----

MONTH	GCLU	CCI
January	24.3	50.1
February	16.7	8.8
March	9.1	11.1
April	9.4	29.3
May	5.5	7.0
June	10.2	6.9
July	19.2	35.5
August	43.6	14.4
September	18.8	14.4
October	51.5	37.5
November	25.3	17.2
December	5.8	9.6

Sources: The General Confederation of Labour Union (GCLU)
and the Chamber of Commerce & Industry (CCI)

TABLE 4-3

Monthly Evolution of Inflation Rate
in 1988 (%)

MONTH	INFLATION RATE
January	1.5
February	- 8.1
March	- 1.7
April	1.0
May	- 2.1
June	1.2
July	0.1
August	1.4
September	10.8
October	10.7
November	10.6
December	1.3

Source: The General Confederation of Labour Union (GCLU)

Table (4-2), the highest inflation rate in 1987 was that registered in October (51.5%) according to the GCLU and in January (50.1%) according to the CCI . If one considers Cagan's definition of hyperinflation, one would say that the Lebanese economy has experienced a hyperinflationary rate in October according to the GCLU or in January according to the CCI; but since that rate did not sustain in the following months but rather decreased, then we can deduce that no hyperinflation exist yet in Lebanon. Table (4-3) further ensures this result, showing that prices have declined during February (-8.1%), March (-1.7%), and May (-2.1%) in 1988.

Moreover, if we consider Samuelson's definition of hyperinflation, i.e. that prices should rise by at least 1000% per year, the 731% inflation rate in 1987 and the 28% in 1988 and the 70% in 1989 do not reflect a hyperinflationary situation which further strengthens our above conclusion.

By examining Tables (4-4, 4-5), we can detect that Lebanon has experienced moderate inflation in the peace period, i.e. prior to 1975 and galloping inflation ever since 1976 with a tendency to aggravate since 1985 .

C: DECLINE IN THE LEVEL OF ECONOMIC ACTIVITY

While monetary expansion tends to shift the aggregate demand curve to the right, that is, the level of aggregate demand increases thereby increasing the general level of prices (assuming the aggregate supply is positively sloped), a decline in the level of national output, that is, in aggregate supply also causes the general price level to rise (assuming the Aggregate Demand is negatively sloped).

Ever since 1975, the Lebanese economy has been experiencing a crippling reduction in its output caused mainly by adverse consequences of the war: the war has destroyed a considerable number of productive factories and enterprises either partially or totally, caused the destruction of a considerable portion of the economy's capital stock, caused a substantial decline in the level of national investment.

TABLE 4-4

Evolution of the CPI and Annual Inflation (%)
1964 - 1974 period averages (1966=100)

YEAR	CPI	INFLATION RATE
1964	94.6	-
1965	97.4	2.9
1966	100.0	2.7
1967	109.2	9.2
1968	108.5	-0.6
1969	113.1	4.2
1970	113.1	0.0
1971	114.7	1.41
1972	119.3	4.01
1973	125.3	5.04
1974	136.4	8.9

Source: Central Directorate of Statistics.

TABLE 4-5

Evolution of Price Inflation (%)
1975 - 1992

----- End of Period ----- | ----- Period Average -----

YEAR	CDS	BCCI	GCLU	CDS	BCCI	GCLU
1975	4.2	-	-	7.3	-	-
1976	-	-	-	-	-	-
1977	-	-	-	-	-	-
1978	-	-	15.8	-	-	5.2
1979	-	-	29.1	-	-	11.6
1980	16.9	14.3	15.5	-	14.3	24.5
1981	24.5	20.4	24.5	-	16.0	19.4
1982	11.5	9.6	11.8	-	13.8	18.5
1983	9.7	3.8	9.7	-	7.2	8.5
1984	18.4	25.3	25.8	-	14.8	19.5
1985	59.2	60.1	69.7	-	54.3	64.4
1986	132.9	146.8	162.2	-	95.4	100.4
1987	-	741.3	731.0	-	487.1	430.5
1988	-	-	28.0	-	-	154.5
1989	-	-	70.0	-	-	60.0
1990	-	-	60.0	-	-	50.0
1991	-	-	35.0	-	-	33.0
1992	-	-	150.0	-	-	130.0

Sources: CDS : Central Directorate of Statistics
BCCI: Beirut Chamber of Commerce & Industry
GCLU: General Confederation of Labour Union

Many entrepreneurs have left Lebanon as well as laborers, and to the diverging of banking credit towards non-productive sectors (i.e. to the trade and services sector).

Nevertheless, the existing factories and enterprises are working under unfavorable conditions owing to the continuing state of war, and the shortage in available funds that could be channeled into investment. All this led to a drastic decline in the productive capacity of the Lebanese economy, thereby leaving it dependent more and more upon imports .

Table(4-6) contains estimates of Gross Domestic Product (GDP) compiled by the Arab Monetary Fund for the period 1975-1992. Real GDP which was nearly \$ 3.4 billion in 1975 dropped to \$ 2.1 billion in 1976 due to the severity of the war during this year, remained around a level of nearly \$ 3-4 billion in the 1977-1983 period then dropped below \$3 billion between 1984-1986, improved to nearly \$3.2 - 3.7 billion between 1987 and 1989 and averaged nearly \$ 3.6 billion in 1992 after 18 years, GDP only increased by 5.9% between 1975 and 1992.

The major factors accounting for the drastic decline in Lebanon's GDP are:

(i) The crippling reduction in the level of national investment, whether domestic or foreign. At the time foreign investment ceased due to the continual rounds of war and destruction, domestic investment is very 'modest', nearly \$ 300-500 million (Estimates of the Beirut Chamber of Commerce and Industry, Center of Economic Studies and Documentation).

This means that the investment-output ratio is not more than 8-14% which is relatively low.

(ii) The drastic decline in the nation's capital stock. While the volume of capital stock was nearly \$ 8.7 billion in 1974, i.e. more than double the volume of GDP, it dropped to nearly \$ 2 billion in 1992, i.e. less than 50% of GDP. This implies that the current level of capital stock stands at less than 23 of its level in 1974 (Ibid). This is due to the war-induced destruction of a considerable proportion of the nation's capital stock. Moreover, national investment is now below the level required to maintain and replace the capital stock, thus leading to a further drop in national output. The investment-capital stock ratio stands currently at less than 15-25% (Ibid).

A good measure of the direct economic cost of the war over 1975-1992 period is the inability of the Lebanese economy to grow during the 1975-1992 period in natural rates, or equivalently the commutative

loss in real output which implies an enormous cost for a small country like Lebanon. In fact, the real cost is much more greater than this if we take into consideration the indirect costs of the war such as the reduction in the human capital stock caused by the substantial emigration of the Lebanese to foreign countries to search for peace and stability .

D: EXCHANGE RATE DEPRECIATION AND DOLLARIZATION:

The fiscal deficit-induced monetary expansion and inflation has led to exchange-rate depreciation due to the disequilibrium between the supply of and the demand for money. While money supply tended to increase in an accelerated manner as shown previously, the demand for the Lebanese Pound tended to decline drastically due to the decrease of the purchasing power of the Lebanese Pound caused by higher inflation, thereby resulting in exchange rate collapse as shown in Table(4-7). The exchange rate (L.L./\$) which ranged between 2-5 L.L. for every dollar in the period 1975-1983 increased to L.L. 8.89 in 1984, L.L. 18.10 in 1985, L.L. 87 in 1986, L.L. 455 in 1987, L.L. 530 in 1988, L.L. 842 in 1990, L.L. 879 in 1991 and L.L. 1838 in 1992. The current level of the dollar vis-a-vis the L.L. stands at more than 756 times its level in 1975. Faced with this drastic

TABLE 4-7

Exchange Rate L.L./\$ Trends
(End of Period)
1975 - 1992

YEAR	L.L./\$
1975	2.43
1976	2.93
1977	3.00
1978	3.00
1979	3.26
1980	3.65
1981	4.61
1982	3.81
1983	5.49
1984	8.89
1985	18.10
1986	87.0
1987	455.0
1988	530.0
1989	505.0
1990	842.0
1991	879.0
1992	1838

Source: Bank of Lebanon, Quarterly Bulletin, Various issues.

exchange-rate collapse, the public instead of holding the Lebanese Pound, tended to shift to foreign currencies, especially the U.S. Dollar. Table(4-8) shows that the Lebanese economy has been experiencing the phenomenon of "dollarization" ever since the year 1986, which can be defined as the shift away from the national currency, and can be measured by the ratio of foreign currency deposits of residents to money supply M2. It is clear from the Table(4-8) that Lebanese residents do hold a considerable proportion of their assets in foreign currencies (mainly the U.S. dollar) which contributes to more than 62% of the money supply M2 .

E: DECLINE IN BDL STOCK OF FOREIGN EXCHANGE :

Due to the continued depreciation of the Lebanese Pound in the foreign exchange market, the Central Bank was obliged to interfere in the market in an attempt to stabilize the exchange value of the Lebanese Pound .

However, its attempt was not totally successful due to the fact that exchange rate depreciation was caused by economic, fiscal, monetary, and psychological factors which the exchange-rate policy alone cannot cope with. Hence, the Central Bank could not have total

TABLE 4-8

Ratio of Foreign-Currency Deposits of Residents to
Money supply M2(%)
1975 - 1992

YEAR	L.L./\$
1975	19.6
1976	15.9
1977	18.1
1978	15.7
1979	25.6
1980	31.2
1981	36.6
1982	23.6
1983	27.9
1984	27.9
1985	32.1
1986	67.7
1987	89.4
1988	78.1
1989	60.0
1990	66.9
1991	61.1
1992	62.9

Source: Bank of Lebanon, Quarterly Bulletin, various issues

control over the market rate. And due to the recurrent difficulties concerning intervention in the foreign exchange market, the stock of foreign exchange tended to decrease over time: this stock which was nearly \$ 2.6 billion in 1982 declined to the so-called "red line" in 1987 totaling \$ 623 million and reached in 1992 running at less than \$ 1.5 billion, as shown in Table (4-9). This implies that the Lebanese Pound has lost during some years one of the essential factors that can be used for purposes of exchange rate stabilization, thereby exerting further pressure on prices.

F: CAPITAL FLIGHT:

Due to the continued worsening in political and economic conditions in the country, the majority of the public lost confidence in the government and its currency, thereby encouraging them to shift their monetary assets to foreign countries seeking security and stability, i.e. capital flight.

This capital flight, in turn, affected negatively the exchange value of the Lebanese Pound, and, therefore, caused prices to rise.

TABLE 4-9

Evolution of the Balance of Foreign Exchange
1975 - 1992 (in Million of dollars)

YEAR	L.L./\$
1975	1199
1976	1300
1977	1566
1978	1832
1979	1527
1980	1580
1981	1507
1982	2599
1983	1883
1984	652
1985	1051
1986	462
1987	336
1988	947
1989	906
1990	623
1991	1236
1992	1457

Source: BDL, Quarterly Bulletin, various issues

Table(4-10) shows that the amount of foreign deposits of banks and non-banks is substantial: more than \$ 10 billion are found abroad such figure would be magnified if we include investments in other sectors, whereby estimates of different sources indicate that not less than \$ 20 billion are found abroad distributed between deposits and investments .

G: OTHER ECONOMIC CONSEQUENCES:

The fiscal crisis in Lebanon fueled since 1975 further adverse economic consequences mainly:

1- Distortion in the Economic Structure:

The recurrent increase in both the fiscal deficit and public debt, reflecting in principle an accelerated increases in public spending for exceeding the rise in public revenues, have led over time to a major distortion in domestic economic structure as indicated by the uprise in economic activity based on the relatively high ratio of public spending to GDP as shown earlier. Such a development points to a basic fact: the size of the public sector expanded sharply since 1975 on the account of the private sector whose size retarded significantly. Nevertheless, the government role in economic activity only produced high levels of inflation and depreciation of the Pound as well as other economic consequences.

TABLE 4-10

Evolution of Foreign Deposits of Banks and Non-Banks
1984 - 1992 (in Million of Dollars)

YEAR	FOREIGN DEPOSITS
1984	8.34
1985	8.33
1986	9.25
1987	10.50
1988	10.43
1989	10.87
1990	12.26
1991	11.50
1992	10.50

Source: IMF, International Financial Statistics, various issues.

2- A vicious circle between exchange-rate depreciation and inflation. Higher inflation, by encouraging the public to shift to foreign currencies, exerts an upward pressure on the exchange rate hence resulting in the decrease of the purchasing power of the Lebanese Pound. Exchange rate depreciation, in turn, tends to lower demand growth, and given money supply growth, the outcome is an upsurge in price inflation.

3- The monetary expansion induced inflation has led to negative real interest rates due to the excess of annual inflation rates over annual nominal interest rates. Table(4-11) shows that real interest rates in Lebanon are negative, i.e the public instead of earning an interest on their holdings are losing a considerable portion of these holdings. These negative real interest rates encourage the public to shift to foreign currencies, thereby exerting further pressure on the exchange rate.

4- The monetary expansion induced inflation has led to a further increase in government expenditures on goods and services due to the increase in their prices, and given the low levels of government revenues, the final outcome was an upsurge in the fiscal deficit, recurrent increases in money supply, and hence further inflation. This implies that there exists some casualty between the rising fiscal deficits and rising inflation.

TABLE 4-11

Evolution of Real Interest rates in Lebanon (%)
1989 - 1992

YEAR	NOMINAL INTEREST RATE	REAL INTEREST RATE
1989	24.98	- 26.48
1990	24.98	- 21.88
1991	19.47	- 17.60
1992	20.99	- 51.60

mark:

=====

Real Interest rate = $\frac{\text{Nominal effective Int. rate on 1 year T.B.} - \text{Annual inflation rate}}{1 + \text{annual inflation rate}} \times 100$

This calculation of Real Int. rate is issued by the Bank of Lebanon.

Sources: - Figures for nominal interest rates are obtained from the Bank of Lebanon, Quarterly Bulletin, various issues.
- Figures for inflation are obtained from the General Confederation of Labor Union

5- Higher inflation has led to a current demand for higher wages on the part of the General Confederation of Labor Union and, consequently to further upsurge in prices. However, the increase in nominal wages remains much lower than the increase in prices, hence resulting in the decrease of real wages and salaries.

6- Major misallocation of banking resources caused mainly by negative interest rates on investment due to sharp inflation upsurge and depreciation of the L.L, coupled by the increased tendency of banks to finance the fiscal deficit through its subscription in TBs as well as its inclination to speculate against the L.L. A significant portion of banking resources were directed towards unproductive sectors (such as speculation activities, financing trade and services sectors, and financing government deficit), instead of directing an increasing portion of its resources to major productive sectors such as agriculture and industry which do not receive more than 10% of its total credit facilities as shown in Table(4-12).

Nevertheless, such misallocation of banking resources, accompanied by deteriorating in banking supervision during the war period significantly participated in the financial failure of some 15 banks, thereby obliging BDL to support such banks by credit liquidity that nearly \$ 26 million in 1989 and \$ 126 million in 1990.

TABLE 4-12

Commercial Bank's Credit to Agriculture
and Industry as % of total Credit (%)
1975 - 1992

YEAR	CREDIT
1975	22.7
1976	22.7
1977	22.8
1978	18.8
1979	19.5
1980	21.9
1981	19.7
1982	19.9
1983	17.9
1984	17.9
1985	15.3
1986	12.3
1987	8.3
1988	8.8
1989	12.4
1990	11.1
1991	10.9
1992	10.0

Source: Banque Du Liban, Quarterly Bulletin, various issues

II. SOCIAL CONSEQUENCES:

On the social level, the fiscal deficit-induced inflation and exchange-rate depreciation has led to a redistribution of income from creditors to debtors, a deterioration in real wages, a drastic decline in GDP per capita, poverty problem, all encouraging emigration and 'brain drain'.

As mentioned earlier, higher inflation tends to make real interest rates on the Lebanese Pound negative. That is, the depositor instead of earning an interest rate on his deposit, will end up with his eroding over time. Abou-Mousleh has shown that a L.L. 100 deposited at a domestic bank in Lebanon in January 1, 1983 has become L.L. 86.61 at the end of 1985, L.L. 6.22 at the end of 1986, and only L.L. 3.11 by June 15, 1987. The distribution of the L.L. 100 among various beneficiaries is as follows (Abou-Mosleh, G., "Inflation and Redistribution of Incomes", a working paper, Bank of Lebanon, August 27, 1987, pp. 3.)

1- Commercial Banks which benefited from the differential between the cost of the deposit and cost of lending:

L.L. 11.93

2- The Treasury which benefited from the deposit due to negative interest rates on the treasury bills:

L.L. 30.61.

3- Debtors from banks (economic sectors mainly trade)
due to negative interest rates on lending*:

L.L. 45.46

* In fact, the funds directed to the economic sectors
are not employed totally in the production process but
rather directed to speculation .

4- The bank of Lebanon (sterilized funds from
commercial banks)

L.L. 8.87

5- What is left over to the depositor

L.L. 3.11

TOTAL =====> L.L. 100

Hence, it is obvious that inflation has
redistributed income from creditors to debtors; the
former lose and the latter gain. In fact, the
redistribution of income in Lebanon is done from the
poor to the rich people, thereby leading to a worsening
of the standard of living of low and middle-income
groups.

High inflation rates, accompanied by the continued
depreciation of the Lebanese Pound, have led to a dras-
tic decline in both the real salary and per-capita GDP,

as indicated in Table(4-13, 4-14). The minimum basic salary when evaluated in dollar terms declined drastically from more than \$100-200 between mid 1970's and 1980's to \$19 in 1987 and reached only \$64 in 1992 thereby indicating that the basic salary stood in 1992 at nearly 30%-60% of its level in mid 1970's and 1980's. Per-capita GDP experienced no major improvement over the past 18 years, remaining around \$1000.

All these indicators show that Lebanon is now experiencing a sharp poverty and starvation among the low-income groups and even some middle-income groups. This paves the way to a misfeeding and health problem as well as severe social distress, thereby affecting negatively the productivity of workers.

The decline in real wages and salaries due to higher inflation and exchange rate depreciation, accompanied by the continuity of the state of war (worsening of political and security conditions), have led to a substantial emigration on the part of the Lebanese to foreign countries seeking there economic and political stability. Table (4-15) shows the evolution of the number of emigrants as a percentage of total population during 1982-1989 period.

Nevertheless, population statistics on Lebanon indicate that at least one million Lebanese have left Lebanon since the year 1975, and that it lost about two-third of its skilled and professional labor force (Abi-Farah, Op-Cit.,pp.15).

TABLE 4-13

Evolution of The Minimum Basic Salary
1975 - 1992

YEAR	Salary in L.L.	Salary in \$.
1975	313	129
1976	313	107
1977	309	103
1978	414	138
1979	518	159
1980	681	187
1981	802	174
1982	926	243
1983	1098	200
1984	1245	140
1985	1466	81
1986	7047	37
1987	8645	19
1988	24863	47
1989	24745	49
1990	44626	53
1991	74715	85
1992	117638	64

ce: Beirut Chamber of Commerce & Industry

TABLE 4-14

Evolution of the Per-Capita GDP
1975 - 1992 (in \$)

YEAR	L.L./\$
1975	1292
1976	761
1977	1202
1978	1414
1979	1273
1980	1526
1981	1470
1982	1282
1983	1358
1984	954
1985	812
1986	988
1987	1195
1988	1295
1989	1250
1990	1160
1991	1258
1992	1316

Source: Beirut Chamber of Commerce & Industry

TABLE 4-15

Ratio of Emigrants to Total Population
1982 - 1989 (%)

YEAR	RATIO
1982	12.1
1983	12.5
1984	11.9
1985	12.9
1986	14.8
1987	15.8
1988	16.1
1989	20.0

ce: Abi-Farah, Op-Cit pp.14

III. FISCAL DEFICIT AND THE INFLATIONARY PROCESS IN LEBANON

EMPIRICAL INVESTIGATION

Until very recently, studies concerned with the monetary aspects of the inflationary process generally took the Cagan model as their basic foundation- that is, they treated the money supply as strictly exogenous (or policy determined). Inflation is, therefore, essentially caused by the expansion in the money supply and there is no feedback. Lately, however, some papers, both theoretical and empirical, have questioned the unidirectional nature of the Cagan model, and have recognized that the expansion in the money supply may not be independent of inflation. They have explicitly introduced the idea that the inflation results in a widening of fiscal deficits financed through the banking system (in particular, by the Central Bank) leading to further increases in the money supply and further increases in prices. The purpose of this part is to: (i) examine the inflationary process in Lebanon during the 1975-1988 period, (ii) examine whether the relationship between money supply and prices is unidirectional

or two-way directional, and (iii) examine whether the causality process is stable, in the sense that the self-perpetuating nature of price increases tends to produce a stable rate of inflation or an accelerating rate.

A: A CAUSALITY TEST BETWEEN MONEY SUPPLY AND PRICES

Before formulating a model of the inflationary process in Lebanon, it is worth analyzing the nature and extent of the relationship between the rate of the growth of the money supply and changes in the price level in Lebanon .

A causal comparison of the averages of the annual inflation rates and growth in the money supply would seem to support the contention that there is a positive relationship between the two variables.

Clearly, this cursory examination of average growth rates is merely suggestive and cannot be interpreted as constituting the presence of a significant relationship (let alone a causal relationship) between the two variables. In order to examine the relationship between the two variables more rigorously, it might be better to subject them to the formal tests of causality that have been developed by Sims (1972) Pierce (1977), and Pierce and Haugh (1977).

Causality in the framework of these tests is interpreted in the sense of leads and lags between two series. A series, say prices, is viewed as "causing" the other series, money, if it leads money over time. If, on the other hand, prices consistently lag behind money, then money "causes" prices.

Two-way causality, or feedback, is the reflection of one of the series leading, as well as lagging behind, the other series.

The basic procedure of these tests is fairly simple and can be outlined briefly. We first put each of the two series through a filter to remove any existing autocorrelation.

This prefiltering removes the effect on a series of its own past values and converts it into one with white-noise properties ("Prewhitening" involves multiplying the values of the two variables by the factor $(1-0.75L)^2$ where L = nb.of lagged or lead periods,

$$\text{i.e. } P_t = (1-0.75)^2 \cdot \text{Ln}P \quad \& \quad m_t = (1 - 0.75L)^2 \text{ Ln } M$$

After this prewhitening process, we cross correlate the two series with both the lagged and the further values of the transformed series, thereby giving some indication of the direction of causality. For example, a significant value for the correlation coefficient between

the current price level and the current money supply would lead one to reject the null hypothesis that the two series are independent. If only the lagged values of the growth rate of money supply were significantly correlated with the current value of inflation, one could interpret that to imply that inflation "causes" increases in the money supply. Based on this reasoning, a significant correlation between current inflation and both the past and future values of the growth of money supply would imply two-way causality (Pierce and Haugh 1977).

Table (4 - 16) shows the empirical results of regressing the current price level on the money supply in the previous year, the current year, and the first subsequent year (in logarithmic form and prewhitened) during the 1975-1988 period. The empirical results indicate that a good fit of the equation as indicated by the high R^2 , low standard error of estimation, and the non-existence of serial correlation between the error terms.

TABLE 4-16

EMPERICAL RESULTS

	Constant	M-1	M	M+1	R ²	SER	F	DW
P	-3.21	0.18	0.50	0.68	0.996	0.042	1053.8	1.97
	T (-12.15)	(1.74)	(2.98)	(6.67)				
	Cross-correlation coefficient:	0.9604	0.9889	0.9971				

The significant values of the parameter estimates indicate that the independent variables (i.e. Ms) explain almost 99.6% of the total variation in price-level movements. Also, the cross correlation coefficient between inflation and each of M-1, M, and M+1, is statistically significant .

These results clearly indicate that the contemporaneous relationship between money supply growth and inflation is statistically significant. This assures that both the lagged and future values of money supply growth are significant in explaining the observed inflation in Lebanon, thereby implying a two-way causality between inflation and money supply growth .

To further ensure the above result, the current general price level was regressed on the current money supply (in logarithmic form) for the 1975-1988 period. The results obtained were as follows:

LnP	=	-1.165	1.153	LnM	MULT	.R
= 0.9889						
	T	(-9.32)	(21.05)			R ²
= 0.9779						
	SEE	(0.12)	(0.05)			R ²
= 0.9757						
	F	=	443.15			SER
= 0.0279						
	DW	=	1.85			

The above results suggest a significant correlation between money supply and inflation, thereby implying that the two variables are significantly dependent .

Having established an evidence on the nature of the relationship between money supply growth and inflation, we now proceed to design a model that explicitly introduce the link that is postulated to explain this two-way causality .

B: A MODEL OF INFLATIONARY PROCESS:

The model used is that developed by Aghevli and Khan (1978). The basic model involves four stochastic equations explaining, respectively, the price level, government expenditures, government revenues, and the supply of money; and one definitional equation dealing with the formation of expectations regarding inflation.

The complete model can be outlined as follows:

$$P = a_0 - a_1Y + \rho_2 TT^2 + a_3M + U_1 \quad (\text{Price-level}) \dots (1)$$

$$G = b_0 + b_1Y + b_2P + u_2 \quad (\text{Gov. Expenditure}) \dots (2)$$

$$R = c_0 + c_1Y + c_2P + u_3 \quad (\text{Gov. Revenues}) \dots (3)$$

$$M = d_0 + d_1M + d_2G - d_3R + u_4 \quad (\text{Money supply}) \dots (4)$$

$$TT^2 = e_0 + e_1 + \rho P + e_2 TT_{-1} + U_5 \quad (\text{Expected Inflation}) (5)$$

(Hint: the variables are in logarithmic form for the sake of obtaining the elasticities directly).

The variables are defined for convenience:

Endogenous:

P = domestic price level,

G = nominal government expenditures

R = nominal government revenues,

M = stock of money, and

π^e = expected rate of inflation, formed "adaptively".

Exogenous:

y = Level of real income, and

m = Money multiplier

The inflationary process inherent in this system of simultaneous equations can be briefly outlined as follows: Assume initially that there is an increase in the money supply—through, say, an increase in international reserves or in the Central Bank claims on the private sector, or in the stock of monetary base in the previous period (equation 4). This would raise the price level (equation 1), and result in increase in both government expenditures (equation 2) and revenues (equation 3).

If the increase in expenditures is greater than in revenues, the fiscal deficit will increase. This will cause the money supply to increase further, and the process will be repeated.

Figure 1 shows a flowchart of this inflationary process.

Having constructed a theoretical model of inflationary process, incorporating a two-way causality between money supply and prices, now we move to apply the model to the Lebanese case .

FIGURE 1. INFLATIONARY PROCESS IN LEBANON

C: EMPIRICAL ESTIMATION OF THE MODEL :

Since the basic model given by equations (1) - (5) is linear, we estimated it by the "Two-Stage Least Squares" (2SLS) technique. This method allows one to take into account all apriori restrictions inherent in the specification. The estimation results are shown in Table (4 - 17).

The model fits owing to the significant R^2 , significant parameter estimates, low or moderate standard errors of regression, and the non-existence of serial correlation between the error terms.

The main implications that can be derived from the estimation results can be outlined as follows:

1- Money supply growth, real GDP, and expected inflation are influential facts in the inflationary process. In effect, a 10% increase in money supply growth or expected inflation leads to respectively 11.5% or 2.6% increase in inflation. Hence there is nearly a one-to-one relationship between money supply and the general price level. However, a 10% drop in real GDP implies a 3.9% increase in inflation. The three variables explain almost 98% of the total variation in the general price level.

TABLE 4-17

ESTIMATION RESULTS

	CONSTANT	P	G	R	M	TT ^a	Y	n	R ²	SER	F	DW
1)P	-2.02 (-0.76)				1.15 (7.79)	0.26 (1.24)	-0.39 (-1.34)		0.983	0.196	256.90	2.43
2)G	-18.89 (-4.20)	1.30 (17.56)					2.28 (4.40)		0.962	0.35	166.10	1.98
3)R	-23.70 (-5.19)	0.93 (12.85)					2.99 (5.95)		0.926	0.34	82.63	2.05
4)M1	4.44 (10.43)		0.78 (7.92)	0.29 (-2.06)				2.04 (2.03)	0.959	0.22	101.77	1.85
5)TT ^a	CONSTANT 1.96 (4.81)	DP 2.33 (5.51)	TT-1 0.14 (0.87)						0.877	0.44	47.37	1.82

2- Both changes in the general price level and real GDP explain significantly movements in government expenditures. These two variables explain almost 96% of the total variation in government spending.

In effect, a 10% increase in either prices or income leads respectively to 13% or 22.8% increase in government spending.

3- Again changes in the general price level and income effect nominal revenues of the government by almost 93% . The results indicate an almost one-to-one relationship between prices and revenues, and an increase in income generates a double increase in revenues.

4- The increase in nominal government spending, accompanied by a drastic erosion of the revenue base, and the increase in money multiplier explain the observed explosion of money supply .

A 10% increase in either government spending or money multiplier generates respectively a 7.8% or 20% increase in money supply growth.

However, a 10% drop in government revenue engineers a nearly 3% increase in money supply. The three variables explain significantly 96% of the variation in money supply .

To conclude: The increase in money multiplier (due mainly to the substantial growth in monetary base) generates, in equation (4), a huge growth of money supply. This increase in money supply enters in equation (1) to cause a rise in the general price level, in addition to other factors (i.e. TT^e and Y). This increase in prices is then reflected in increases in both government spending and revenues (equation 2 and 3 respectively). But since the increase in spending exceeds by far the increase in revenues. The outcome is a continuous widening of the fiscal deficit . This, in turn, causes the money supply to increase further, thereby inducing further inflation, and the circle continues.

D: DYNAMIC STABILITY OF THE MODEL

By "dynamic stability" we mean whether the causality process is stable, in the sense that the self-perpetuating nature of price increases tends to produce a stable rate of inflation or an accelerating rate, Aghevli and Khan (1978) have shown that the necessary and sufficient condition for the model to be stable is that the expression :

$$1 - e_1 . a_2 + c_2 . d_3 - d_2 > 0 \dots\dots\dots (6)$$

Substituting the values of the parameter estimates from table 3 in expression (6) gives :

$1 - (2.33)(0.26) + (2.99)(-0.29) - 0.78 = -1.2529 < 0 \Rightarrow$
the model is unstable

Since the model of inflationary process is unstable, this would imply that, in general, incorporating the feedback of inflation into the money supply will result in more instability. Consequently, the self-perpetuating rate of price increases tends to generate an accelerating inflation .

E: CONCLUSIONS AND POLICY IMPLICATIONS:

The purpose of this part has been to deal with the inflationary process in Lebanon, examining the two-way causality between money and prices. The basic hypothesis was that, while government rise concomitantly with inflation, government revenues would tend to fall behind in real terms owing to collection lags. The financing of this inflation-induced deficit would then increase the money supply and generates further inflation. Thus, the increase in the supply of money would both cause inflation and would be the result thereof, a phenomenon that was confirmed by the formal tests of causality between the two variables.

It was also shown that this causality process is unstable, in the sense that the self-perpetuating nature of price increases tends to produce an accelerating rate of inflation .

The conclusion thus, is that, in Lebanon, the fiscal policy tends to be automatically destabilizing, the principal built-in destabilizer being the inability of revenues to match expenditures of the government. A passive fiscal policy in terms of inflation is, therefore, hazardous. The control of inflation in Lebanon requires deliberate action by budgetary authorities to eliminate budgetary deficits or even to achieve surpluses, if the burden on monetary policy is not to be excessive . In fact, monetary policy in Lebanon tends to accommodate the fiscal policy, that is, money supply growth is being driven chiefly by the continually massive fiscal deficits. Hence, in order to prevent money supply from playing a destabilizing role attempts should be made at reducing the government fiscal deficit .

Hence budget correction or balancing is a necessary condition to break the inflationary vicious circle .

Given the prevailing status quo, budget correction could be achieved mainly by specifying an annual target level for the fiscal deficit, and a great effort must

be made abiding by it. In setting deficit targets, it is important to avoid deficits large enough to increase the overall ratio of debt to GNP. By cutting expenditures down, deficits would be scaled down to a level consistent with a stable ratio of deficit to GNP over a certain (future) period of time .

On the other hand, domestic authorities should give priority to reshaping the revenue system. It would seem, however, that the possibility should be explored of indexing the nominal value of certain taxes, particularly personal and corporate income taxes and property taxes, the variations in the general price level .

CHAPTER V

CONCLUSIONS AND POLICY RECOMMENDATIONS

I - CONCLUSIONS:

To summarize, what can be learned from the Lebanese experience ?

1- The story about the fiscal crisis is not a simple one. The fiscal process is dynamic and multidimensional. The rapid fiscal deficit and the induced explosionary growth in the public debt are both caused by:

- (i) A substantial decline in real revenues
- (ii) A rapid and accelerated expansion in public spending.

2- The fiscal crisis in Lebanon has resulted in several adverse consequences on both the economic and social levels, together with negative implications for reconstruction and development of the Lebanese economy, mainly through the following effects:

- (i) A crippling expansion in money supply
- (ii) A dramatic drop in the exchange value of the Lebanese Pound
- (iii) A drastic explosion in the general price level

(iv) A rapid dollarization in the Lebanese economy
(v) A significant misallocation of economic resources
(vi) A crippling reduction in real economic activity
(vii) A severe social crisis as manifested by a major degradation in real incomes, as upsurge in unemployment rates, a crippling decline in the standard of living, and capital as well as human flight and brain drain.

(viii) A dramatic squeezing or shortage in capital funds necessary for financing reconstruction and development efforts, thereby impeding economic growth.

II- POLICY RECOMMENDATIONS :

The purpose of this section is to develop a fiscal-economic program comprising a coordinated set of fiscal and economic measures capable of restoring fiscal balance and strengthen fiscal reform together with economic activation in the country .

1 - FISCAL MEASURES:

On the fiscal level, and admitting the fact that the Lebanese budget is experiencing a clear pattern of massive deficits continuing for several years along with the associated central bank's monetization of these deficits (which is highly inflationary), and starting from the fact that budget correction or balancing is an important key to successful stabilization in a highly inflationary economy, on both the expenditures and revenues sides, certain fiscal measures are urgently needed to be undertaken in order to curb the fiscal deficit-induced inflationary consequences and to reduce inflation and depreciation of the Lebanese Pound, namely:

These measures could be undertaken on practical and legislative basis, namely:

A - On The Expenditures Side:

(1)- It is doubtless that the rational acknowledgment of a general budget does necessarily lead to curb public expenditures. At times when the budget was acknowledged it was done unsystematically and in an irrational manner and without accurate planning; that implied the legalized expenditures that were spent on non-productive activity caused a high proportion of loss in public funds.

Against this, it is necessary to acknowledge rationally the annual budget, provided that its figures reflect a great deal of accuracy in estimating the government's revenues and expenditures (according to the priority criterion); and that complete abidance by such an accurate budget during the financial year in question is urgently needed. Such a measure constitutes a major prerequisite for a balanced budget.

(2)- Domestic authorities should issue an 'emergency legislation' which specifies an annual target level for the fiscal deficit, and a great effort must be made at abiding by such a target. In setting deficit targets, it is important to avoid deficits large enough to increase the overall ratio of debt to GNP. By cutting expenditures, deficits would be scaled down to a level consistent with a stable ratio of deficit to GNP over certain (future) period of time, under prudent assumptions about the ability of the economy to grow.

(3)- The prevailing status quo requires a deterrent legislation to limit the ability of the Ministry of finance to borrow through issuing treasury bills without any limit.

(4)- The general budget and the following budgets do not reflect the sum of all the government's financial operations. Hence it's necessary to put a unified representation of the government's financial position, which includes all the financial operations of the public sector including the independent departments and other public institutions as well as the institutions which the government owns shares in them. By so doing, a clear picture of the government's financial position would be indicated: the actual volume of public debt (internal and external counterparts), and the sum of the government's obligations, actual and expected.

(5)- Implementing a radical administrative reform in public enterprises, aiming at restructuring such enterprises and reshaping its capital and human resources in such a manner to activate its performance and enhance the productivity of its employees as well as the overall productivity of such enterprises. Such an administrative reform, which the government has adopted very recently, could well participate in curbing irrational public spending.

(6)- The government should seek cutting down its spending by:

(i)- Scaling down its current (unproductive and inflationary) spending to maximum sustainable levels.

(ii)- Setting target levels for public spending growth that over suitable enough to assimilate the growth in public debt gradually during the coming years.

(iii)-Seeking to increase public spending on capital items that are productive in nature and that could lead to absorb an increasing part of unemployment existing in the economy.

(IV)- Rationing public expenditures on the basis of cost-benefit analysis, to secure irrational spending on unnecessary items.

B - On The Revenues Side :

(1)- Activating the determination and collection of all types of taxes.

(2)- Fighting tax evasion through reshaping financial fines on taxevaders towards increasing such fines.

(3)- Indexing the nominal value of certain types (particularly personal and corporate income taxes as well as property taxes) to the variations in the general price level to preserve the purchasing power of such taxes.

(4)- Devising new taxes for the sake of increasing the overall level of taxes .

(5)- Raising the customs dollar price and equating it with its market price, so as to increase the overall level of customs duties.

(6)- Reconsidering the prices of public services recurrently in the light of increases in the cost of living and salaries increases.

2 - MONETARY MEASURES:

On the monetary level, to facilitate and strengthen the effectiveness of the above measures, certain monetary measures must be undertaken, namely:

(1)- Limiting the injection of new Pounds into the market. A significant step would be to target the domestic liquidity. Setting a target for the ratio of domestic liquidity to GNP, with the tendency to reduce it over time, would halt future inflation rates.

(2)- In order to encourage the public to transform their foreign currency holdings to the Pound and to halt capital flight, real interest rates must be high (positive). This requires relating interest rate movements to movements in the general price level.

(3)- The BDL should attempt at decreasing its finance share in the government deficit, mainly through cutting down its subscription in TBs as well as its direct loans to the Treasury and public enterprises.

3 - ECONOMIC MEASURES:

On the macroeconomic level, the fiscal and monetary measures should be accompanied by measures aimed at enhancing the overall level of economic activity. The production process has to be enhanced in order to raise the level and growth rate of real economic activity. This could be done through increasing and rationing credit (mainly from banks) to the lagging sectors of the economy (e.g. industry, agriculture) and through acquiring external funds that could help in establishing new productive enterprises or aid the already existing enterprises, as well as participating in the ongoing process of reconstruction and development.

By the end of 1992, more than \$ 1.2 billion have been collected in the form of foreign aid (grants and loans) that could well be used efficiently to activate economic sectors and rehabilitate the infrastructure of the economy. Such measures when used in an coordinated manner could, in effect, lead to fiscal and economic stabilizations, that would put the economy again on the right road towards economic growth and development .

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