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AN ANALYSIS OF PUBLIC SECTOR DEFICITS AND DEBT IN LEBANON: 1970-2000

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Prior to its Civil War (1975-90), the Lebanese economy was one of the most dynamic in the Middle East. The Civil War, however, resulted in a heavy loss--both human and material--and, among other factors, contributed to fundamental changes in the economy. The purpose of this paper is to analyze one of the most challenging issues and major sources of deepening crisis for the Lebanese economy: public sector deficits and debt.

The paper analyzes this problem during two distinct phases: the Civil War period, and the post-war and reconstruction period (1990-2000). Focus is placed on the methods of budget funding and the consequences of these for the Lebanese economy. This article concludes that addressing the fiscal deficit problem is critical for the wellbeing of the economy, and that tackling it is made more difficult due to political involvement, corruption, and, more importantly, an inadequate and inefficient public governance system. This article also makes policy recommendations to assist in alleviating the deficits.

INTRODUCTION

Prior to 1975, the Lebanese economy was one of the most dynamic in the Middle East. The country's stable macroeconomic environment, liberal economy, vibrant private sector, its traditional role as an intermediary between the developed economies of Europe and the developing countries of the Middle East, and its openness to capital and labor mobility made it quite unique in the region. The economic structure was also quite unique. While many of the region's economies were heavily reliant upon natural resources (especially oil and gas) and agriculture as the basis for their economic development and taxation revenue, Lebanon, by contrast, possessed few natural resources. It did, however, enjoy a strong comparative advantage in the services sector, particularly in banking and finance, insurance, and trade-related services. Beirut was the financial center for the Middle East in the 1960s and early 1970s, having the largest number of representative offices of foreign banks in the Arab world, and was the regional headquarters for many international companies. Lebanon's economic stability, characterized by low inflation, high rates of economic growth, large balance of payment surpluses, small budget deficits, a floating, stable and fully convertible domestic currency, and political stability, made it a highly attractive business center.

This, however, disintegrated with the beginning of the Civil War (1975-90), which exacted a heavy toll in human and material terms and resulted in fundamental changes in the economy. Infrastructure and industrial facilities were destroyed, while foreign and domestic reluctance to invest in the economy resulted in the obsolescence of the remaining productive capacity. Moreover, the flow of goods and factors of production was disrupted as a result of the fragmentation of the country, and there was a loss of professional and entrepreneurial skills through mass emigration. Emigration was accompanied by capital flight, and Lebanon's access to flows of foreign capital was severely curtailed. Concurrently, public finances deteriorated significantly owing to a lack of central government authority, a weak and inefficient tax system, combined with the need to provide a minimum of public services. Resulting large fiscal deficits were financed primarily through the banking system. The consequent rapid growth in liquidity compared with economic activity, and the erosion of private sector confidence, led to continuous pressure on the Lebanese pound in the foreign exchange market, heightened inflationary pressures, and resulted in high levels of currency substitution.

The 1989 Ta'if Accord provided the basis for a peaceful settlement to the Civil War by gradually restoring government authority and bringing about a cessation of hostilities in 1990. Then began the difficult task of simultaneous economic stabilization and confidence-building on the one hand, and post-war reconstruction and development on the other to ensure a sustainable recovery of the badly dysfunctional economy. Confidence was further restored in the last quarter of 1992 following the completion of parliamentary elections, the first in 20 years, and the installation of a new government.

The costs of the Civil War were estimated at US$25 billion plus a loss of more than 150,000 lives, together with immeasurable suffering.[1] Hence, the tasks facing the new government were immense, and its participation in the reconstruction and rehabilitation process became exceptionally large. While this contributed significantly to the country's recovery and recent good economic performance, it also contributed to new and emerging problems. The most worrisome of problems included acceleration in the growth of government capital expenditure, slow recovery of the revenue-generation capacity, sizable fiscal imbalances, and a rapid accumulation of public debt. During 1993-2000, gross public debt as a percent of gross domestic product (GDP) increased from 49 percent to 151 percent, and net public debt rose from 38 percent to 141 percent.[2] This did not include financial commitments for urgently needed public schools, low-income housing, and health programs.

The purpose of this paper is to analyze the Lebanese experience with fiscal deficits and public debt. Focus is placed on the methods of budget funding and consequences for the economy. The article first conducts an overview of government expenditure and taxation revenues in Lebanon during and after the war. The article then examines the budget deficits and public debt in Lebanon. It covers the fiscal deficits and public debt performance during 1975-90, fiscal deficits and public debt performance during 1990-2000, and the mode of financing the deficit and debt. Next, the article presents the consequences of the deficits and public debt for the economy. Major conclusions are then presented.

PUBLIC FINANCE IN LEBANON

Overview of Fiscal Performance during and After the Civil War

The Civil War caused a significant deterioration in Lebanon's overall budgetary performance. Tax revenue, which was already low before the outbreak of the Civil War, declined further and simultaneously caused expenditures to rise considerably (Table 1). As a percentage of

GDP tax revenues, already traditionally low, declined further while expenditure rose considerably (See Table 1). The Civil War reduced the revenue yield mainly as a result of the breakdown of government authority over revenue sources. Revenue collection was also adversely affected by inflation, which diminished real revenues from specific taxes. This in turn lead to delayed tax payments and induced a shift from taxed to non-taxed activities. Weak tax revenues dropped further from 15.6 percent of GDP in 1974 to 9.7 percent of GDP in 1990 (Table 1). Customs duty receipts, in particular, declined during 1988-90 owing to the loss of control over legal ports of entry and a consequent surge in illegal imports.

Toward the end of the war, direct tax collection improved as economic activity began to recover, and the authorities instituted a self-estimation business profit tax. Non-tax revenue also improved during 1989-90 as a result of a rise in real estate prices and a six percent *ad valorem* registration fee applied to real estate transactions. In addition, non-tax revenue was boosted by increased Central Bank of Lebanon (BDL) profits, reflecting increased Treasury bill holdings by the Central Bank of Lebanon and profits from foreign exchange operations.

Revenue losses during the war years were not matched by a corresponding restraint in expenditure, due to the government's efforts to maintain a minimum level of public services and operations. Total expenditure rose from 15.4 percent of GDP in 1972 to 39 percent in 1989-90. In particular, domestic interest payments absorbed an increasing share of total expenditure as the government increasingly resorted to debt financing of budget deficits. Domestic interest payments increased from four percent in 1980, as a percentage of total expenditure, to 29 percent in 1989. Similarly, fuel subsidies rose to a peak of 19 percent of total expenditure in 1989.[3] Although intermittent adjustments in wages and salaries were effected, the government's wage bill declined from about 13 percent of GDP in 1976 to seven percent of GDP in 1989 (Table 1). Nevertheless, reflecting the full year effect of the sharp wage increase granted in the previous year, the public sector wage bill rose to about 11 percent of GDP in 1990, and its share of total expenditure rose to 27 percent. Finally, budgetary capital expenditure, however, declined from six percent of GDP in 1980 to less than two percent in 1990.

At the end of the Civil War, Lebanon's budget was characterized as follows: a) low revenue yielding, mainly owing to a lack of sufficient government control over revenue sources and a porous tax system; b) continued dependence on indirect taxes, as had been the case prior to the war; c) increased importance of direct tax revenue relative to indirect taxes; d) and an increased burden from domestic interest payments. As a result of these developments budget surpluses incurred prior to the war were transformed into increasing deficits during the war and post-war years. The overall deficit rose from 12 percent of GDP in 1976 to about 30 percent of GDP in 1990.

Post-war Normalization, 1991-92

After the reestablishment of a government of national unity at the end of 1990, the fiscal situation in 1991 and 1992 improved markedly for several reasons. First, revenues increased fourfold to 15 percent of GDP as a result of the gradual reassertion of government authority over revenue sources. Widespread improvement in revenue collection occurred, particularly with respect to customs duties and non-tax revenue. Second, rapid growth resulting from the normalization of economic activity reinforced the revenue increase. Third, the elimination of war-related expenditures and expenditure restraint (including a hiring freeze) resulted in a significant decline in total expenditure to 29 percent of GDP in 1991, down from 39 percent in the previous year (Table 1). Interest payments on domestic debt declined from 10.3 percent of GDP in 1990 to 4.8 percent in 1992 as a result of increased monetary financing (Table 1). The fuel subsidy was limited to about one percent of GDP, and other current expenditure declined by more than three percentage points to ten percent of GDP. In contrast, capital expenditure increased fivefold to about four percent of GDP, largely to restore basic public services and rehabilitate public infrastructure. These developments resulted in a substantial reduction in the overall budget deficit from 30 percent of GDP in 1990, to 13 percent in 1991, and to 11.4 percent in 1992.

The structural weaknesses of the budget in Lebanon, relative to that of selected Middle Eastern countries (Egypt, Iran, Jordan, and Syria during the early 1990s), is shown in Table 2. Except for Jordan in 1991, Lebanon had the largest overall budget deficit, but made great strides during 1991-93 to reduce it. Furthermore, Lebanon had the lowest total revenue to GDP ratio of the five countries, and, apart from Iran, the lowest total expenditure to GDP ratio. Despite the increased share of government expenditure to GDP during the war, the public sector still played a relatively small role in the Lebanese economy.

In terms of revenue composition Lebanon had the lowest contribution from direct taxes and (apart from Iran, an oil exporter) the highest contribution from non-tax revenues, both of which point to an inelastic tax system (tax revenue does not increase commensurate with increases in income). In addition, Lebanon, along with Jordan, had the lowest revenue from import taxes as a share of total imports, although planned reforms to strengthen customs administration did, later, increase such receipts.[4]

Of the five countries, Lebanon's share of current expenditure in total spending was the highest, and its share of capital expenditure was the lowest (Table 2). Finally, Lebanon (with Egypt) devotes a large and growing share of its public expenditure to servicing its debt commitments, which reduces the authorities' flexibility to conduct fiscal policy and respond to unforeseen shocks to the economy.

These observations point to the following main structural weaknesses on the revenue side in the early 1990s: a) there was a heavy reliance on indirect taxes and relatively small income tax collections, while taxable income was not applied on global earnings; b) although the bulk of indirect taxes consisted of customs duties, the average effective taxation of imports remained low; c) existing excise taxes were largely outmoded and very limited in scope and yield;[5] and there was no comprehensive tax on consumption, such as a general sales tax; d) there was an overemphasis on non-tax revenue, such as various fees, charges, fines, and miscellaneous property and enterprise income; and (5) the effectiveness of tax administration and collection remained porous and limited.

In order to contain inflationary pressures, in the early 1990s, the authorities intended to continue financing budget deficits through debt creation, which led to a substantial increase in the budgetary burden of domestic interest payments. Massive reconstruction projects were undertaken directly by the Government and other public entities (in particular, by the Council for Development and Reconstruction (CDR)), financed largely from foreign concessional loans and official grants. The magnitude of the financing need led to a sharp increase in the level of foreign indebtedness and foreign debt service after 1993, which had been relatively low before this time.

Revenue Developments and Policies, 1993-2000

In contrast with the period from 1991-92, during which revenue increases were primarily the result of the reestablished government authority over revenue sources and the normalization of economic activity, the authorities embarked on a number of reforms to mobilize revenue during 1993-2000. Reflecting the favorable revenue effects of major reforms introduced during this period and improvement in tax administration, Lebanon's tax ratio (total tax revenue as a percentage of GDP) increased from 5.4 percent in 1992 to 13.4 percent in 1999. It then fell to 11.8 percent in 2000 (Table 1) as a result of a general tariff reduction in December 2000 which lowered customs tariffs on most imports.

The principal reform measures included the following steps:

1) Duties and taxes on imports. Reflecting the favorable revenue effects of the 1995 and 1999 tariff reforms and the temporary increase in imports required for reconstruction, revenues from this source increased from five percent of GDP in 1993 to 7.9 percent and seven percent in 1999 and 2000, respectively (Table 3). The reform measures included the introduction of a minimum tariff rate of two percent.

2) Taxes on income and profits. This tax category, despite some progression in nominal rates, registered a ratio of less than unity until 1996, reflecting the major income tax reform of 1993. The reform included the following measures: (I) reduction in nominal tax rates from 26 percent to ten percent on corporate profits and from 15 percent to five percent on dividends and on other corporate distributions; (II) reduction of the top marginal rates for individual income taxes from 32 percent to ten percent for wages and salaries, and from 50 percent to ten percent for individual business profits; (III) adoption of an amnesty program that added 9,700 taxpayers; and (IV) accelerating the payment of taxes withheld at the source by having the withholders release the funds quarterly.[6] The reduction of nominal tax rates was intended to encourage the flow of international capital and direct investments and improve voluntary compliance by taxpayers. In 1997 and 1999, after significant strengthening of the tax administration, the revenue yield of taxes on the income and profits category improved (Table 3).

3) Taxes on goods and services. During the period 1993-95, the excise rates on tobacco and cigarettes were raised from five percent to 30 percent, and the prices of petroleum products were also raised a number of times to narrow the gap with international prices. Taxation of real estate transactions also yielded increasing revenue given the real estate boom of 1993-95. Despite these developments, this category of tax registered a decline from 2.5 percent

of GDP in 1993 to two percent and 0.9 percent in 1997 and 1999, respectively. This can be attributed to the collection of excise tax on cement, petroleum, cars, and tobacco, which were added to the products during importation as they passed through customs (in addition to custom duties).

Improvements in tax revenue mobilization over the period 1993-2000 were primarily the result of the 1995 customs reforms. The decline in the share of taxes on income and profits until 1996 reflected the combination of the revenue effects of the 1993 reform and weaknesses in taxpayer compliance and tax collection. The literature relating to optimal tax theory suggests that the most efficient means of raising tax revenue is by means of income and consumption taxes. While the reform of income taxation has not yet resulted in an increased tax yield, even with the improvements registered in 1997, ongoing reform should remain focused upon improving the raising of income taxes as well as consumption taxes. Today, Lebanon's revenue structure remains weak and unbalanced, relying heavily on three sources: imports, some excisable goods, and a plethora of taxable public services and administrative fees.

Expenditure Developments and Policies, 1993-2000

A sharp increase in government expenditure has been the predominant characteristic of public finances during the 1993-2000 period. Government expenditure rose from 23 percent of GDP in 1993 to 37.9 percent and 42 percent in 1996 and 2000, respectively (Table 1), with all expenditure categories, albeit to a different degree, contributing to the increase.

<u>Current expenditure (excluding interest payments)</u>

This expenditure category consists primarily of salaries, transfers, and subsidies. The government has, in general, succeeded in containing the overall wage bill through wage freezes. This is the case despite considerable political pressure to compensate government employees for the accumulated loss of purchasing power on wages during and after the Civil War. In late 1995, a retroactive wage increase was granted.[7] Since then, the government has adopted the policy that further wage increases will only be granted if they are covered by compensating revenue measures. Subsidies to public enterprises have remained important, reflecting the slow cost-recovery capability experienced by providers of basic public services. Furthermore, the Lebanese government has had to increase its current expenditure on people and institutions affected in the South of the country by the ongoing conflict with Israel.

<u>Interest payments</u>

These have been a major factor underlying the growth dynamics of expenditure. Expenditure on domestic interest payments rose from 4.8 percent of GDP in 1992 to 14.4 percent of GDP in 2000 (Tables 1). Since 1991, the budget deficit has been financed almost entirely by issuing debt, largely denominated in domestic currency, to institutions and agents other than the central bank. In the context of the government's exchange-rate-based nominal anchor policy, and given the significant domestic and regional political risks, nominal interest rates on domestic currency assets have been high and subject to dramatic adjustments. Together with the rapid accumulation of public debt, this led to sharp increases in budgetary interest payments.

Capital expenditure

After the launch of the Horizon 2000 program,[8] the government embarked on a large number of infrastructure rehabilitation and enhancement projects, and capital expenditure rose from 3.4 percent of GDP in 1993 to 9.3 percent and 9.4 percent in 1994 and 1995, respectively. In preparing the program, the government envisaged spreading capital expenditure in nominal terms equally across the 12-year planning period. Capital expenditure, as a percentage of GDP, would, therefore, decline over time. This effect was already visible in 1996, 1998, and 2000 when, with almost unchanged levels in nominal terms, capital expenditure fell to 8.5 percent, 6.3 percent, and 4.7 percent of GDP, respectively (Table 1).

In conclusion, the impressive improvement in Lebanon's fiscal stance through 1993 is attributable to the recovery of revenues and considerable expenditure restraint. Although total expenditure was lowered effectively in real terms at the beginning of the post-war years, it remained significantly above the levels that prevailed prior to the war, resulting in a relatively higher overall deficit. Thus, the government sector has become larger than it had been before the war, absorbing a larger share of domestic resources. The revenue composition that emerged at the end of 1993 is comparable to that of the pre-war years, with indirect taxes and non-tax revenue accounting for large shares of total revenue. However, total revenue mobilization in real terms still remains below the levels that prevailed before the war. There has been some improvement in revenue performance which can be expected to continue in the coming years of reconstruction and recovery. However, a number of structural weaknesses requiring substantial reform so as to improve domestic resource mobilization remain to be addressed.

BUDGET DEFICITS AND PUBLIC DEBT IN LEBANON

This section analyzes the Lebanese experience with fiscal deficits and public debt during the periods 1975-90 and 1990-2000. It also investigates the mode of financing these deficits and the debt structure of Lebanon's public debt. This strategy has been characterized by a large share of short-term treasury bills, denominated in Lebanese pounds, issued at a high discount, and sold domestically.

Fiscal Deficits and Public Debt in Lebanon (1975-1990)

During 1970-75 the average annual growth of nominal gross public debt was only 3.5 percent, and the nominal gross public debt as a percent of GDP averaged 5.4 percent (Table 4). Pre-war public debt was, therefore, not a major concern. The deepening crisis for the Lebanese economy during 1975-90, as evidenced by the marked deceleration in economic growth and private investment activity, increased the budget deficit and the public debt increased rapidly. The average annual growth of nominal gross public debt from 1976-83 was 66 percent but declined to only 4.6 percent from 1983-90. This decline occurred as a result of resorting to money creation (for debt reduction purposes) by the authorities, which was accompanied by high inflation and a depreciation of the Lebanese pound during 1983-92.

By the end of 1990, gross public debt as a percent of GDP had increased to 99.8 percent, up from 3.5 percent in 1975 (Table 4). Domestic public debt accounted for 75.2 percent of this (Table 1). The share of external public debt as a percentage of gross public debt remained more or less the same during the Civil War, averaging about 7.5 percent of GDP, equivalent to about US$205.2 million (Table 4). According to Chami, this low level of external debt was not the outcome of a deliberate decision on the part of policymakers, but rather an inability to borrow when the economy was in a state of war.[9]

Rising public debt contributed to a significant increase in debt servicing requirements. Debt service (especially interest payments on treasury bills) as a percentage of total public sector revenue increased from 8.7 percent in 1975 to 374.3 percent and 238.6 percent in 1988 and 1989, respectively (Table 5). Debt service as a percentage of total expenditure increased from only 6.9 percent in 1975 to 30.5 percent and 28.8 percent in 1988 and 1989, respectively. The debt service to exports ratio increased from 2.6 percent in 1975 to 31.2 percent and 63.2 percent in 1988 and 1989, respectively (Table 5). This indicates the increasing pressure on public sector expenditure, which compounded further the fiscal deficits.

Fiscal Deficits and Public Debt in Lebanon (1990-2000)

During this period two phases in the evolution of Lebanon's public debt can be distinguished. From 1990-92, the overall budget deficit, as a percentage of GDP, declined from about 30 percent in 1990 to 13 percent and 11 percent in 1991 and 1992, respectively. The ratio of gross public debt to GDP decreased to 76.8 percent and 58 percent in 1991 and 1992, respectively (Table 4). Debt service as a percentage of revenue declined from 168.9 percent in 1990 to 48.9 percent in 1992, and the debt service to GDP ratio declined from 10.8 percent in 1990 to 5.5 percent in 1992 (Table 5). The decline in the public deficit during the period 1990-1992 occurred as a result of: the gradual reassertion of government authority; government revenues increased from 9.7 percent of GDP in 1990 to 12 percent in 1992 (revenue collection improved especially with respect to customs duties and non-tax revenue); fiscal restraint brought total expenditure down to 23 percent of GDP; and interest payments on domestic debt went down to 4.8 percent of GDP (Table 1) as a result of increased monetary financing. It is worth noting that the situation above happened despite very sizable primary deficits, and despite the nominal depreciation of the Lebanese pound due to a rapid growth of the money supply and negative real interest rates. The negative real interest rates were associated with substantial inflation during 1991-93 and the favorable financial market sentiments that followed the autumn 1992 appointment of PM Hariri.

The second phase of the evolution of the deficit and public debt in Lebanon was from 1993-2000. This phase was both economically and politically different from that of the other periods, characterized in particular by a steady appreciation of the Lebanese pound and a change in the factors contributing to the rising budget deficit. As a result of rebuilding the infrastructure, together with large and expanding current expenditure and the slow recovery of the revenue-generation capacity, sizable fiscal imbalances occurred. Budget deficits increased from 9.2 percent of GDP in 1993 to 20.6 percent and 23.7 percent in 1996 and 2000, respectively (Table 1). This led to a sustained growth in government debt during the 1993-2000 period (Table 4). During this period, the average annual growth of public debt was 31 percent, and gross public debt as a percent of GDP increased from 48.6 percent in 1993 to 102.9 percent and 151.8 percent in 1997 and 2000, respectively. Net public debt rose from 38 percent to 92.3 percent and 141.2 percent of GDP in 1997 and 2000, respectively (Table 5). Domestic public debt as a percent of GDP increased from 44.2 percent in 1993 to 86.5 percent and 109.5 percent in 1997 and 2000, respectively (Table 4). The external public debt as a percent of GDP increased from only 4.3 percent in 1993 to 16.4 percent and 42.3 percent in 1997 and 2000. Hence, public debt in Lebanon remained predominantly domestic. Furthermore, debt service as a percent of revenues increased from 42.3 percent in 1993 to 84.9 percent and 92.2 percent in 1997 and 2000, respectively. Debt service as a percent of GDP increased from 6 percent in 1993 to 14.9 percent and 16.9 percent in 1997 and 2000, and as a percent of expenditure it increased from 25.5 percent in 1993 to 39.4 percent and 40.3 percent in 1997 and 2000, respectively. Finally, as a percent of exports it increased from 65.6 percent in 1993 to 341.1 percent and 391 percent in 1997 and 2000, respectively (Table 5). In nominal terms the gross public debt increased from US$3.7 billion in 1993 to about US$25 billion in 2000. The external public debt increased from US$0.3 billion in 1993 to about US$7 billion in 2000.

In conclusion, despite increased GDP growth rates in the early 1990s, the rate of growth of budgetary spending consistently exceeded it. Essa et al. suggests that the average growth rate in spending increased in certain years by as much as seven times the growth in GDP.[10] The rapid growth in spending was traditionally deemed warranted, as 80 percent of it was compulsory (in the form of salaries and debt servicing). Moreover, various facts reveal that such spending was not solely due to political, economic, or financial emergencies. There was also a lack of government consideration of the dangers associated with a rising public debt, especially where increased spending was not accompanied with growing revenues. Hence, debt financing resulted in a rise in the structural deficit, as it was not compensated by higher taxes or reductions in other transfer payments.

The Mode of Financing the Public Deficit and Debt in Lebanon

Lebanon initially had only very limited access to either international capital markets or official foreign financing. This reflected considerable political and macroeconomic uncertainties immediately after the war, and it had to resort to domestic capital markets to finance its budget deficit. Three to twelve month short-term treasury bills denominated in Lebanese pounds were the only instruments available. In mid-1991, the authorities also started issuing 24-month treasury bonds with semi-annual coupon payments. For a while, treasury bills with a maturity of 18 months were also available, but their issue was discontinued given the limited interest by the investor community. Reflecting these developments, Lebanon's debt structure has been characterized by a high, albeit gradually declining, share of domestic short-term treasury bills (Table 6).

Treasury bills used to finance the budget deficit grew by an average of 69.2 percent during the Civil War period. Short-term bills registered a very high average share of 85.2 percent of the total issued during the war. Most treasury bills were subscribed to by the commercial banks at an average share of 56.9 percent during the war.11 As shown in Table 7, the percentage of treasury bills in domestic public debt increased from 49.6 percent in 1970 to 55.2 percent in 1980, to 64.3 percent in 1990, and 99.3 percent in 2000. Moreover, the percentage of treasury bills in total public debt was 18.6 percent in 1970, increasing to 47.7 percent in 1980, 48.8 percent, and 71.6 percent in 1980, 1990, and 2000, respectively. From 1978-82, three month treasury bills accounted for 69-78 percent of those issued. Short-term treasury bills, as a percent of total domestic public debt, represented 42.9 percent in 1978, increasing to 71.4 percent in 1982. The growth of the budget deficit resulted in the rapid growth of treasury bills issued during this period. In addition, from 1978-82, treasury bills were again subscribed mainly (between 85 and 92 percent) by commercial banks. Special bills for the subscription of commercial banks were introduced in 1979, representing 20 percent of total subscriptions.12

In 1983, the Bank of Lebanon entered the financial market as a subscriber of 25 percent of total issues. The biggest share was subscribed to by commercial banks (around 68 percent), and the remaining seven percent was subscribed to by the general public. Table 6 shows that long-term treasury bills--or bonds--represented only three percent of total subscriptions, compared to short-term treasury bills' contribution of around 80 percent of total subscriptions in 1984. This was due to political and economic uncertainty.

During the 1986-87 currency crisis, the share of commercial banks in treasury bill holdings dropped significantly to 65 percent and 40 percent, respectively, compared to 72 percent in 1985. Consequently, the central bank's share of treasury bills purchased increased from 21 percent in 1986 to 52 percent in 1987. It is worth noting here that commercial banks held 75 percent of total treasury bills, while the share of the Bank of Lebanon (BDL) was less than eight percent.

Beginning in 1991, there was a redistribution of maturities in favor of long-term treasury bills (mainly bonds with 24 months to maturity) that accounted for 15 percent of total subscriptions in 1991 (Table 6). Since then, 24-month treasury bonds have become the dominant Lebanese pound debt instrument. This type of treasury bill, on average, accounted for 60 percent of all outstanding treasury bills and bonds from 1993-2000[13] (Table 6). Between 1991 and 2000, the share of short-term treasury bills as a percent of domestic public debt declined from 73.6 percent in 1991 to 31.9 percent and 22.5 percent in 1997 and 2000, respectively. The share of long-term treasury bonds increased from 13 percent in 1991 to 67.1 percent and 76.8 percent in 1997 and 2000, respectively. This was the result of the positive events of the post-war period and optimistic expectations regarding the future of Lebanon. The commercial banks[14] have been the main subscribers to the issue of new treasury bills, averaging in the order of some 73.3 percent from 1991-2000, followed by the non-banking system.[15] This could have a negative impact on private investment and the role of the private sector overall, however, because pouring money into treasury bills "crowds out" the private sector by creating a liquidity shortage. Hence, the public sector had become an important competitor with the private sector for bank loans.

Treasury bills have been the main short-term Lebanese pound denominated asset in Lebanese financial markets, and, given the role of commercial banks as the principal intermediaries, are the main determinants of quasi-monetary Lebanese pound liabilities. Treasury bill holdings by non-bank entities have been increasing, in particular, since 1995. This change in the structure of treasury bill holdings has been attributed to the unsteady interest rate setting by commercial banks (Table 8) and the deepening of financial markets. The latter has allowed for a larger investor base, including foreign, non-resident investors. At the end of 1997 about seven percent of the outstanding treasury bills were held by non-resident investors.[16]

As shown in Table 8, the nominal interest rate on treasury bills with a three months maturity increased from three percent in 1977 to 18 percent in 1990; those with six months maturity increased from 10.5 percent in 1982 to 20 percent in 1990; for those with a 12 months maturity it increased from 3.6 percent in 1977 to 16 percent and 20 percent in 1985 and 1990, respectively; and for those with a 24 months maturity it registered 4.3 percent in 1977, increasing to 12 percent and 24.5 percent in 1983 and 1992, respectively. This high interest rate policy on treasury bills was implemented by the Bank of Lebanon (BDL) during the Civil War and early 1990s in order to reduce the massive increase in the money supply, to control the severe depreciation of the Lebanese currency, and to encourage the commercial banks and others (such as financial institutions as well as general public and public entities) to participate in financing the budget deficit. Since 1994, Lebanon has adopted a tender system to determine the interest rate. Interest paid on treasury bills is the generator of the largest item of the debt service burden.

According to the Bank of Lebanon, in March 1991, the interest rate paid on treasury bills reached a peak, ranging from 19.94 percent to 35.1 percent in the primary and secondary markets. Higher interest yields on treasury bills--by speeding the pace of growth of domestic debt and by leading to a general increase in discount rates, deposit rates, and lending rates--adversely affected private sector activity by creating a liquidity shortage. The depreciation of the pound from February-March 1992 compelled the fiscal authorities to increase interest rates on treasury bills within a range of 22 percent and 31.5 percent by August 1992. However, by the fourth quarter of 1992 a wave of optimism reigned as the political situation stabilized, leading to an increase in the demand for Lebanese pounds. Consequently, interest rates on treasury bills were gradually lowered and ranged between 12.59 percent and 26 percent by the end of the year.[17]

As shown in Table 8, nominal interest rates on treasury bills declined significantly from 1993 to 1994 in response to increased domestic and external demand for Lebanese pound denominated assets. From the fourth quarter of 1995 to the end of 2000, interest rates on treasury bills experienced a steady decline, reflecting increased confidence in the strength and stability of the Lebanese pound. The interest rates on 24-month treasury bills, which made up 60 percent of the total issued during 1993-2000, declined from 22.7 percent in 1993 to 16.08 and

14.14 percent in 1997 and 2000, respectively. On three-month maturities, it declined from 16.51 percent in 1993 to 12.68 and 10.88 percent in 1997 and 2000, respectively. On six-month maturities, it declined to 11.43 percent in 2000, and to 11.84 percent on 12-month maturities. This happened because the government had implemented, in previous years, conversion of some of the public debt into foreign currency instead of Lebanese pounds. This enabled the interest rates on treasury bills to decline. In addition, this policy led the public debt in foreign currency to increase from 10.2 percent of total public debt at the end of 1992 to 15.8 percent and 27.5 percent in 1997 and 2000, respectively (Table 9). This also has important economic implications, as discussed below.

During the period of the 1980s and early 1990s, most of the country's external debt was short-term. However, after 1994, borrowing was turned into long-term debt owed by the government or was government-guaranteed. Short-term debt increased from US$0.3 billion in 1980 to US$0.9 billion in 1993 and to US$2.5 billion in 2000. Long-term debt increased from US$0.21 billion in 1980 to US$0.36 billion in 1993 and to a high level of US$7.3 billion in 2000[18]. Furthermore, as indicated earlier, the debt service-to-exports ratio increased dramatically from around 50 percent in 1992 to more than 300 percent during the period of 1997-2000. In other words, the country had to spend a considerable amount of its foreign exchange reserves on servicing its external debt during this period.

Foreign currency debt as a share of GDP was relatively low during the period from 1991-93, but increased thereafter. Initially, the foreign currency debt was largely composed of debt owed to commercial banks and to bilateral official creditors. Since 1994, however, the Lebanese government has also been able to tap into international capital markets for budgetary financing. As noted earlier, this debt was initially accumulated by the government in order to finance the reconstruction programs. It therefore started to increase from 1993 with the beginning of the reconstruction period, and especially in 1994 when the first treasury bills began to be released in foreign currency. Such treasury bills, or Eurobonds, are issued by the public and private sectors. These issuances started in 1994 with the first US$400 million global issue by the Lebanese government.[19] Since 1997 these releases have been transformed from an instrument to finance reconstruction to an instrument to finance the deficit as with domestic releases. This policy was implemented by the government to substitute high interest, short-term domestic debt with lower rate, medium and long-term external debt--the aim being to reduce the overall cost of debt service. In addition, between 1994-2000, the public sector issued Eurobonds which amounted to approximately $US5017.3 million, with maturities varying between three and ten years and interest rates ranging between 6.5 percent and 10.25 percent.[20] External public debt accounted for 42 percent of gross public debt in Lebanon in 2000, up from only 8.5 percent in 1994. In the last several years Lebanon has, therefore, increasingly relied on external debt to finance its domestic debt, meaning a financing of debt by debt. Furthermore, the large public debt, in the context of the overall macroeconomic policy mix, has led to a substantial interest rate burden on the budget.

Foreign currency debt has been associated with much more favorable terms since 1993, reflecting not only the grant element in some official financing, but also the low interest rates on international bonds issued by Lebanon relative to debt instruments in Lebanese pounds. Since the first issue in 1994, the yield spread, relative to comparable U.S. government bonds and bills, has decreased considerably, despite the lengthening of maturities. This reflects, in part, increased awareness about Lebanon by foreign investors. Moreover, this demonstrates the large foreign exchange reserves and the high reconstruction-related growth, which have been perceived favorably in capital markets. Lebanese pound assets, however, have been associated with high nominal and real interest rates as indicated by the substantial interest differential between Lebanese pound and comparable U.S. dollar assets.

CONSEQUENCES OF THE BUDGET DEFICIT AND PUBLIC DEBT IN LEBANON

The emergence of huge budget deficits and their financing resulted in an increase in the money supply at an unprecedented rate. While most of the monetary aggregates in Lebanon were affected, especially during the 1980s and early 1990s, M_3 was most affected during this period.[21] This contributed significantly to rising inflation and a depreciation of the Lebanese pound during the Civil War and early 1990s. The increased money stock was the direct result of financing budget deficits through the central and commercial banks. The part of the deficit financed by the Central Bank of Lebanon is the most expansionary, because it leads to an equal increase in the monetary base and to a multiple effect on the money stock. Part of the excess money supply was used to acquire foreign currency deposits within the banking system. This was reflected clearly by the difference in the rates of growth of M_1 and M_2 (which includes deposits in foreign currencies). While M_1 (the domestic currency) grew at an average rate of 45 percent during 1982-87, M_2 grew at an average of 92 percent during the same period. The series of M_1, Quasi-Money, and M_3 are depicted in Figure 1 which shows a sharp increase in quasi-money and M_3 during the period of the 1980s. The difference reflects the share of foreign currency (especially US$) denominated assets. This share has increased considerably during the 1980s. For example, it stood at 24 percent in 1982, rose to 68 percent in 1986 and to nearly 90 percent by the end of 1987[22]. This was the result of a further depreciation of the pound and erosion of the public sector's confidence in it. This phenomenon of dollarization of the Lebanese economy contributed to the severe depreciation of the domestic currency.

In addition, because financing the deficit through the private sector has meant absorbing resources available for private investment, the continued growth in the deficit influences the private sector through a crowding out effect.[23] Furthermore, the policy of money creation used by the authority as a primary method of budget financing (just prior to the cessation of hostilities) led inflation to increase from 18.13 percent in 1984 to close to 500 percent in 1987, and the average exchange rate depreciated from LL6.51 per 1US$ in 1984 to LL224.60 per 1US$ in 1987.

The policy of financing budget deficits through debt creation has increasingly encumbered the budget with domestic interest payments, which have become a major burden on public finances. This was compounded by a high real interest rate between five and 11 percent during 1996-2000. The continuing increase in the level of the budget deficit and debt has led to lower growth[24], especially in the last few years, and to increases in the level of real interest rates. In addition, the high deficit over the last ten years reduced the government's room for maneuver regarding economic policies designed to deal with social issues,[25] especially unemployment, which reached 35 percent in 1992 and 20 percent in 1999.

The debt in Lebanon could also be a burden because of the higher taxes needed for debt servicing. This overall burden is also compounded by the current inefficient use of tax income, which undermines the authorities' ability to collect taxes. Between 1994 and 1995, government revenues increased by 64 percent as a result of a rise in direct stamp duties and fees, taxes on built-up property, and customs duties. Hence, this could have adverse effects on the economy by discouraging investment or work effort; such effects would reduce output supply.

Furthermore, since 1993, the government started to increase its reliance on foreign loans in order to finance large reconstruction projects. This led, as discussed earlier, to a significant increase in the level of foreign indebtedness and foreign debt servicing during 1993-2000. Bolbol argues that relying on foreign borrowing should not be overdone, for several reasons.[26] First, the foreign exchange lost as interest payments could be a drag on the economy, and Lebanon's ability to service its foreign debt is limited given that the debt-to-exports ratio exceeds 300 percent. Second, although the rates on Eurobonds look low at nine percent, they are in fact only one percent less than the real yield on domestic bonds since the nominal yield is 16 percent and inflation is six percent. Therefore, in real terms there are no substantial savings in borrowing costs. Third, foreign debt is a reduction in net worth whereas domestic debt is not,[27] so the positive wealth effects that function as a stimulus to aggregate demand would turn negative. Fourth, an exchange rate shock would worsen the foreign debt exposure of the country and its ability to service that debt, because its value would increase in domestic currency terms (unless the foreign debt were hedged against currency risk). Fifth, foreign borrowing may act as a substitute for much needed fiscal reforms and the imperative to base government finance on a rational and equitable foundation.[28]

CONCLUDING REMARKS

This paper has analyzed the public sector deficit and debt in Lebanon during the period 1975-2000 broken down into two distinct phases: the Civil War period (1975-90) and the post-war and reconstruction period (1990-2000). The Civil War period was characterized as one of deepening crisis for the economy as evidenced by the marked deceleration in economic growth and private investment activity. The budget deficit as a percent of GDP increased to 32.3 percent in 1989, being one of the highest amongst the Middle East countries. Increased government expenditure and reduced government revenues were both responsible for the steep increase in the public sector deficits. As a result of large budget deficits during this period the public debt started to increase after 1975. By the end of 1990, gross public debt represented

99.8 percent of GDP, of which 80.6 percent was domestic.

Money creation remained the primary method of budget financing with the issuance and sale of treasury bills to the private sector. It has been argued that the main effect of the huge budget deficit, and the way it was financed, was to increase the money supply at an unprecedented rate, thus contributing to rising inflation and depreciation of the Lebanese pound during the Civil War.[29]

Over the post-war period, two phases in the evolution of Lebanon's public debt can be distinguished. During 1990-92, the overall budget deficit to GDP ratio declined to 11 percent. This happened as a result of: the gradual reassertion of government authority; government revenues increased from 9.7 percent of GDP in 1990 to 12 percent in 1992 (revenue collection improved especially with respect to customs duties and non-tax revenue); fiscal restraint brought total expenditure down to 23 percent of GDP; and interest payments on domestic debt went down to 6.9 percent of GDP as a result of increased monetary financing.

The second phase, 1993-2000, was different from the other period both economically and politically, especially with the steady appreciation of the value of the Lebanese pound and the causes of the budget deficit. As a result of rebuilding the country's infrastructure, the acceleration in the growth of government capital expenditure, together with large and expanding current expenditure and the slow recovery of the revenue-generation capacity, led to sizable fiscal imbalances. Consequently, government budget deficits increased from 9.2 percent of GDP in 1993 to 20.2 and 23.7 percent in 1997 and 2000, respectively. This huge increase led to a sustained growth in government debt. From 1993-2000, the average annual growth of public debt registered 31 percent. Likewise, gross public debt as a percent of GDP increased from 48.6 percent in 1993 to 102.9 percent and 151.8 percent in 1997 and 2000, respectively. Net public debt rose from 38 percent in 1993 to 141.2 percent in 2000. Hence, the government is unable to service its debt from revenues and is borrowing to finance its debt servicing obligations and to pay the salaries of civil servants. While the public debt in Lebanon accumulated significantly in the last ten years, since 1996, the economy has been slowing down. The annual real GDP growth rate declined from 38.2 percent in 1992 to four, three, two, and zero percent in 1996, 1998, 1999, and 2000, respectively.

Debt financing in Lebanon has led to a rise in the structural budget deficit, higher interest rates, increases in the money supply, rising inflation, a depreciation of the Lebanese pound (during the period of Civil War), stagnation, and a slowing of economic growth in recent years. Tackling the fiscal deficits is critical although difficult due to political involvement and corruption, and, more importantly, an inadequate and inefficient public governance system. A good public governance system is essential in order to put in place an efficient and effective plan to reduce the deficits and to improve macroeconomic performance. This should be based on: reducing government expenditures; increasing revenues by introducing a transparent, non-porous, and efficient taxation system; privatizing public sector enterprises; and judicious foreign borrowing.

The process will also depend on the ability of the country to improve its inadequate economic performance, including effective measures to promote exports that will assist in building up debt servicing capacity. There is also a need to implement economies policies to raise the level of domestic savings. Such policies should involve tax reform or introducing a new global tax system, such as a Goods and Services Tax, as well as reducing government spending on non-developmental activities. In addition, taxes (such as direct taxes) should be made more progressive, and higher rates should be applied to middle and upper level income earners. In line with expanding the tax base, more efficient tax administration and tax collection is required by using better government delivery systems and hiring more skilled and competent tax inspectors.

The government is in favor of privatization of state owned assets and cutting government expenditures. In certain cases this could improve the economic efficiency and competitiveness of the whole economy. However, this is not so in all cases, especially in cases where the government suffers from political involvement or corruption. Hence, the government should study the issue of privatization very rigorously on a case by case basis to ensure that this solution reduces the fiscal deficits and does not to have adverse effects on the Lebanese people. On the issue of reducing government expenditure, it is advisable that the government be judicious in reducing capital expenditure (e.g. education, health, infrastructure, etc.), as this could have adverse effects on the economy over the longer term.

Finally, measures improving productivity and efficiency, the exchange rate, and the country's monetary stance will be required to complement the budget cut policy. The trade deficit needs to be reduced through export promotion and diversification; promoting expanding sectors such as ICT, finance, banking and tourism; encouraging further Arab economic cooperation; and adopting trade and investment policies aimed at attracting Multinational Enterprises (MNEs) and foreign direct investment in general. Hence the process involved in tackling the deficits will not be easy, but needs to be conducted expeditiously.

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TABLES

Table 1a: Summary of Public Sector Operations: 1972-2000 (in percent of GDP): Revenue

Years	Total	Tax revenue			Nontax [ii]
		Total	Direct taxes	Indirect Taxes[i]	
1972	12.1	8	2.4	5.6	4.1
1974	15.6	11.5	2.6	8.9	4.1
1975	10.7	7.5	1.1	6.4	3.1
1976	3.7	2	0.2	1.9	1.7
1980	13.7	9.5	2.4	7	4.3
1985	7.3	2	1.1	0.9	5.3
1988	1.8	0.6	0.5	0.1	1.2
1989	6.8	1.4	1.1	0.3	5.5
1990	9.7	2.1	1.9	0.2	7.6
1991	15.9	5.4	2.2	3.2	10.5
1992	12	5.4	0.5	4.9	6.6
1993	14.1	9.3	1.8	7.5	4.8
1994	14.6	9.4	1.8	7.6	5.2
1995	16.8	11.1	1.6	9.5	5.7
1996	17.3	14	1.6	12.4	3.3
1997	17.5	11.7	2.3	9.4	5.8
1998	18.2	12.6	3.1	9.5	5.5
1999	19.6	13.4	3.7	9.7	6.2
2000	18.3	11.8	n.a.	n.a.	6.6

Table 1b: Summary of Public Sector Operations: 1972-2000 (in percent of GDP): Expenditures

Years	Total	Current	Wages and Salaries	Interest payments			Fuel Subsidy (EDL)[iii]	Other[iv]	Capital expenditure[v]	Surplus (+)/ Deficit (-)
				Total	Domestic	Foreign				
1972	15.4	12.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	3.3	-3.3
1974	15	12.4	6.2	0.7	n.a.	n.a.	n.a.	5.5	2.6	0.6
1975	13.6	7.6	8	0.9	n.a.	n.a.	n.a.	4.1	6.1	-3
1976	15.7	12.6	13	1.1	n.a.	n.a.	n.a.	3.2	3.1	-12
1980	27.1	20.9	8.5	1.5	1.5	0	n.a.	10.8	6.3	-13.4
1985	43.1	39.5	7.4	9.9	9.8	0.1	9.8	12.4	3.6	-35.8
1988	19.2	17.8	4.5	5.9	5.8	0.1	2.9	4.5	1.4	-17.4
1989	39.1	36.7	7.2	11.3	11.2	0.1	7.4	10.9	2.4	-32.3
1990	39.4	37.8	10.6	10.8	10.3	0.5	2.3	14	1.7	-29.8
1991	28.9	25.1	9	5	4.9	0.1	0.8	10.3	3.9	-13.1
1992	23.4	21.8	6.9	5.5	4.8	0.7	1.5	7.9	1.5	-11.4
1993	23.4	20	9.9	6	5.7	0.2	1.4	4.2	3.4	-9.2
1994	35.1	25.8	11.2	9.7	9.6	0.1	1.6	3.3	9.3	-20.5
1995	35.2	25.7	10.4	10.4	9.7	0.7	1.2	3.8	9.4	-18.4
1996	37.9	29.4	11.1	13	12.1	0.9	1	4.4	8.5	-20.6
1997	37.8	33.8	10.8	14.9	14.1	0.8	n.a.	8.1	8.6	-20.2
1998	32.3	26.5	9.6	13.7	12.4	1.2	n.a.	3.5	6.3	-14.1
1999	34.1	28.6	11.1	14.6	12.9	1.7	n.a.	2.9	6.3	-14.5
2000	42	32.1	11.7	16.9	14.4	2.5	n.a.	3.4	4.7	-23.7

Sources: Sena Eken and Thomas Helbling (eds.), "Back to Future: Reconstruction and Stabilization in Lebanon," *IMF Occasional Papers*, No. 176 (1999); Sena Eken, Paul Cashin, S. Nuri Erbas, Jose Martelino, and Adnan Mazarei, "Economic Dislocation and Recovery in Lebanon," *IMF Occasional Papers*, No. 120 (1995); Banque du Liban (BDL), *Yearly Reports* (Beirut: BDL, 1972-2000); Ministry of Finance, *Annual Report*, for 1972-2000 (Beirut: Ministry of Finance, 1972-2000).

Notes:

i. Includes customs duties and others
ii. Includes foreign grants in some years and adjustments with respect to monetary accounts
iii. Petroleum subsidy paid to the Electricity Company of Lebanon (EDL)
iv. Includes advances and transfers and adjustments with respect to monetary accounts
v. In 1996, this item includes domestically financed LL 151 billion of exceptional capital expenditure to rehabilitate the damages in 1996 caused by the bombings in April; in 1996, 1997, 1998, 1999, and 2000 these items include capital expenditure of Council for Development and Reconstruction (CDR) financed externally. This expenditure was LL 507 billion in 1996, LL 500 billion in 1997, LL 479 billion in 1998, LL 456 billion in 1999 and LL 260 billion for 2000.
n.a. = not available.

<u>Table 2a</u>: Fiscal Indicators for Selected Middle Eastern Countries

Years	Overall Balance	Current balance	Total Revenue [i]	Total expenditure	Direct taxes	Indirect taxes	Non-tax revenue
	(In percent of GDP)				(In percent of total revenue)		
Lebanon							
1991	-16.3	-12.4	12.6	28.9	17.2	25.3	57.7
1992	-12.2	-10.7	11.1	23.4	4.3	44.1	51.6
1993	-8.4	-6.9	14.1	22.5	9.3	43.4	47.2
Egypt [ii]							
1991/92	-5	4.1	34.8	39.8	24.3	34.7	41.1
1992/93	-4.7	3.9	35	39.7	23.9	34.8	41.3
1993/94	-2.8	3.5	35.1	37.9	22.9	37.6	39.5
Iran							
1991	-2	4.8	18.1	20	14	11.7	74.3
1992	-2.4	4.9	17.5	19.8	16.7	16.4	66.9
1993	-1.9	6	18.5	20.5	17.1	15.3	67.6
Jordan							
1991	-17.8	-8	29	46.8 [3]	11.5	40.7	47.8
1992	-3.7	2.1	36.1	39.9	9.4	45.9	44.7
1993	-6.4	0.1	32.4	38.8	10.2	45.2	44.6
Syria							
1991	-1.4	6.2	23.8	25.1	37.1	43.6	19.3
1992	-4.9	4.9	19.8	24.7	27.4	49.2	23.3
1993	-9.2	4.5	17.9	27.1	22.9	52.7	24.5

Table 2b: Fiscal Indicators for Selected Middle Eastern Countries

Years	Import Duties	Current Expenditures	Wage Bill	Interest Payments	Capital Expenditure
	(In percent of imports)	(In percent of total expenditure)			
Lebanon					
1991	2.8	86.5	30.9	17.2	13.5
1992	5	93.4	29.7	23.4	6.6
1993	9	93.2	21.6	26.5	6.8
Egypt [ii]					
1991/92	13.3	76.9	17.1	20.2	23.1
1992/93	14.4	79	18.8	25.6	21
1993/94	14.7	82.4	19.8	29.3	17.6
Iran					
1991	n.a.	66.5	n.a.	n.a.	33.5
1992	n.a.	64.1	n.a.	n.a.	35.9
1993	n.a.	67.3	n.a.	n.a.	32.7
Jordan					
1991	6.6	86	15.6	25.2	14
1992	8.6	84.4	16.3	24.4	15.6
1993	8.9	82	17.8	17.7	18
Syria					
1991	14.7	70	52.6	1.2	30
1992	10	60.4	44.4	1.4	39.6
1993	n.a.	49.2	34.6	1	50.8

Source: Sena Eken, Paul Cashin, S. Nuri Erbas, Jose Martelino, and Adnan Mazarei, "Economic Dislocation and Recovery in Lebanon," IMF Occasional Papers, No. 120 (1995).

Notes:

i Excludes grants

ii Includes central and local governments, food supply authority, and investment expenditure of public authorities; fiscal year July/June.

Table 3 **Revenue from Major Categories of Taxes and Duties (% of GDP)**

Years	Taxes on income, profits and property	Taxes on goods and services[i]	Duties and taxes on import[s]	Other taxes[ii]	Total tax revenue	Non-tax revenue[2]	Total revenue
1993	1.8	2.5	5.0	n.a.	9.3	4.8	14.1
1994	1.8	2.5	5.2	n.a.	9.4	5.2	14.6
1995	1.6	2.1	7.3	n.a.	11.1	5.7	16.8
1996	1.6	2.0	8.0	2.5	14.0	3.3	17.3
1997	2.0	2.3	7.5	0.8	12.6	3.8	16.4
1998	3.1	1.5	7.2	0.8	12.6	3.6	16.2
1999	3.6	0.9	7.9	0.9	13.3	4.6	17.9
2000	n.a.	n.a.	7.0	n.a.	11.8	4.7	16.5

Sources: Banque du Liban (BDL), *Yearly Reports/Quarterly Bulletin*, (Beirut: BDL, 1993-2000); Ministry of Finance, *Annual Report*, for 1993-2000 (Beirut: Ministry of Finance, 1993-2000); Sena Eken and Thomas Helbling (eds.), "Back to Future: Reconstruction and Stabilization in Lebanon," *IMF Occasional Papers*, No. 176 (1999).

Notes:

[i] With the 1995 tariff reform, the excise tax on cement, petroleum, cars and some other taxes on goods and services became part of customs duties and are recorded in duties and taxes on imports.

[ii] Under the revised budget classification scheme of 1996, some revenue, such as fiscal stamp duties, which

were classified as non-tax revenue until 1995, are now included in the new item "other taxes"; n.a. not available

Table 4 **Growth in the Nominal Gross Public Debt in Lebanon: 1970-2000 (in millions of US$, unless otherwise indicated)**

Years	Domestic public debt	External public debt	Gross public debt	Annual growth of gross public debt (%)	In percent of GDP		
					Domestic public debt	External public debt	Gross public debt
1970	38.2	63.6	101.8	-7.8	2.6	4.3	6.8
1971	34.4	66.6	100.9	-0.8	2.1	3.9	6.0
1972	54.8	60.8	115.5	14.4	2.6	2.9	5.5
1973	90.0	54.1	144.2	24.8	3.3	1.9	5.3
1974	138.2	48.6	186.8	29.6	3.9	1.4	5.3
1975	65.7	48.1	113.7	-39.1	2.0	1.5	3.5
1976	282.6	39.7	322.3	183.4	19.8	2.8	22.6
1977	491.2	38.1	529.3	64.2	18.4	1.4	19.8
1978	643.9	48.4	692.3	30.8	21.7	1.6	23.3
1979	818.5	95.4	913.9	32.0	23.8	2.8	26.6
1980	1304.7	205.7	1510.3	65.3	32.1	5.1	37.1
1981	1628.5	263.3	1891.9	25.3	41.8	6.8	48.5
1982	2975.7	171.1	3146.8	66.3	111.9	6.4	118.4
1983	4799.6	243.0	5042.6	60.2	131.2	6.6	137.8
1984	4822.7	181.0	5003.7	-0.8	111.4	4.2	115.6
1985	3313.0	180.0	3493.0	-30.2	91.7	4.9	96.7
1986	2132.3	206.0	2338.3	-33.1	75.7	7.3	83.0
1987	861.8	53.0	1414.8	-39.5	26.1	16.8	42.9
1988	1274.3	449.5	1723.8	21.8	38.5	13.6	55.0
1989	1978.7	517.3	2495.9	44.8	72.8	19.0	91.8
1990	2287.9	543.9	2831.8	13.5	80.6	19.2	99.8
1991	2843.4	576.9	3420.3	20.8	63.9	12.9	76.8
1992	2959.9	257.0	3216.9	-5.9	53.4	4.6	58.0
1993	3332.9	327.0	3659.9	13.8	44.2	4.3	48.6
1994	5563.8	772.0	6335.8	73.1	61.1	8.5	69.5
1995	7399.2	1343.0	8742.2	37.9	66.5	12.1	78.6
1996	10963.7	1898.0	12861.7	47.1	84.4	14.6	98.9
1997	12853.4	2434.0	15287.4	18.9	86.5	16.4	102.9
1998	14302.9	4199.8	18502.7	21.0	88.5	25.9	114.5
1999	16833.9	5538.0	22371.9	20.9	102.3	33.6	135.9
2000	18017.4	6967.5	24984.9	11.7	109.5	42.3	151.8

Sources: Banque du Liban (BDL), *Yearly Reports* (Beirut: BDL, 1970-2000).

Ministry of Finance, *Annual Report*, for 1970-2000 (Beirut: Ministry of Finance, 1970-2000); Sena Eken, Paul Cashin, S. Nuri Erbas, Jose Martelino, and Adnan Mazarei, "Economic Dislocation and Recovery in Lebanon," *IMF Occasional Papers*, No. 120 (1995); Sena Eken and Thomas Helbling (eds.), "Back to Future: Reconstruction and Stabilization in Lebanon," *IMF Occasional Papers*, No. 176 (1999); Gassan Ayash (1997): *Public Finance Crisis in Lebanon 1982-1992*, Discussion Paper, No. 285920 (Beirut: al-Nahar, 1998).

Table 5 Key Economic Debt Ratios (%) in Lebanon: 1973-2000

Years	Debt service[i] /revenues	Debt service/GDP	Debt service/exports[ii]	Debt service/expenditure	Net public debt[iii]/GDP
1973	5.9	0.8	3.6	5.7	n.a.
1975	8.7	0.9	2.6	6.9	n.a.
1977	6.5	0.9	3.1	4.2	n.a.
1981	19.3	3.6	13.9	11.8	n.a.
1982	39.7	11.2	33.6	22.4	55.2
1983	35.7	10.9	54.5	21.1	75.5
1984	34.4	8.6	60.8	22.2	93.5
1985	153.2	11.2	69.8	26.0	105.8
1986	179.8	10.1	48.8	31.8	95.1
1987	122.6	3.3	22.0	17.1	70.5
1988	374.3	5.9	31.2	30.5	28.3
1989	238.6	11.3	63.2	28.8	62.6
1990	168.9	10.8	62.2	27.4	52.9
1991	39.5	5.0	41.2	17.2	56.0
1992	48.9	5.5	50.4	23.3	46.1
1993	42.3	6.0	65.6	25.5	37.8
1994	66.4	9.7	120.2	27.7	52.2

1995	61.8	10.4	141.7	29.6	63.1
1996	66.2	13.0	215.6	34.3	78.3
1997	84.9	14.9	341.1	39.4	92.3
1998	75.3	13.7	330.9	42.4	105.6
1999	74.4	14.6	345.8	42.9	119.9
2000	92.2	16.9	391.0	40.3	141.2

Sources: Banque du Liban (BDL), *Yearly Report* (Beirut: BDL, 1973-2000); Ministry of Finance, *Annual Report*, for 1973-2000 (Beirut: Ministry of Finance, 1973-2000); Sena Eken, Paul Cashin, S. Nuri Erbas, Jose Martelino, and Adnan Mazarei, "Economic Dislocation and Recovery in Lebanon," *IMF Occasional Papers*, No. 120 (1995); Sena Eken and Thomas. Helbling (eds.), "Back to Future: Reconstruction and Stabilization in Lebanon," *IMF Occasional Papers*, No. 176 (1999); Chamber of Commerce and Industry of Beirut (CCIB), *Yearly Report* (Beirut: CCIB, 1973-2000); Gassan Ayash (1997): *Public Finance Crisis in Lebanon 1982-1992*, Discussion Paper, No. 285920 (Beirut: al-Nahar, 1998); Ali A. Bolbol, "Seigniorage, Dollarization and Public Debt: The Lebanese Civil War and Recovery Experience 1982-97," *World Development*, Vol. 27, No. 10 (1999), pp.1861-73.

Notes:

[i] Debt service includes only interest payments on domestic and foreign loans.

[ii] Export are registered at F.O.B (Free on Board) value, before deducting rebate and commissions fees to foreign factors.

[iii] Defined as gross public debt minus public sector deposits with the banking system.

Table 6 Treasury Bills (TBs) in Circulation: Nature and Percentage Share in the Whole (unless otherwise indicated): 1980-2000

Years	Long-term TBs[i]			Short-term TBs[ii]				
	In percent of domestic public debt	In percent of total TBs		In percent of domestic public debt	In percent of total TBs			
		Long-term TBs	24 months bonds		Short-term TBs	3 months	6 months	1 year
1980	16.5	29.9	6.4	30.1	54.4	54.4	0	0
1982	1.0	1.1	0	71.4	81.9	69.1	12.8	0
1984	1.8	3.0	3.0	47.8	79.4	22.4	17.0	36.

								0
1987	0	0	0	64.3	97.8	26.9	24.7	46.2
1988	0	0	0	79.4	97.2	25.5	18.7	53.0
1990	0	0	0	62.7	97.4	16.5	21.5	59.4
1991	13.0	14.8	14.8	73.6	83.2	7.3	10.1	63.4
1992	29.7	31.7	31.7	62.2	66.3	23.6	13.2	24.8
1993	54.5	47.4	47.4	58.1	50.6	8.9	13.2	26.6
1994	69.4	60.6	60.6	42.6	37.2	2.5	7.6	27.1
1995	47.0	40.8	40.8	66.2	57.5	6.3	5.9	45.3
1996	53.8	54.4	51.9	45.0	45.6	5.3	16.2	24.1
1997	67.1	67.8	63.5	31.9	32.2	2.1	6.5	23.3
1998	78.2	79.1	74.3	20.7	20.9	1.6	3.9	15.2
1999	77.0	77.9	71.1	21.9	21.8	2.3	6.5	13.1
2000	76.8	77.4	70.4	22.5	22.6	2.9	6.1	13.7

Sources: Banque du Liban (BDL), *Annual Report and Quarterly Bulletin* (Beirut: BDL, 1980-2000); Ministry of Finance, *Annual Report*, for 1980-2000 (Beirut: Ministry of Finance, 1980-2000); Gassan Ayash (1997): *Public Finance Crisis in Lebanon 1982-1992*, Discussion Paper, No. 285920 (Beirut: al-Nahar, 1998).

Notes:
[i] Maturity greater or equal to two years
ii Maturity less or equal to 18 months

Table 7 Domestic Public Debt (PD): Composition, (1970-2000), In Millions of L.L., Unless Otherwise Indicated.

Years	Borrowing from the Bank of Lebanon[i]	Borrowing from the commercial banks		Domestic public debt	Percentage of treasury bills in PD	Percentage of treasury bills in total public debt	Treasury bill rate. Annual rate (%)
		Treasury bills[ii]	Other advances[iii]				
1970	63	62	0	125	49.60	18.62	-3.08
1975	151	0	0	151	0	0	-100.00
1980	1954	2476	0	4488	55.23	47.66	112.35
1985	15600	38200	600	54400	70.22	62.31	99.68
1990	559980	1023014	7324	1590318	64.33	48.83	30.09
1991	299136	2333179	7001	2639316	88.40	64.32	128.07
1992	299888	4754400	15566	5069854	93.78	86.17	103.77
1993	61800	6016700	3300	6081800	98.93	94.71	26.55
1994	77700	9212600	4100	9294400	99.12	86.92	53.12
1995	102800	12815000	56500	12974300	98.77	90.84	39.10
1996	100400	17053600	106100	17260100	98.80	84.63	33.08
1997	100600	19575600	108800	19785000	98.94	83.38	14.79
1998	103800	21436000	145900	21685700	98.85	76.51	9.50
1999	115000	25113700	157200	25382800	98.94	74.45	17.16

2000	113900	2696430 0	83000	2716120 0	99.28	71.59	7.37

Sources: Banque du Liban (BDL), *Annual Report and Quarterly Bulletin* (Beirut: BDL, 1970-2000)' Ministry of Finance, *Annual Report*, for 1970-2000 (Beirut: Ministry of Finance, 1970-2000); Gassan Ayash (1997): *Public Finance Crisis in Lebanon 1982-1992*, Discussion Paper, No. 285920 (Beirut: al-Nahar, 1998).

Notes:
i Includes loans to public entities.
ii Includes treasury bills held by the Central Bank of Lebanon, commercial banks, and non-banking system.
iii Other loans

Table 8 Interest rates in Lebanon: 1970-2000

Years	3 months TBs[i]	6 months TBs[i]	12 months TBs[i]	24 months TBs[i]	Discount rate (end of period)[ii]	Deposit rate[iii]	Lending rate[iv]
1970	n.a.	n.a.	n.a.	n.a.	3.00	n.a.	n.a.
1975	n.a.	n.a.	n.a.	n.a.	7.00	n.a.	n.a.
1977	3.00	n.a.	3.60	4.30	6.00	n.a.	n.a.
1980	11.00	n.a.	n.a.	n.a.	10.00	n.a.	n.a.
1982	10.00	10.50	n.a.	n.a.	12.00	12.94	16.83
1983	9.75	10.25	11.00	12.00	12.00	10.01	14.53
1984	15.50	15.50	15.50	n.a.	12.00	11.53	15.58
1985	16.00	16.00	16.00	n.a.	19.70	13.24	17.29
1986	18.00	20.00	20.00	n.a.	21.85	16.42	22.21
1987	18.00	20.00	20.00	n.a.	21.85	21.18	36.54
1988	18.00	20.00	20.00	n.a.	21.84	21.96	44.46
1989	18.00	20.00	20.00	n.a.	21.84	17.54	39.86
1990	18.00	20.00	20.00	n.a.	21.84	16.86	39.94
1991	14.50	15.50	16.30	16.50	18.04	16.76	38.01

1992	12.59	13.96	17.36	24.50	16.0	17.09	40.21
1993	16.51	17.90	17.41	22.70	20.22	15.56	28.53
1994	13.05	13.81	12.84	15.26	16.49	14.80	23.88
1995	15.40	15.85	15.45	22.16	19.01	16.30	24.69
1996	13.80	14.95	14.55	19.58	25.00	15.54	25.21
1997	12.68	13.06	13.20	16.08	30.0	13.37	20.29
1998	11.43	12.39	12.93	16.02	30.00	13.61	n.a.
1999	10.88	11.43	11.84	14.14	25.00	12.50	19.48
2000	10.88	11.43	11.84	14.14	20.00	11.21	18.15

Sources: International Monetary Fund (IMF), *International Financial Statistics* (Washington, D.C.: IMF, 2000), pp.630-31; Banque du Liban (BDL), *Annual Report and Quarterly Bulletin* (Beirut: BDL, 1970-2000).

Notes:

[i] Nominal rate on treasury bills (end of year)

[ii] Rate charged by the Bank of Lebanon to discount advances and paper offered by the Commercial Banks. Since June 1985, the discount rate has been formally linked to the Treasury bill rates and commercial bill rates.

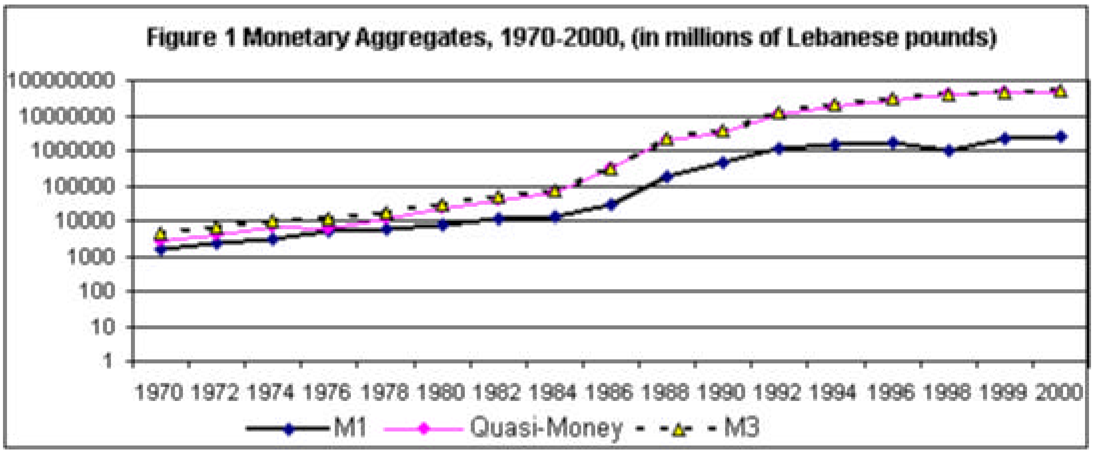
[iii] Average rate offered by commercial banks on fixed-term deposits

[iv] Average rate charged by commercial banks on loans and advances

Table 9 Distribution of Public Debt According to Currency, Selected Years (as percent of the total)

Years	Debt in L.L	Debt in foreign currency
1992	89.8	10.2
1993	91.2	8.8
1994	88.0	12.0
1995	84.8	15.2

1996	85.3	14.7
1997	84.2	15.8
1998	77.8	22.5
1999	75.8	24.2
2000	72.5	27.5
Sources: Ministry of Finance, *Annual Report* (Beirut: Ministry of Finance, 2001); Fahim Meadad, "Public Debt Management of Lebanese Economy," Discussion Paper, No. 366875, (Beirut: al-Nahar, 1999).		



Source: Plotted by the author based on data provided by International Monetary Fund (IMF); *International Financial Statistics* (Washington, D.C.: IMF, 2001), pp.648-49.

Notes:
M_1 = currency in circulation + demand deposit in domestic currency
Quasi - Money = domestic currency time and savings deposits + foreign currency deposits.
$M_3 = M_1$ + Quasi – Money

NOTES

[1] Sena Eken, Paul Cashin, S. Nuri Erbas, Jose Martelino, and Adnan Mazarei, "Economic Dislocation and Recovery in Lebanon," *IMF Occasional Papers*, No. 120 (Washington, D.C.: IMF, 1995).

[2] Banque du Liban (BDL), *Monthly, Quarterly, and Yearly Reports*, (Beirut: BDL, 1999-2000).

[3] Until 1988, the government controlled all petroleum prices; in that year the authorities eliminated the subsidy on petroleum by privatizing the importation of petroleum and limiting fuel subsidies largely to electricity generation.

[4] International Monetary Fund (IMF), *International Financial Statistics Yearbook*, for years 1990-2000 (Washington DC: IMF, 1990-2000).

[5] Apart from a ten percent levy imposed on water, electricity, and telecommunications, the main excisable items are petroleum products, cement, alcoholic beverages, and tobacco and cigarettes. Excises on these items are levied at specific as opposed to ad valorem rates; specific rates greatly limit the responsiveness of revenues to price increases and encumber tax administration.

[6] Sena Eken and Thomas Helbling (eds.), "Back to Future: Reconstruction and Stabilization in Lebanon," *IMF Occasional Papers*, No. 176 (1999).

[7] From January 1, 1995 onwards. For the lowest wage categories, the increase amounted to 20 percent. Middle-and upper-wage categories received an increase of between ten and 20 percent.

[8] Horizon 2000 went beyond the initial emergency works of the National Emergency Recovery Program (the NEPR short term program 1993-97, originally costing US$2.25 billion, was designated to rehabilitate key physical and social infrastructure) and included the rehabilitation and expansion of infrastructure and public facilities so as to lay the foundations for future economic growth. In its 1995 version, Horizon 2000 envisaged total public investments of US$17.7 billion between 1995 and 2007 valued at 1995 prices (estimated at US$22.2 billion at current prices), see Sena Eken and Thomas Helbling (eds.), "Back to Future" for more details.

[9] Saade N. Chami, "Economic Performances in a War Economy: The Case of Lebanon," *Canadian Journal of Development Studies,* Vol. 13, No. 3 (1992), pp. 325-36.

[10] Najib Essa, *The Labour Market and Labour Policy in Lebanon*, First Edition, (Beirut: The Lebanese Centre for Policy Studies, 1996).

[11] BDL, *Monthly, Quarterly, and Yearly Reports*, (Beirut: BDL, 1998).

[12] BDL, *Monthly, Quarterly, and Yearly Reports*, (Beirut: BDL, 1998).

[13] The decomposition of treasury bills and bonds into maturities reported in Table 6 is based on the maturity of the bills at the time of issue, and not on the remaining time to maturity.

[14] Until March 1997, banks had to hold treasury bills equivalent to 40 percent of Lebanese pound deposits (this constraint was not binding as banks held treasury bills far in excess of requirements). The central bank stands ready to refinance banks through bilateral repurchase agreements involving treasury bills, but this facility typically has been used only in periods of

tension and effectively constitutes the lender-of-last-resort facility.

[15] This includes financial institutions as well as general public and public entities. The latter category also includes public entities that are not included in the budget (e.g., social security funds), which hold their excess cash balances in treasury bills. These holdings amounted to about five percent of all outstanding treasury bills and bonds during recent years.

[16] Sena Eken and Thomas Helbling (eds.), "Back to Future."

[17] BDL, *Monthly, Quarterly and Yearly Reports*, (Beirut: BDL, 1992).

[18] World Bank, *Global Development Finance*, (Washington, D.C.: World Bank, 2000-2001).

[19] It was later followed by several other issues by both the public and private sectors, with maturities varying between three and ten years—some of them being listed on international stock exchanges such as those of Luxembourg and the London Stock Exchange (LSE).

[20] BDL, *Monthly, Quarterly and Yearly Reports*, (Beirut: BDL, 2000).

[21] $M_3 = M_1$ (currency in circulation + demand deposits in domestic currency) + domestic currency time and savings deposits + foreign currency deposits.

[22] Christofer Towe, "Exchange Rate Fundamentals Versus Speculation: An Illustrative Example Using Lebanese Data," *IMF Staff Papers*, Vol. 36 (September 1989), pp. 678-707.

[23] Samir Makdissi, "Lebanon – The Public Debt and Economic Policies," Discussion paper, No. 330949 (Beirut: Al-Anwar, 1999).

[24] Saade N. Chami, "Economic Performances in a War Economy"; S. Makdissi, "Lebanon – The Public Debt and Economic Policies," Discussion paper, No. 330949 (Beirut: Al-Anwar, 1999); Ali A. Bolbol, "Deficits, Debt, and Post-War Lebanon: Analysis and Policy Proposals," (Toronto: Economics Department, Ryerson Polytechnic University, 1999).

[25] Samir Makdissi, "Lebanon – The Public Debt and Economic Policies," Discussion paper, No. 330949 (Beirut: Al-Anwar, 1999).

[26] Ali A. Bolbol, "Deficits, Debt, and Post-War Lebanon."

[27] When Ricardian Equivalence does not hold; Ricardian Equivalence regards net public debt as zero net worth, because the former is equal to the present value of future taxes that the government needs to impose on the public to pay for its debt. Of course, one possibility for why deficits are not "working" is that markets have discounted their potential wealth effects via higher expected future inflation and taxes.

[28] One major drawback, however, from domestic debt financing is a more unequal distribution of income. This is because it transfers interest and principal payments to the wealthy holders of net debt. Lebanon has a very unequal distribution of income, where the wealthy five percent control more that 40 percent of income (The Economist, 1996).

[29] Saade N. Chami, "Economic Performances in a War Economy."