CREDIT LIBANAIS S.A.L.



DISSECTING THE LEBANESE PUBLIC DEBT: DEBT DYNAMICS & REFORM MEASURES

JULY 2016

ECONOMIC RESEARCH UNIT

CREDIT LIBANAIS HEADQUARTERS

ADLIEH
BEIRUT, LEBANON
TEL +961.1.608000
FAX +96.1.608231
research@cl.com.lb

TABLE OF CONTENTS

Exe	CUT	TIVE SUMMARY	4
I.	E١	VOLUTION OF LEBANON'S PUBLIC DEBT	5
Α		OVERVIEW OF LEBANON'S ECONOMY AND PUBLIC DEBT	5
	i.	HISTORICAL GROSS PUBLIC DEBT AND CONTRIBUTING FACTORS	5
	ii.	Undisclosed Public Debt	9
	iii.	. HISTORICAL DEBT TO GDP RATIO	10
	iv.	. DEFICIT AND DEBT EVOLUTION	11
	٧.	LEBANON'S DEBT TO GDP WORLD RANKING	13
	vi.	. COMPARISON OF LEBANON'S DEBT METRICS WITH REGIONAL COUNTRIES	13
В		Breakdown of Public Debt	14
	i.	By Type of Holder	14
	ii.	By Currency	15
	iii.	By Maturity	17
	iv.	By Cost of Debt	18
	٧.	EVOLUTION OF LEBANON'S SOVEREIGN RISK PROFILE	20
	vi.	. TIMELINE OF RATING ACTIONS ON LEBANON	20
C		HISTORICAL DEBT SERVICING	21
D	٠.	LIST OF MAJOR SUMMITS AND DONOR CONFERENCES	21
	i.	THE PARIS I CONFERENCE	22
	ii.	THE PARIS II CONFERENCE	22
	iii.	. THE STOCKHOLM CONFERENCE FOR LEBANON'S EARLY RECOVERY	24
	iv.	. THE PARIS III CONFERENCE	26
II.	In	NTERNATIONAL CASE STUDIES	29
Α		THE CASE OF IRELAND	29
В		THE CASE OF NEW ZEALAND	29
C		THE CASE OF ITALY	30
D	٠.	HEAVILY INDEBTED POOR COUNTRIES INITIATIVE AND MULTILATERAL DEBT RELIEF INITIATIVE	30
Е		SALE OF GOLD RESERVES	30
III.	Rı	EFORM MEASURES	31
Α		TRAPPED IN A VICIOUS CIRCLE	31
В		Possible Remedies	32
	i.	Privatization	33
	ii.	Public-Private Partnerships	35
	iii.	EXPENDITURE RATIONALIZATION	36
	iv.	FISCAL REFORMS	36
	٧.	FINANCIAL ENGINEERING SCHEMES	37

SYNOPSIS OF TERMS

"ABL" Association of Banks in Lebanon "BCD" Beirut Central District "BDL" Banque Du Liban "bps" **Basis Points** "CAGR" Compounded Annual Growth Rate "CAS" Central Administration of Statistics "CDR" Council for Development and Reconstruction "EC" **European Commission** "EDL" Electricité du Liban "EIA" U.S. Energy Information Administration "FDI" Foreign Direct Investment "GCC" **Gulf Cooperation Council** "GDP" Gross Domestic Product "HIPC" Heavily Indebted Poor Countries "IEA" International Energy Agency "IMF" International Monetary Fund "LBP" Lebanese Pound "MDRI" The Multilateral Debt Relief Initiative "MENA" The Middle East and North Africa "MOF" The Lebanese Ministry of Finance "NSSF" National Social Security Fund "NERP" National Emergency Reconstruction Program "OECD" Organization for Economic Co-operation and Development "S&P" Standard and Poor's The United States Dollar

"UAE" The United Arab Emirates "UK" The United Kingdom "UN" The United Nations "US" The United States "USD" The United States Dollar "VAT" Value-Added Tax "WB" The World Bank "Y-O-Y" Year-on-Year "YTD" Year-to-Date

EXECUTIVE SUMMARY

High indebtedness has been plaguing the Lebanese economy over the past two decades or so, as the government has been caught in a vicious cycle of a hefty public debt burden and recurrent budget deficits. This has thwarted the economic growth, escalated the debt crisis, and positioned Lebanon among nations with the highest debt-to-GDP ratios in the world. More specifically, the Lebanese government embarked in the early 1990s on an expansionary fiscal policy and a costly reconstruction plan, aimed primarily at rehabilitating the severely destroyed infrastructure in the hope of fostering economic growth and doubling the GDP per capita. In this context, the Credit Libanais Economic Research Unit has analyzed the Lebanese public debt dynamics particularly in the post war era and recommended potential reform measures to trim the budget deficit and curb debt growth.

Our publication highlights that total capital expenditures stood at \$12.49 billion between end of 1992 and 2014 out of which circa \$5.02 billion were externally funded and \$7.47 billion were financed by the government. The sizeable borrowings to restore the damaged public infrastructure, the high interest payments on said debt, along with the resulting budget deficits from debt servicing and transfers to EDL were the main culprits behind the ballooning public debt. More particularly, said debt grew at its fastest pace during the early post-civil war period, with growth decelerating at later stages. Delving further into details, our analysis uncovers that Lebanon's debt grew at a CAGR of around 40% during the 1993-1998 era, increasing from \$3.39 billion to \$18.56 billion as the capital expenditures to GDP ratio hovered between 8% and 9% during the 1994-1998 period before slowing markedly to around 1% to 2% of GDP in the early 2000s. Similarly, government borrowings fell sharply between the years 1998 and 2015 due to the government's efforts to refinance its existing debt by rolling it over on several occasions and at a cheaper cost, aided by the Paris conventions and other donors' agreements. Transfers to EDL have been a major drain on public finances, aggregating to \$16.85 billion over the 1992-2015 period, accounting for 23.96% of gross public debt at end of year 2015.

At present, the Lebanese banking sector still holds the lion's share (53.8%) of total debt, despite managing to reduce its exposure from 59.3% in the year 2013. This is in fact mirrored by the smaller proportion of claims on the public sector which fell from 26.96% of local banking sector balance sheet in 2008 to 20.32% in 2015 and subsequently to 20.35% as of April 2016. Historically, Lebanon's debt has been almost evenly split between the domestic currency and foreign currencies, with the share of local currency debt increasing significantly over the last couple of years. This new trend can be attributed to the fact that the issuance of foreign currency denominated debt in the form of Eurobonds requires the ratification of the parliament; the thing which was hard to secure in recent years on the back of the intense political bickering, which has derailed the regular convention of legislative parliamentary sessions.

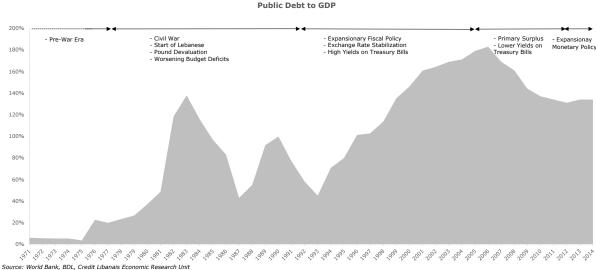
At present, gross public debt stands at \$71.65 billion (April 2016) with Lebanon's debt to GDP ratio reaching an alarming 139% level, positioning it as the 4th highly indebted country in the world according to the CIA World Factbook. This debt figure excludes some sizeable amounts owed by the government to the National Social Security Fund, hospitals, and private sector contractors, among others which, if embedded in the calculation, would undoubtedly raise gross public debt to just above \$74 billion. This trend is unsustainable and calls for immediate action from the government in the form of reform measures which can take several forms such as privatization, Public-Private Partnerships, expenditure rationalization, fiscal reforms, and many rounds of debt softening and financial engineering schemes.

I. EVOLUTION OF LEBANON'S PUBLIC DEBT

A. Overview of Lebanon's Economy and Public Debt

The Lebanese economy has been trapped in a vicious circle of cumbersome public debt and recurrent budget deficits throughout the past two decades, stymying economic growth and positioning Lebanon among countries with the highest debt-to-GDP ratios in the world.

Going down the history lane, Lebanon stood out among its regional peers with its liberal economy during the 1950s and 1960s, which had fostered economic prosperity and attracted foreign direct investment (FDI). Said flowery era was interrupted by the outbreak of the civil war in the year 1975, curbing economic growth and revenue collection. Consequently, Lebanon's budget deficit soared from 3% of GDP in 1975 to 29.8% in 1990, one of the largest deficit-to-GDP ratios in the Middle East at that time, prompting the government to borrow in order to finance its spiking deficits. Public debt continued to ratchet up during the post-war period to finance the reconstruction of Lebanon's devastated infrastructure and recurrent budget deficits. In fact, the Lebanese government had embarked in the early 1990s on a massive reconstruction program (Horizon 2000) for its war-torn infrastructure.



Despite its high indebtedness, Lebanon remains adorned to this day with several encouraging attributes such as its laissez-faire economy, moderate tax regime, free capital mobility, and solid banking sector, only to name a few, casting a ray of hope on its ability to break free from its public debt dilemma.

i. Historical Gross Public Debt and Contributing Factors

Once the hostilities stopped following the Taef agreement, the Lebanese government started its path to economic recovery in 1991. The Council for Development and the Reconstruction "CDR" was the government's entrusted entity with the process of reconstruction and economic recovery. Subsequently, the CDR established a three-year plan (National Emergency Reconstruction Program "NERP") which was allocated a budget of \$2.25 billion, partially financed by a \$225 million loan by the International Bank for reconstruction and Development (World Bank), along with grants from international development agencies and overseas agencies. Said program mainly focused on the rehabilitation of the power sector,

the water & wastewater sector, the solid waste sector, the education sector, and the housing & development sector.

In October 1992, the government led by the late Prime Minister Rafic Hariri implemented a series of measures to reestablish economic stability and restore confidence in the economy and the Lebanese Pound. In addition, the government set a reconstruction plan with a \$14 billion budget to be implemented over the 1993-2002 period (Horizon 2000) with the purpose of rehabilitating the country's damaged infrastructure and doubling GDP per capita¹. This costly plan, however, was dropped as it was deemed excessively ambitious with unrealistic expectations. Consequently, the government resorted to a less aggressive reconstruction plan, which cut by half the original budget, the sectoral breakdown of which is elaborated by the table below based on contracts inked with the CDR over the 1992-2003 period:

Sector	Share (%)	Amount (\$ Billion)
Electricity	19.7%	1.40
Roads, Highways and Public Transport	16.3%	1.16
Water Supply	12.6%	0.89
Telecommunications and Post	10.9%	0.78
Solid Waste	12.1%	0.86
Ports and Airport	9.5%	0.68
Education	8.4%	0.59
Public Health	3.6%	0.25
Government Buildings	1.7%	0.12
Agriculture and Irrigation	1.5%	0.11
Other Sectors	3.7%	0.27
Total	100.0%	7.12

Source: CDR, Credit Libanais Economic Research Unit

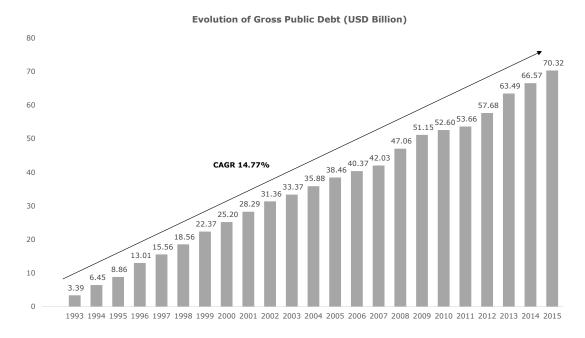
It is obvious that the cost incurred by the government to rehabilitate the electricity sector consumed alone 19.7% (\$1.4 billion) of the total budget allocated over the discussed period, followed by roads, highways and public transport (16.3%, \$1.16 billion), water supply (12.6%, \$0.89 billion), and solid waste (12.1%, \$0.86 billion), only to name a few.

Initially, the government was hoping to rely on external financial support, yet when said aid failed to fully materialize, the government started borrowing domestically by issuing high-yielding Treasury bills to finance the reconstruction phase. More specifically, yields on domestic Treasury bills reached as high as 37.85%² per annum in September of the year 1995, in the light of the high sovereign risk associated with a country emerging from a 15-year civil war. By the end of 1997, it is estimated that the financing needs for rebuilding the country attained \$4 billion, split almost equally between grants, soft loans, and commercial loans³. Due to the high cost of borrowing, however, the government's expenditures continue to outpace its revenues till our present time, resulting as such in recurrent fiscal deficits that called for additional government borrowings to finance said gaps. As a result, public debt soared by 1973% from \$3.39 billion in 1993 to \$70.32 billion in 2015, thus expanding at a compounded annual growth rate of 14.77%.

² Banque Du Liban

¹ World Bank

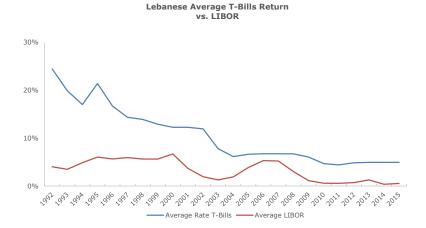
³ Wetter, J. (1999). Public Investment Planning and Progress'. In S. Eken and T. Helbling (eds), Back to the Future: Postwar Reconstruction and Stabilization in Lebanon. IMF Occasional Paper No. 176. Washington, DC: IMF.



It is worth noting that the average yield on Lebanese Treasury bills has been following a rollercoaster trend over the 1992-1995 period amid rising concerns surrounding the extension of the presidential mandate of the then-incumbent president. The average rates on Lebanese Treasury bills, however, followed a downward spiral starting the year 2002 as a result of the Paris conventions, which restored confidence in the government and in the economy. As a result, the average spread of Lebanese short-term rates (3 months, 6 months and 12 months) over the average LIBOR of the same tenure contracted from 20.40% in 1992 to 4.40% in 2015, although this comparison does not factor-out country-specific risk. The following section depicts the evolution of yields on Lebanese Treasury bills over the 1992-2015 period:

	A	verage T-Bills Yie	ld				∆ Debt Stock
Year	3-month	6-month	12 - month	Average T- Bills Yield	Average LIBOR	Average Spread	\$ billion
1992	22.39%	23.94%	26.94%	24.42%	4.03%	20.40%	0.07
1993	18.27%	19.95%	21.43%	19.88%	3.48%	16.40%	0.22
1994	15.09%	17.21%	18.68%	16.99%	4.87%	12.12%	3.06
1995	18.88%	20.65%	24.60%	21.38%	6.03%	15.34%	2.41
1996	15.19%	16.93%	17.88%	16.67%	5.65%	11.02%	4.15
1997	13.42%	14.30%	15.26%	14.33%	5.92%	8.41%	2.55
1998	12.70%	13.78%	15.17%	13.88%	5.62%	8.26%	3.00
1999	11.57%	12.74%	14.38%	12.90%	5.62%	7.28%	3.81
2000	11.18%	12.12%	13.43%	12.24%	6.68%	5.57%	2.83
2001	11.18%	12.12%	13.43%	12.24%	3.65%	8.59%	3.09
2002	10.86%	11.87%	13.06%	11.93%	1.94%	9.99%	3.07
2003	6.71%	7.91%	8.76%	7.79%	1.27%	6.52%	2.00
2004	5.30%	6.40%	6.75%	6.15%	1.91%	4.24%	2.51
2005	5.22%	7.09%	7.57%	6.63%	3.86%	2.77%	2.59
2006	5.22%	7.24%	7.75%	6.74%	5.29%	1.44%	1.91
2007	5.22%	7.24%	7.75%	6.74%	5.23%	1.51%	1.66
2008	5.21%	7.21%	7.72%	6.71%	3.01%	3.70%	5.03
2009	4.91%	6.48%	6.72%	6.04%	1.13%	4.91%	4.09
2010	4.10%	4.85%	5.09%	4.68%	0.60%	4.08%	1.45
2011	3.93%	4.50%	4.81%	4.41%	0.56%	3.86%	1.05
2012	4.35%	4.91%	5.26%	4.84%	0.71%	4.13%	4.03
2013	4.44%	4.99%	5.35%	4.93%	1.27%	3.65%	5.81
2014	4.44%	4.99%	5.35%	4.93%	0.37%	4.55%	3.08
2015	4.44%	4.99%	5.35%	4.93%	0.53%	4.40%	3.75

Source: BDL, Credit Libanais Economic Research Unit



As an integral part of Lebanon's reconstruction journey, the rehabilitation of the Beirut Central District "BCD" was awarded to the Lebanese Company for the Development and Reconstruction of the Beirut Central District (Solidere), the cost of which was estimated at \$4.2 billion⁴.

The aforementioned government spending on the reconstruction of Lebanon's ailing infrastructure, which was mirrored by a rallying capital expenditures to GDP ratio to between 8% and 9% during the 1994-1998 period, fueled an exponential increase in public debt. Since the early 2000s, the government's capital spending slowed to around 1% to 2% of GDP, mainly reserved for the maintenance of existing infrastructure.

		Public Capital Expenditures	GDP	Public Capital Expenditures	Gross Public Debt	Budget Deficit	New Debt
Y	ear	% of GDP	\$ billion	\$ billion	\$ billion	\$ billion	\$ billion
19	992	1.5%	5.46	0.08	3.17	0.62	
19	993	3.3%	7.53	0.25	3.39	0.69	0.22
19	994	9.3%	9.11	0.85	6.45	1.87	3.06
19	95	9.4%	11.12	1.05	8.86	2.05	2.41
19	996	8.5%	13.00	1.11	13.01	2.68	4.15
19	997	5.7%	15.75	0.90	15.56	3.18	2.55
19	998	6.7%	17.29	1.16	18.56	2.44	3.00
19	999	4.3%	17.41	0.75	22.37	2.52	3.81
20	000	3.5%	17.25	0.60	25.20	3.90	2.83
20	001	1.2%	17.60	0.22	28.29	2.80	3.09
20	002	2.1%	19.09	0.40	31.36	2.85	3.07
20	003	2.4%	19.75	0.47	33.37	2.61	2.00
20	004	2.6%	20.96	0.54	35.88	2.01	2.51
20	005	1.7%	21.29	0.35	38.46	1.86	2.59
20	006	1.7%	21.80	0.37	40.37	3.04	1.91
20	007	1.5%	24.58	0.37	42.03	2.55	1.66
20	800	1.2%	28.83	0.35	47.06	2.92	5.03
20	009	1.0%	35.14	0.36	51.15	2.96	4.09
20	10	1.2%	38.01	0.47	52.60	2.89	1.45
20	11	1.1%	40.08	0.45	53.66	2.34	1.05
20	12	1.1%	44.10	0.50	57.68	3.93	4.03
20	13	1.4%	47.60	0.65	63.49	4.22	5.81
20	14	0.9%	49.94	0.43	66.57	3.07	3.08
20	15	-	51.17	_	70.32	3.95	3.75

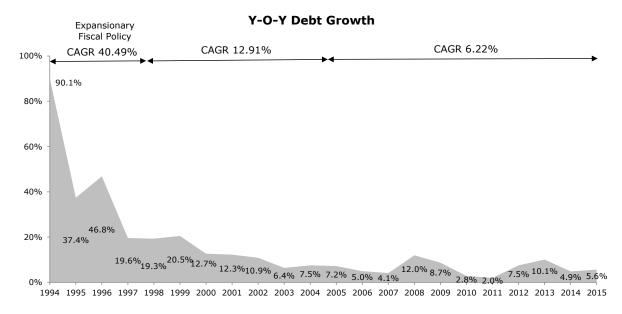
Source: World Bank, MOF, IMF, CDR, Credit Libanais Economic Research Unit

_

⁴ Dibeh. G. (2005) "The Political Economy of Postwar Reconstruction in Lebanon". World Institute for Development Economics Research

Total capital expenditures stood at \$12.491⁵ billion between end of 1992 and 2014, out of which circa \$5.016 billion were externally funded and \$7.474 billion were financed by the government. It is worth noting that external financing included grants, the thing which explains the gap between capital expenditures on the one hand, and budget deficit and additional borrowing (New Debt) on the other. Furthermore, and according to the CDR 2014 annual report, some \$7.991 billion worth of contracts were completed while \$4.499 billion remain in the pipeline.

In fact, ongoing capital expenditures coupled with the recurrent deficits were the main drivers behind the escalating public debt. More specifically, Lebanon's debt grew at its fastest pace during the 1993-1998 era, recording a CAGR of 40.49%, with the debt stock rising from \$3.39 to \$18.56 billion, as depicted in the chart below.



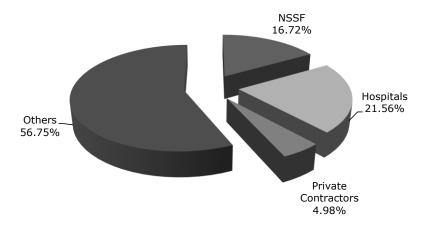
Government borrowings slowed between the years 1998 and 2015 as the government was striving to refinance its existing debt as it nears maturity (rolling over existing debt), yet at a cheaper cost, aided by the Paris conventions and other donors' agreements. Nevertheless, the repeated budget deficits as a result of the high debt service and uninterrupted transfers to Electricité du Liban (EDL) further aggravated the piling debt burden during the concerned period. In figures, Lebanon's public debt grew at a CAGR of 12.91% between 1998 and 2005, and a lower CAGR of 6.22% between 2005 and 2015.

ii. Undisclosed Public Debt

Lebanon's public debt figure excludes some amounts owed by the government to the National Social Security Fund, hospitals, and private sector contractors, among others, in addition to amounts reserved for expropriations. Some economists have estimated the value of these liabilities to range between \$2 billion and \$4 billion, which if accounted for, would raise gross public debt to just above \$74 billion and widen the debt-to-GDP ratio by 735 bps.

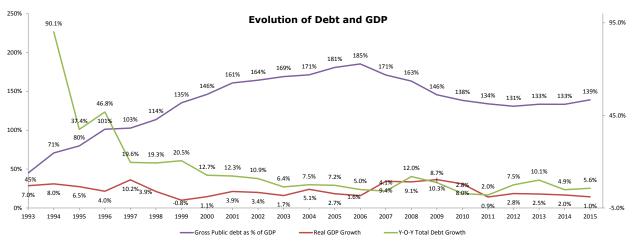
⁵ CDR Report 2014

Breakdown of Undisclosed Debt



iii. Historical Debt to GDP Ratio

Lebanon's GDP registered stellar growth rates in the early post-war period averaging 6.6% per annum between the years 1993 and 1998, a growth that was insufficient to tame the frantic increase in the government's debt over the corresponding period. Consequently, the debt to GDP ratio rallied from 45% in 1993 to 71% in 1994, before culminating at 114% in 1998. The case was similar for the 1998-2002 era where the average growth in public debt (15.1%) outpaced by far that of real GDP (average growth of 2.3% per year), bearing in mind that GDP growth was very sluggish in the years 1999 and 2000, lifting the debt to GDP ratio much higher to 146% in 2000.

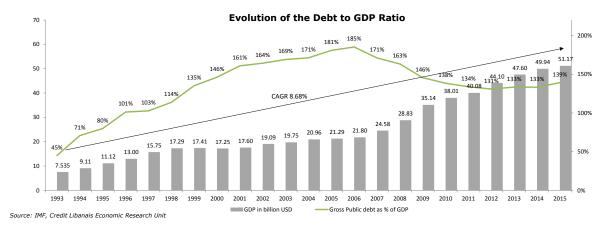


Source: IMF, BDL, Credit Libanais Economic Research Unit

Following the year 2002, the pace of growth in debt slowed significantly in the light of the much cheaper cost of borrowing following the Paris conventions and the introduction of the value-added tax (a 10% VAT) in February 2002, which were accompanied by the implementation of "special schemes" by BDL and Lebanese commercial banks to reduce debt in the year 2003. The BDL scheme consisted of a debt cancellation, debt exchange, and debt rollover program, while that of commercial banks revolved around their subscription in non-interest generating Lebanese government securities (these monetary tools are discussed in details later in this paper). This slowdown in debt growth, however, continued to outperform the growth in GDP (bearing in mind that the 2003-2007 period witnessed many intervals of political instabilities including the assassination of Prime Minister Hariri in February 2005, the Israeli aggression on Lebanon in summer 2006, and the long sit-ins in the Beirut Central

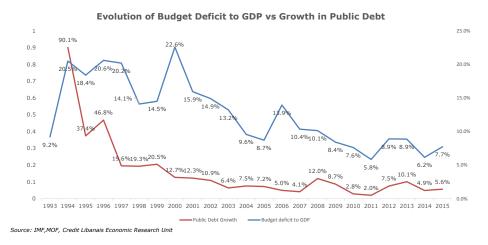
District until May 2008, among others). Accordingly, the debt to GDP ratio further deteriorated to 169% in 2003 before increasing gradually to a peak of 185% in 2006.

The period extending between the years 2007 and 2010 was characterized by unprecedented GDP growth rates, which averaged 9.2%, following the Doha accord and the election of a new president in May 2008, which helped restore political stability, reinvigorate confidence, and revitalize foreign investment in the country. Consequently, the debt to GDP ratio was trimmed down to 146% in 2009 and just above 138% in 2010, before bottoming out at around 131% in 2012. During the last couple of years, however, the debt to GDP ratio bucked its downturn to reach an estimated 139% in 2015⁶ amid the economic deadlock that resulted from the spillover of the Syrian crisis and presidential void.



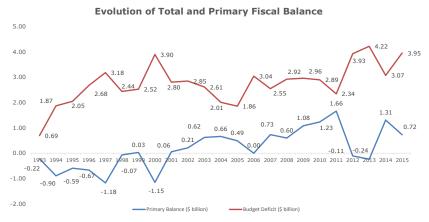
iv. Deficit and Debt Evolution

Lebanon's public debt and its budget deficit follow a very similar pattern as the government continues to resort to borrowing to finance its spending needs. For instance, Lebanon's budget deficit expressed as a percentage of GDP recorded its highest levels between the years 1993 and 2000, at a time when public debt was growing aggressively at a CAGR of 33.17% during Lebanon's post-war reconstruction phase. Whereas for the period spanning from the year 2001 until 2015, the deficit to GDP ratio was suppressed as additional revenue sources for the government were introduced, coupled with a lower debt service from cheaper debt refinancing on the one hand, met by a pickup in economic activity on the other, explaining as such the relatively slower growth in public debt.

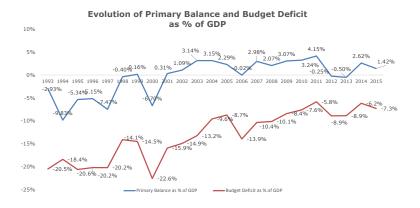


⁶ All the aforementioned debt to GDP ratios are based on IMF estimations.

Lebanon witnessed a deficit in its primary balance between the years 1993 and 2000 (with the exception of the year 1999) and this shortage was clearly reflected in the government's budget, which suffered its highest deficit as a proportion of GDP hovering between a negative 20.5% in the year 1993 and a negative 22.6% in the year 2000. The Lebanese government then launched a series of reform measures under the commitments it made to donors during the Paris summits, which centered upon slashing by half the overall fiscal deficit between the years 2003 and 2004 before completely wiping it out by 2006. These reform measures include the rehabilitation of public institutions, in addition to the introduction of the VAT and tax on interest income in an endeavor to reshape public finances and slow the blistering pace at which the debt was rising. As a result, the government succeeded in trimming its budget deficit down from \$2.61 billion in 2003 to \$2.01 billion in 2004 and a much lower \$1.86 billion in 2005, a trend which was interrupted by the Israeli aggression on Lebanon in July 2006. In fact, budget deficit stood at \$770.8 million as of June 2006, a figure that would have ended the year 2006 at \$1.54 billion (around 41% reduction in deficit during the 2003-2006 period, which somehow nears the target deficit containment for 2004, yet remains far from the 2006 target) if linearly extrapolated in the absence of the summer hostilities on Lebanon.



In parallel, Lebanon enjoyed primary balance surpluses from the year 2001 until 2015 (except for the years 2006, 2012, and 2013 during which Lebanon had to face unexpected socio-political shocks, which stroke the economy).



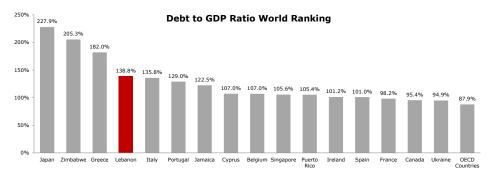
One of the main culprits behind Lebanon's budget deficits over the past decade or so is the large amounts transferred to EDL and its huge drain on public finances. It is worth highlighting, in this context, that transfers to EDL used to erode around 25% of annual government revenues a couple of years ago, yet this rate has dropped to a still significant 12.50% in the year 2015 on the back of the substantial drop in hydrocarbon prices. In the same vein, debt service continue to dilute government revenues, a point that was raised by

the recent World Bank report in which it criticized the fact that the cost of debt is consuming nearly 50% of government revenues.

v. Lebanon's Debt to GDP World Ranking

High indebtedness is a common phenomenon facing many countries across the globe, particularly those that lack natural resources. In recent years, we have seen many economies tumble and crash as the world financial crisis continued to propagate, added a series of civil revolutions in the Arab world, which casted its shadows on the rest of the world. These political and economic shocks curbed world economic growth and triggered increasing public debt burdens for some economies, which used an expansionary monetary policy to stimulate consumption and growth. More particularly, and according to the CIA World Factbook, Japan suffered the highest debt to GDP ratio (227.9%) in the year 2015, followed by Zimbabwe at 205.3%, Greece (182.0%), Lebanon (138.8%), Italy (135.8%), and Portugal (129.0%).

Furthermore, OECD countries (which lack natural resources at large) have been facing the problem of increased debt levels in the past few years. Total debt of the OECD nations was around 78.37% of total OECD GDP in 2007 and has risen to reach a level of 87.89% in 2015.



Source: CIA Factbook, Credit Libanais Economic Research Unit

Individual countries within the OECD stretched in 2014 from a low of 10.76% of debt to GDP in Estonia to more than 245.90% in Japan. The financial crisis that started in late 2007, with its mix of liquidity crisis, reduced tax revenues, massive economic stimulus programs, recapitalizations of banks and so on, led to an intense surge in the public debt for most advanced economies. This trend is noticeable not only in countries with a history of debt problems such as Japan, Italy and Greece but also in countries where debt to GDP ratio was relatively low before the crisis such as the US, UK, France, Portugal and Ireland with debt to GDP ratios of 105%, 89%, 97% and 128% respectively during the year of 2015.

vi. Comparison of Lebanon's Debt Metrics with Regional Countries

As captured by the following table, Lebanon's appalling debt burden translates into an external debt to exports ratio (153.94%) and debt service to exports ratio (16.63%) that exceed by far their regional peers, that of the MENA region and that of Upper Middle Income countries (the income group to which Lebanon belongs) as at end of year 2014.

On the other hand, Lebanon has a very low multilateral debt (debt extended by the World Bank or IMF) to external debt ratio (2.79%) when compared to other covered countries, as most of its debt is held by local investors (whether in the form of treasury bills or

Eurobonds). This may also be explained by the fact that such low cost multilateral debt is conditional upon the implementation of structural reforms, the thing which is currently not feasible given the lack of political will and the near-paralysis on the legislative and executive fronts.

Finally, Lebanon's astounding reserves level (foreign currency plus gold) mitigates to a great extent the risk associated with its debt burden as these reserves cover around 1.66 times Lebanon's external debt, hence outperforming all covered countries, the MENA region, and Upper Middle Income countries.

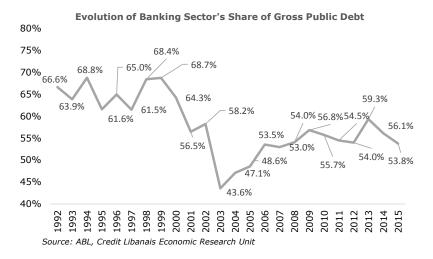
Lebanon's Debt Metrics as Compared to Regional Countries (Figures as at end of Year 2014)	Egypt	Jordan	Lebanon	MENA	Tunisia	Upper Middle Income
External Debt as a % of Exports of Goods, Services & Primary Income	83.77%	148.20%	153.94%	101.10%	119.46%	70.32%
Debt Service as a % of Exports of Goods, Services & Primary Income	12.67%	8.52%	16.63%	N.A.	8.72%	7.38%
Multilateral Debt as a % of External Debt	27.21%	12.41%	2.79%	22.74%	33.44%	6.09%
Reserves as a % of External Debt	37.67%	66.15%	165.54%	174.28%	28.40%	147.32%
Short-term Debt as a % of Total Reserves	22.25%	67.84%	8.51%	N.A.	91.30%	23.18%

B. Breakdown of Public Debt

Source: World Bank, Credit Libanais Economic Research Unit

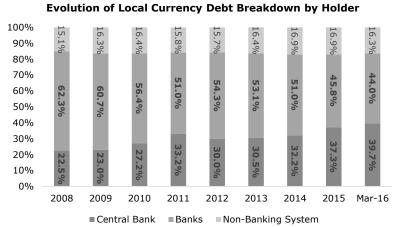
i. By Type of Holder

The Lebanese government's borrowing needs are generally financed by the banking sector, which currently detains around 53% of Lebanon's gross public debt. Historically, however, Lebanese banks' share of gross public debt was much higher, peaking at 68.7% in the year 1999, before dropping drastically to 56.5% as of the year 2001 and 43.55% in 2003 in the light of the Paris I and Paris II conventions, which secured sizeable amounts of external debt. In recent years (2008-2015 period), the banking sector's share of gross public debt has been fairly stable as banks continued to participate in the roll-over of foreign currency public debt, compensating in some instances the share of foreign investors, who divested from the Lebanese sovereign risk to some extent amid the rising hostilities domestically and in the region.



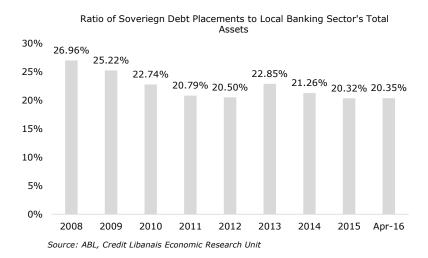
Lebanese banks have, however, managed to significantly dampen their share of local currency sovereign debt (Treasury bills) over the 2008-March 2016 period as highlighted by the below chart. In figures, the banking sector's share of local currency debt dropped steadily from 62.3% in the year 2008 to 45.8% in the year 2015 and 44.0% by March 2016, compensated by the increasing share of the Central Bank from 22.5% in 2008 to 37.3% in

2015 and 39.8% in March 2016. In the meantime, the share of the non-banking system of local currency debt remained fairly stable, oscillating within the 15.1%-16.9% range.



Source: Ministry of Finance, BDL, Credit Libanais Economic Research Unit

Moreover, and in tandem with the recommendations of international rating agencies, Lebanese banks have also watered down their balance sheet exposure to the Lebanese sovereign debt, with claims on the public sector dropping from 26.96% of local banking sector balance sheet in 2008 to 20.32% in 2015 and 20.35% as of April 2016. It is worth noting that this ratio does not incorporate the Lebanese banking sector's assets abroad, which if accounted for, would by far lower the ratio.



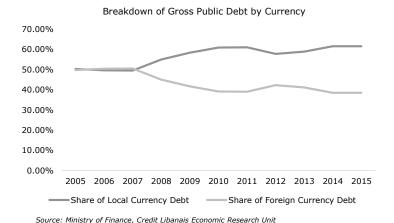
ii. By Currency

As depicted by the below table, Lebanon's public debt was almost evenly divided between local and foreign currency debt over the 2005-2007 period, before the emergence of a trend towards local currency borrowing as of the year 2008. In details, local currency debt rallied by a CAGR of 9.57% from \$20.81 billion in the year 2007 to \$43.25 billion in 2015, in comparison with a much more timid CAGR of 3.09% for foreign currency debt over the same period. As a result, the share of local currency debt out of total gross public debt skyrocketed from 49.51% as at end of year 2007 to 61.51% as at end of 2015 and 61.43% by end of April 2016, whereas that of the relatively cheaper foreign debt dwindled from 50.49% in 2007 to 38.49% at end of 2015, before slightly rebounding to 38.57% at end of April 2016.

This can be attributed to the fact that the issuance of foreign currency denominated sovereign debt (Eurobonds) requires the ratification of the parliament, the thing which was hard to obtain in recent years on the back of the intense political bickering, which derailed the regular convention of legislative parliamentary sessions.

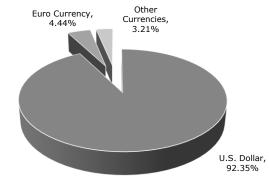
\$ Billion	2005	2006	2007	2008	2009	2010
Gross Public Debt	38.46	40.37	42.03	47.06	51.15	52.60
Local Currency Debt	19.33	20.04	20.81	25.88	29.83	32.01
as a % of Gross Public Debt	50.26%	49.63%	49.51%	54.99%	58.32%	60.85%
Foreign Currency Debt	19.13	20.33	21.22	21.18	21.32	20.59
as a % of Gross Public Debt	49.74%	50.37%	50.49%	45.01%	41.68%	39.15%
\$ Billion	2011	2012	2013	2014	2015	April 2016
Gross Public Debt	53.66	57.68	63.49	66.57	70.31	71.65
Local Currency Debt	32.73	33.30	37.35	40.96	43.25	44.02
as a % of Gross Public Debt	61.00%	57.73%	58.84%	61.53%	61.51%	61.43%
Foreign Currency Debt	20.93	24.39	26.13	25.61	27.06	27.64
as a % of Gross Public Debt	39.00%	42.27%	41.16%	38.47%	38.49%	38.57%

Source: Ministry of Finance, Credit Libanais Economic Research Unit



USD-denominated debt represents the bulk (92.35%) of foreign currency sovereign debt, with debt in other foreign currencies mainly stemming from bilateral and multilateral loans related to the various donor summits and conventions.

Breakdown of Foreign Currency Debt as at end of 2015



Source: Ministry of Finance, Credit Libanais Economic Research Unit

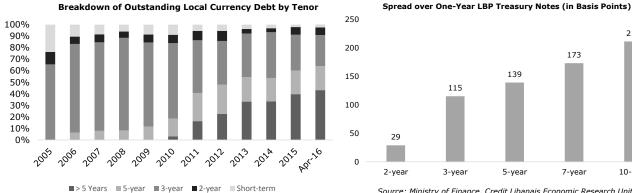
iii. By Maturity

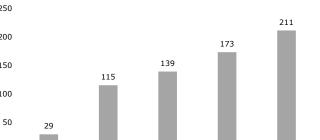
The term structure of Lebanon's local currency debt has gradually shifted towards the long end of the curve over the last ten years. In details the share of outstanding short-term Treasury bills of total outstanding local currency debt dropped from 23.68% in the year 2005 to 8.81% in the year 2010 and a meager 2.10% as at end of year 2015, before picking up slightly to 3.09% in April 2016. On the other hand, outstanding longer-term Treasury notes (maturity greater than 5 years), and despite their short-term history, already constitute circa 40% of Lebanon's outstanding local currency debt. This can be mainly attributed to the high level of confidence in the government's ability to honor its debt obligations (as long-term notes in general are associated with the highest level of default risk), as well as the attractive spreads said securities are offering over the short-term ones. Finally, it is worth noting that the weighted average time to maturity of outstanding Lebanese Treasury bills and bonds stood at 3.47 years as at end of April 2016.

Tenor	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	April 2016
15-year	-	-	-	-	-	-	-	-	-	-	-	0.69%
12-year	-	-	-	-	-	-	-	-	6.09%	5.56%	5.26%	5.20%
10-year	-	-	-	-	-	-	-	-	5.14%	7.90%	12.49%	14.09%
8-year	-	-	-	-	-	-	-	3.98%	3.58%	3.27%	3.09%	3.06%
7-year	-	-	-	-	-	3.18%	16.31%	18.65%	18.46%	16.86%	18.88%	20.20%
5-year	-	6.45%	7.92%	8.25%	11.53%	15.51%	24.36%	25.26%	21.22%	20.18%	20.40%	20.83%
3-year	65.55%	76.83%	76.72%	80.25%	73.07%	65.29%	45.77%	37.99%	37.84%	39.60%	31.13%	27.00%
2-year	10.77%	6.38%	7.02%	5.55%	6.84%	7.21%	8.22%	8.74%	3.85%	3.55%	6.64%	6.53%
Short-term *	23.68%	10.34%	8.34%	5.95%	8.55%	8.81%	5.34%	5.38%	3.81%	3.07%	2.10%	3.09%

^{*} Short-term Maturities comprise 3-month, 6-month and 1-year discounted securities

Source: Ministry of Finance, Credit Libanais Economic Research Unit





5-year Source: Ministry of Finance, Credit Libanais Economic Research Unit

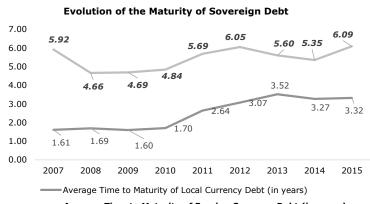
Source: Ministry of Finance, Credit Libanais Economic Research Unit

As far as foreign currency debt is concerned, its tenor is significantly longer than local currency debt, as Eurobond issues are usually long-term in nature. In figures, the weighted average tenor of foreign currency sovereign debt stood at 6.29 years as at end of April 2016.

10-year

7-year

Projected Maturities of Lebanese	Outstanding Amount (USD
Eurobonds	Million)
Nov-16	500
Mar-17	1,500
Jul-17	105
Oct-17	775
Dec-17	531
Mar-18	140
May-18	50
Jun-18	700
Nov-18	1,530
Apr-19	500
May-19	650
Nov-19	1,500
Mar-20	1,200
Apr-20	700
Jun-20	600
Apr-21	2,092
Oct-22	1,540
Jan-23	1,100
Apr-24	700
Nov-24	538
Dec-24	250
Feb-25	800
Jun-25	800
Nov-26	1,600
Nov-27	1,000
Nov-28	893
Feb-30	1,400
Apr-31	300
Nov-35	600
Total	24,596
Weighted Life	6.29



——Average Time to Maturity of Foreign Currency Debt (in years)

Source: Ministry of Finance, Credit Libanais Economic Research Unit

Source: MOF, Credit Libanais Economic

Research Unit

iv. By Cost of Debt

As discussed earlier, the Lebanese government had to historically borrow at high double digit rates in order to attract investors in the post-civil war era. The situation has dramatically changed recently, however, as the Lebanese government has succeeded in systematically lowering its cost of debt on the back of the strong level of confidence it has instilled amongst investors in its ability and willingness to honor its debt obligations. More particularly, the weighted average coupon rate on Lebanon's Eurobonds has dropped from 7.12% and 7.35% in 2007 and 2009 to 6.40% in 2014 and 6.44% in 2015, the thing which represents a circa 100 basis point drop in the cost of borrowing. This comes despite the fact that the tenor of foreign currency debt has been increasing, with the foreign currency debt's average time to maturity widening from 5.92 years in 2007 and 4.69 years in 2009 to 5.35 years in 2014 and 6.09 years in 2015, the thing which should have, holding other factors constant, increased the cost of debt due to the higher risk associated with longer maturities. This reduction in the cost of debt has been mainly accomplished through debt exchange transactions, in which the government refinanced maturing high-cost Eurobonds with less expensive ones. For instance, the Lebanese government has in November 2015 refinanced maturing Eurobonds with a coupon rate of 8.50% with 9-year tenor and 13-year tenor Eurobonds with respective coupon rates of 6.25% and 6.65%.

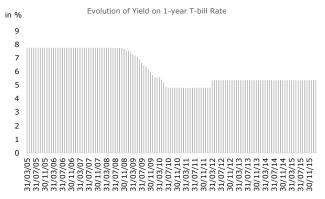
Evolution of the Cost of Lebanon's Foreign Currency Debt 7.60% **7.35% 7.31%** 5.69 6.09 6.05 7.40% 5.6 5.35 6 7.20% 5 7.00% 7.12% 4.84 4.69 4.66 4 7.02% 6.80% 6.60% 3 6.66% 6.40% 6.50% 6.40% 6.44% 6.20% 6.00% 5.80% 2007 2008 2009 2010 2011 2012 2013 2014 2015 Weighted Average Coupon -Average Time to Maturity (in years)

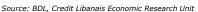
Source: Ministry of Finance, Credit Libanais Economic Research Unit

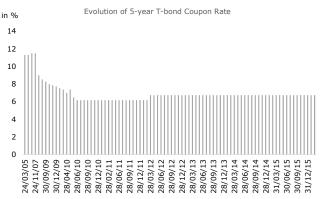
Cost of Foreign Currency Debt	2007	2008	2009	2010	2011	2012	2013	2014	2015
Weighted Average Coupon	7.12%	7.24%	7.35%	7.31%	7.02%	6.66%	6.50%	6.40%	6.44%
Average Time to Maturity (in years)	5.92	4.66	4.69	4.84	5.69	6.05	5.6	5.35	6.09
LT Issuer Foreign Rating (Moody's)	В3	В3	B2	B1	B1	B1	B1	B2	B2

Source: Ministry of Finance, Moody's Investor Service, Credit Libanais Economic Research Unit

The same thing goes for local currency debt where the coupon rate on the 5-year Treasury bonds dropped from double digit figures (11.3% in 2005 and 11.5% in 2007) to 6.18% over the June 2010-February 2012 period before rising slightly to 6.74% as of March 2012 till nowadays. Similarly, the yield on the 1-year Treasury bills dropped by more than 200 basis points from 7.75% in 2005 to 5.35% at the time being. Overall, the weighted average cost of local currency debt dropped from 7.60% in the year 2010 to 6.94% as at end of year 2015.



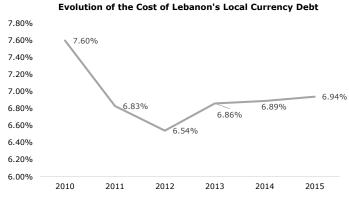




Source: BDL, Credit Libanais Economic Research Unit

Cost of Local Currency Debt	2010	2011	2012	2013	2014	2015
Weighted Average Coupon	7.60%	6.83%	6.54%	6.86%	6.89%	6.94%
Average Time to Maturity (in years)	1.70	2.64	3.07	3.52	3.27	3.32

Source: Ministry of Finance, Credit Libanais Economic Research Unit



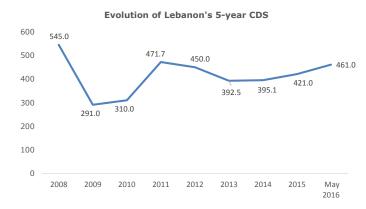
Source: Ministry of Finance, Credit Libanais Economic Research Unit

v. Evolution of Lebanon's Sovereign Risk Profile

Lebanon's sovereign risk profile fluctuated over the years as a result of the series of economic and political upheavals whether organic or implied from its exposure to international markets. More specifically, spreads on the country's 5-year Credit Default Swaps (CDS) oscillated between 291.00 bps and 545.00 bps during the 2008 – May 2016 period, with its peak marked in 2008 at a time when the global economy was suffering from the onset of the global financial crisis. This is further captured by the table below:

	2008	2009	2010	2011	2012	2013	2014	2015	May 2016
5-year CDS	545.00	291.00	309.98	471.73	450.00	392.51			461.00

Source: Bloomberg, Credit Libanais Economic Research Unit

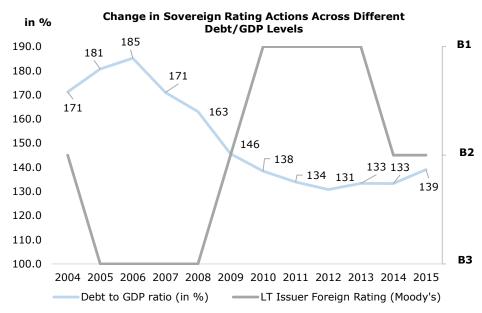


vi. Timeline of Rating Actions on Lebanon

Rating actions in general are influenced by a plethora of quantitative (macroeconomic ratios) and qualitative factors (such as political and security conditions). The assassination of former Prime Minister Rafik Hariri in the year 2005, for instance, resulted in a rating downgrade for Lebanon by the international rating agency Moody's, which lowered Lebanon's LT issuer foreign rating to B3 on March 24, 2005 from B2 previously. The convention of the Doha accord in mid-2008, however, coupled with the stellar economic performance that was registered over the 2007-2010 period prompted Moody's to upgrade Lebanon's LT issuer foreign rating to B2 on April 1, 2009 and then to B1 on April 13, 2010.

Evolution of Rating Actions	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Debt to GDP ratio (in %)	171.2	180.7	185.2	171.0	163.1	145.6	138.4	133.9	130.8	133.4	133.3	139.1
Fiscal Deficit to GDP ratio (in %)	9.6	8.7	13.9	10.4	10.1	8.4	7.6	5.8	8.9	8.9	6.1	7.3
LT Issuer Foreign Rating (Moody's) B2 B3 B3 B3 B2 B1 B1 B1 B1 B2									B2	B2		
Source: Ministry of Finance, Moody's Investor Service, Credit Libanais Economic Research Unit												

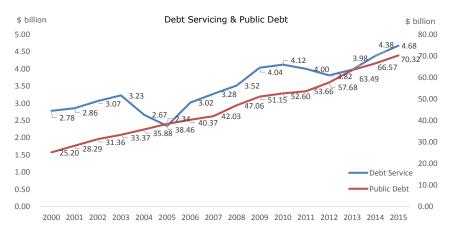
The year 2014, however, witnessed an increased spillover from the Syrian war as well as a political stalemate that was characterized by a presidential void, the failure to conduct parliamentary elections as well as a near-paralysis of the executive branch, all of which reflected into a recessionary economic environment and deteriorating macroeconomic indicators. This has triggered a downgrade of Lebanon's sovereign rating to B2 on December 16, 2014.



Source: Moody's Investor Service, Credit Libanais Economic Research Unit

C. Historical Debt Servicing

The calculation of debt service in Lebanon imbeds interest payments on domestic and foreign debt and foreign debt principal repayment pertaining to concessional loans earmarked for project financing. Debt service fluctuated between \$2.78 billion and \$4.68 billion during the 2000-2015 period, noting that it reached its lowest level in the year 2005 at \$2.34 billion. The trend in debt service mimics Lebanon's growing public debt burden over the years, mainly attributed to the accumulation of budget deficits. The average debt service was \$2.97 billion during the 2000-2008 period, before increasing to an average of \$4.15 billion during the 2009-2015 period.



D. List of Major Summits and Donor Conferences

As public debt piled up throughout the years, Lebanese authorities struggled to wipe its cumbersome stain off of the country's public finances and the Lebanese economy as a whole, seeking international help to reduce the cost of debt and address the concerns and recommendations of international institutions (such as the IMF and the World Bank) and rating agencies.

In fact, Lebanon resorted to foreign aid channeled through four major international aid conferences held during the post-war period, namely the Paris I, II, and III conferences and the Stockholm Conference for Lebanon's Early Recovery. The bulk of said aid came in the form of soft loans and grants, as detailed in the section below:

i. The Paris I Conference

The Paris I Conference was convened on February 27, 2001 at the Elysée Palace in Paris under the patronage of key Lebanese, French, and European officials including then-French President Mr. Jacques Chirac, former European Union Commissioner Mr. Romano Parodi, former president of the World Bank Mr. James Wolfensohn, and former vice-president of the European Investment Bank. Under this conference, Lebanon was able to raise some EUR 500 million geared towards funding development projects in the country.

ii. The Paris II Conference⁷

The Paris II Conference was held on November 23, 2002 at the Elysée Palace in Paris in the presence of leading Lebanese, Arab, European, and international figures including the then-prime ministers of Qatar, France, Belgium, Italy, Germany, Spain, Denmark, Canada, and Malaysia, only to name a few.

Lebanon received commitments aggregating to \$4.4 billion during the aforementioned conference allocated over:

- \$3.1 billion geared towards public debt reduction and management, and
- \$1.3 billion dedicated to the financing of various socio-economic development projects that are mainly sponsored by the World Bank, the European Investment Bank, and different Arab development funds.

The table below depicts the exact allocation of committed amounts by country/institution:

Committed Amounts from Paris II Lender				
Lender Countries/ Institutions	Amounts (USD Million)			
Public Debt Reduction & Management:				
KSA	700			
France	500			
Malaysia	300			
Kuwait	300			
UAE	300			
Bahrain	200			
Canada	200			
Italy	200			
Qatar	200			
Arab Monetary Fund	100			
Belgium	70			
Oman	50			
Total	3,120			
Socio-Economic Development Projects:				
Arab Fund for Social & Economic Development	500			
European Investment Bank	350			
World Bank	200			
Kuwaiti Fund for Development	150			
European Union	100			
Total	1,300			
Grand Total	4,420			
Source: MOE Credit Libanais Economic Decear	h Unit			

Source: MOF, Credit Libanais Economic Research Unit

⁷ The Lebanese Ministry of Finance, "One-Year Progress After Paris II", Special Report, December 2003

In light of the encouraging prospects surrounding the outcomes of the Paris II Conference and the government's multiplied efforts to alleviate the prevailing fiscal imbalances, Standard & Poor's (S&P), the international rating agency, positively revised its outlook on Lebanon from "Negative" to "Stable" in late December 2002, keeping the country's long-term and short-term ratings unchanged at "B-" and "C" on a respective basis.

One year after the Paris II summit was convoked, 7 countries had already honored their respective commitments, with Lebanon receiving some \$2.4 billion in foreign aid by September 2003 (i.e. around 77% of total amounts dedicated to the government's debt reduction and management). These amounts are spread as follows:

Received Amounts from Paris II Lender Countries by September 2003						
Lender Countries	Received Amounts (USD Million)	Type of Financing	Terms			
Malaysia	300	Eurobonds	- Issue Price: 100%			
Oman	50		- Final Maturity Date: 15 years from Issue Date			
UAE	300		- Coupon Rate: 5% p.a., payable semi-annually in arrear - Amortization of Principal: Redeemable in 20 equal semi- annual payments starting from year 6 (grace period of 5			
Kuwait	300		years)			
			- Representations, Warranties, and Covenants: As per the			
KSA	700		issuer's Global MTN program			
Qatar	200		- Listing: Luxembourg Stock Exchange			
		Loan Through the				
France	540	French Treasury &	- 15-year maturity			
Trance	540	Agence Française de	- Coupon Rate: 5% p.a. payable semi-annually			
		Développement (AFD)	- 3-year grace period for principal repayment			
Total	2,390		<u> </u>			

Source: MOF, Credit Libanais Economic Research Unit

The debt terms appearing in the table above show a palpable improvement in Lebanon's cost of debt dynamics, with the 5% p.a. coupon rate adopted under the Paris II convention implying a spread of around 85 basis points above the then-prevailing 10-year US Treasury securities. This compares to a spread of 505 basis points above securities of shorter maturities when accounting for the average cost of Lebanon's foreign currency debt prior to the Paris II conference (circa 9.2%).

In addition to the funds secured by foreign entities, "special schemes" were designed for local parties, namely Banque Du Liban and commercial banks operating in Lebanon, to actively contribute in financing the government's needs under the umbrella of the Paris II Conference. The special scheme with BDL revolved around a debt cancellation, debt exchange, and debt roll-over program, with mobilized funds from BDL under said scheme amounting to \$4.1 billion as of September 2003. In details, some \$1.8 billion worth of BDL's Lebanese Pound-denominated Treasury bills were cancelled against reserves due to the Lebanese Treasury. Concurrently, around \$1.9 billion of BDL's LBP-denominated Treasury bills, Eurobonds, and accrued interest were exchanged against new debt with a longer maturity (15 years) and lower interest rate (4%). In parallel, \$0.4 billion of the principal and interest on maturing Treasury bills held by the Lebanese Central Bank were rolled-over by issuing new Treasury bills during the month of July 2003 with a 5 year maturity and 4% interest rate.

From another standpoint, the special scheme with commercial banks operating in Lebanon called for the subscription of banks in Lebanese government securities that are non-interest bearing and mature in two years. Mobilized funds from commercial banks operating in Lebanon under the concerned scheme aggregated to \$3.6 billion, 85% of which being in cash or near-cash securities (maturing in 3 months).

As a result, mobilized funds received by Lebanon in the aftermath of the Paris II summit totaled \$10.1 billion spread over \$2.4 billion from foreign lenders, \$4.1 billion from BDL, and

\$3.6 billion from commercial banks in Lebanon, representing as such 32% of the country's total outstanding debt stock during that particular period.

As previously mentioned, Lebanon saw its cost of debt shrink substantially in the aftermath of the Paris II refinancing schemes, with the weighted average cost of total outstanding debt shedding 361 basis points year-on-year to 8.36% at end of November 2003 from 11.97% in November 2002. This is further elaborated in the table below:

Overall Weighted Average Cost of Outstanding Public Debt								
Foreign Currenc Date Total Debt Domestic Debt Debt								
Before Paris II	Nov-2002	11.97%	13.82%	9.21%				
After Paris II	Nov-2003	8.36%	9.23%	7.39%				
Change (bps)		-361	-459	-182				

Source: MOF, Credit Libanais Economic Research Unit

It is worth highlighting that the financial support schemes that were offered to Lebanon under the Paris II summit were accompanied by an extensive program set by the government to tackle the country's public finance and debt issues and spur growth. This program includes, among others, a series of fiscal adjustment measures, noting that the government had submitted to the Parliament an austerity budget for the year 2003 that targets an 11% hike in public sector revenues and a drop in the non-interest expenditures-to-GDP ratio for the contemplated year. The government had set an objective to slash its overall fiscal deficit by more than 50% between the years 2003 and 2004 before completely erasing said deficit by the year 2006. The government was also eyeing privatization as a tool to reduce its public debt burden, with the main targets being the electricity and telecommunication sectors.

iii. The Stockholm Conference for Lebanon's Early Recovery8

Four years down the road, an atrocious war was launched by Israel against Lebanon in July 2006 lasting for 33 days and inflicting hundreds of casualties as well as hundreds of millions of dollars (around \$3.6 billion in direct damages according to the CIA World Factbook).

Cost of Direct Damages - USD Millio	n
Infrastructure	958
- Roads & Bridges	429
- Airports	55
- Electricity	244
- Telecommunications	116
- Water	80
- Schools & Hospitals	34
Household & Commercial Establishments	2,406
Industrial Establishments	220
Fuel Stations	12
Military Installations	16
Grand Total up to August 14, 2006	3,612

Source: CIA World Factbook, Credit Libanais Economic Research Unit

In fact, Lebanon was left with about 30 thousand demolished housing units, a sharp jump in its unemployment rate to around 25%, severe damages in electricity (estimated at \$114 million), telecommunications (\$134 million), transport (\$484 million), government infrastructure (\$4 million), and industrial production (\$220 million), in addition to several woes that cannot be quantified.

_

⁸ The Lebanese Ministry of Finance, "Stockholm Conference for Lebanon's Early Recovery", August 31, 2006

In this context, the Stockholm Conference for Lebanon's Early Recovery was organized in the Swedish capital on August 31, 2006 to help respond to Lebanon's "immediate early recovery needs", which were estimated at around \$537 million.

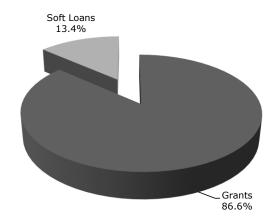
21 projects were accordingly put in place to address the most urgent needs resulting from the 2006 war covering the following areas:

Stockholm Conference - Use of Raised Funds								
Targets	Number of Projects	Amounts (\$ Million)						
Displacement & Shelter	1	75.00						
Mines & Unexploded Ordnance	1	4.15						
Infrastructure	7	148.00						
Basic Social Services	4	87.00						
Environment	2	53.00						
Unemployment & Livelihoods	3	132.00						
Palestinian Refugee Camps	1	3.00						
Agricultural & Industrial Production	2	34.00						
Total	21	536.15						

Source: MOF, Credit Libanais Economic Research Unit

The Stockholm Conference for Lebanon's Early Recovery involved 40 governments and 20 international institutions, allowing Lebanon to secure pledges of just above \$896 million in grants and soft loans. As the bulk (nearly 87%; i.e. \$776.24 million) of the concerned pledges came in the form of grants, Lebanon benefited from a new source of financing without having to further swell its public debt and budget deficit figures.

Stockholm Conference - Breakdown of Pledges by Type



Source: MOF, Credit Libanais Economic Research Unit

As for the sources of funds, Qatar topped the list of donor countries to Lebanon under the Stockholm Conference with a \$300 million pledge (33.46% of the total pledged amounts), followed, and at quite a distance, by the Arab Fund of Economic and Social Development (\$114.11 million <12.73%>), the United Arab Emirates (UAE) (\$70.00 million <7.81%>), and the Kingdom of Saudi Arabia (\$60.00 million <6.69%>), only to name a few.

Stockholm Conference - Pledges by Donor						
Donors	Amounts Pledged (\$ Million)	Contribution				
Qatar	300.00	33.46%				
Arab Fund of Economic						
and Social Development	114.11	12.73%				
UAE	70.00	7.81%				
KSA	60.00	6.69%				
EC	54.85	6.12%				
USA	53.40	5.96%				
EC-ECHO	38.27	4.27%				
Italy	38.27	4.27%				
Spain	34.44	3.84%				
Germany	28.06	3.13%				
France	25.22	2.81%				
Sweden	20.00	2.23%				
Others	59.95	6.69%				
Total	896.56	100.00%				

Source: MOF, Credit Libanais Economic Research Unit

It is worth noting that an additional \$800 million in financial aid were also granted to the Republic of Lebanon by the Kingdom of Saudi Arabia and Kuwait, yet are not included in the above-mentioned \$896.56 million reading.

iv. The Paris III Conference9

The Paris III Conference was convened on January 25, 2007 in the presence of prominent Lebanese, Arab, French, and European officials and the participation of 36 countries and 7 regional and international institutions from around the globe. Lebanon managed to secure around \$7.53 billion in pledges from 38 different countries and institutions under the Paris III convention, the vast majority of which (75%) taking the form of loans and the remaining (25%) being grants.

Of the \$7.53 billion pledged amount, only \$3.70 billion were effectively received by Lebanon as of December 2009, while \$5.87 billion were signed in the form of agreements. \$3.48 billion of these pledges were destined for project financing, while \$1.74 billion were geared towards budgetary support for the Lebanese government, \$1.46 billion were allocated to support the private sector, and \$362 million came in the form of in-kind contributions. Concurrently, \$334 million were reserved for support through the United Nations, while \$104 million were dedicated for support through civil society organizations, \$43 million for support through Banque Du Liban, and the remaining \$12 million being under review. This is further sketched in the following table:

⁹ The Lebanese Ministry of Finance, "International Conference for Support to Lebanon – Paris III – First Progress Report", April 2007

The Lebanese Ministry of Finance, "International Conference for Support to Lebanon – Paris III – Eleventh Progress Report", December 31, 2009

Pledges Under Paris III by Type of Support							
(\$ Million)	Pledged	Signed	Received				
Budget Support*	1,737	2,134	1,610				
Banque Du Liban	43	43	43				
Project Support	3,479	1,382	265				
In Kind	362	328	304				
Private Sector Support	1,463	1,536	1,029				
Support Through the UN	334	338	336				
Support Through Civil Society Organizations	104**	111	111				
Under Review	12	-	-				
Total	7,534	5,872	3,698				

^{*} Includes Malaysia debt transaction for \$500 million

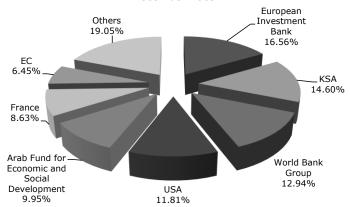
As for the source of pledges under the Paris III summit, the European Investment Bank detained the lion's share (16.56%; i.e. \$1.25 billion) of total pledged amounts as of December 2009, followed by the Kingdom of Saudi Arabia (\$1.10 billion <14.60%>), the World Bank Group (\$975 million <12.94%>), the United States (\$890 million <11.81%>), and the Arab Fund for Economic and Social Development (\$750 million <9.95%>), only to name a few. The section below sheds light on the value of pledges and signed grant and loan agreements by donor country/institution at end of December 2009:

Signed Grant a	nd Loan Agreen			
Donor	Total Pledged	Grants Signed	Loans Signed	Total Signed
European Investment				
Bank	1,248	-	961	961
KSA	1,100	100	-	100
World Bank Group	975	-	475	475
USA	890	770	260	1,030
Arab Fund for				
Economic and Social				
Development	750	-	442	442
France	650	-	599	599
EC	486	281	65	346
UAE	300	-	300	300
Islamic Development				
Bank	250	5	245	250
Arab Monetary Fund	250	-	375	375
Italy	156	60	-	60
Germany	134	74	21	95
IMF	77	-	114	114
Spain	53	59	-	59
Egypt	44	15	-	15
UK	35	35	13	35
Belgium	26	13	-	26
Turkey	20	20	-	20
Canada	17	11	-	11
Norway	15	15	-	15
Oman [']	10	10	-	10
Malaysia	-	-	500	28
Others	47	28	-	500
Total	7,534	1,496	4,370	5,872

Source: MOF, Credit Libanais Economic Research Unit

^{**} The initial pledge by Canada was a total of \$17 million, which included \$13 million for UN agencies and \$4 million in grant to government for project finance. The grant to government did not materialize; therefore the government of Canada reallocated the pledged amount to benefit civil society organizations (CSOs), which explains the increase in pledged amount to CSOs. Source: MOF, Credit Libanais Economic Research Unit

Main Sources of Pledged Funds Under Paris III as of December 2009



Source: MOF, Credit Libanais Economic Research Unit

It is worth noting that some additional \$12 million were pledged by Jordan, Luxembourg, and Portugal, with said pledges remaining, however, under review as of December 31, 2009.

II. INTERNATIONAL CASE STUDIES

A. The Case of Ireland¹⁰

After a seven-year expansion period (with GDP growth averaging 6.05% over the 2000-2007 period), the Irish economy attained its peak during the year 2002, with labor productivity starting to slow down. In parallel, the Irish economy had become increasingly exposed to the real estate sector, with government revenues mainly stemming from taxes levied on the property market and banks' loan portfolio concentrated in the same sector. The pale economic performance translated into a slump in real estate activity in the year 2008, lowering government revenues. Despite the dwindling revenue receipts, Ireland continued to increase its public expenditures, in an endeavor to stimulate economic growth, the thing which led to a widening budget deficit. As delinquencies in the real estate sector started to increase, the Irish banking sector's asset quality deteriorated and accordingly banks found it more and more difficult to borrow from money markets, especially in the light of the dried-up liquidity in financial markets amid the global financial crisis. In order to address this dilemma, the government resorted to the issuance of blanket guarantees and to the recapitalization of banks using public funds. These measures proved costly, however, with the government's structural budget deficit increasing continuously (with the deficit to GDP ratio reaching 6.32%, 12.35% and 29.73% during the years 2008, 2009 and 2010 on a respective basis). As a result, the government's debt ballooned (with the debt to GDP ratio increasing from 23.93% in 2007 to 86.80% in 2010), making it much harder for the country to tap international lending to fund its deficits.

In the year 2010, the Irish government entered into a financial assistance program with the IMF and the Euro zone amounting to 85 billion euros (increasing the country's debt to GDP ratio from 86.80% in 2010 to 109.30% in 2011 and 120.24% in 2012), subject to the implementation of structural reforms. The program pivoted around three main pillars, namely improving the capitalization of the Irish banking sector, more sustainable public finances, and spurring economic growth. This has led to a reduction in Ireland's cost of debt and an increase in its tenor. As a result of the financial assistance program, Ireland witnessed an increase in economic growth and an improvement in some key economic indicators and was able to regain investors' confidence in the economy (with GDP growth rebounding to 5.20% in 2014 and 7.81% in 2015 after averaging -2.47% over the 2008-2010 period).

B. The Case of New Zealand¹¹

New Zealand suffered from a sharp increase in its debt burden and budget deficit levels in the 1980s, with public debt and budget deficit reaching 71% and 5% of GDP respectively in 1985. The economy continued to witness the same trend in the early 1990s, with public debt levelling at 62% of GDP in the 1991-1992 period and primary budget deficit amounting to 2.5% of GDP in the year 1991, prompting the international rating agency Moody's Investors Service to downwardly revise the country's foreign currency credit rating from AAA to AA-.

In the year 1991, the government implemented some serious measures to trim down high public debt levels and ensure a budget surplus in the country. In order to achieve this goal, the government embarked on reducing public expenditures by cutting spending by 7% of GDP. In addition, the government significantly lowered the debt servicing cost from 4% of

 $^{^{10}}$ European commission, "Ireland's economic crisis"

¹¹ World Bank, "Reducing Public Debt: New Zealand"

GDP in 1990 to around 1% of GDP in 1996 by reducing interest rates from an average of 15.5% in the 1986-1991 period to less than 7.6% in the 1992-1997 period. Furthermore, the government launched a privatization program in 1988, which generated some NZ 14 million to the country by the year 1996. Concurrently, the government conducted a reform program which entailed the adoption of a new monetary policy to bring the inflation rate down to 1.9% during the 1992-1997 period from 8.3% during the 1986-1991 period.

The combined result of the aforementioned tools was a reduction in New Zealand public debt to around 17% of GDP by the year 2007. Nevertheless, the country saw its public debt escalate again at the onset of the 2008 financial crisis, with New Zealand's public debt reaching 31% of GDP in 2010.

C. The Case of Italy¹²

In order to reduce total gross public debt, the Italian Treasury entered into a swap with the central bank in the year 2002 "whereby the Treasury bought back long-term bonds with a low coupon in exchange for a smaller amount of bonds with a much higher coupon". As a result, the Italian Treasury reduced its outstanding debt, yet increased its debt servicing (i.e. higher coupon).

D. Heavily Indebted Poor Countries Initiative and Multilateral Debt Relief Initiative¹³

The Heavily Indebted Poor Countries (HIPC) initiative saw the light in the late 1990s by a group of Western developed countries and pertinent international institutions such as the IMF and the World Bank to help support the world's poorest countries by eliminating part (or all) of their multilateral public debt. Monies used to refinance said debt would accordingly be geared towards social spending and poverty reduction. The Multilateral Debt Relief Initiative (MDRI) was later launched in the year 2005 as an extension to the HIPC, granting a list of the poorest countries the full cancellation of their multilateral debt to the IMF, World Bank, and African Development Bank. In this context, and under the HIPC and MDRI, 41 of the poorest and most heavily indebted countries (33 of which being located in Sub-Saharan Africa) are currently entitled to a cancellation of their debt.

E. Sale of Gold Reserves

In an attempt to reduce their external debt stocks, some countries have resorted to selling a portion of their official gold reserves, with prominent cases including Belgium (which sold part of its gold reserves on five occasions between 1989 and 1998)¹⁴ and Venezuela (with noticeable sale of gold being recorded since mid-2015¹⁵, dragging the country's total reserves to their lowest level since 2003 as at November 2015¹⁶). Nevertheless, and subsequent to the 2008 global financial crisis, the gold commodity regained its status as a safe haven investment and an anchor to a country's monetary system, prompting central banks across Europe to avoid selling their gold reserves and central banks around the globe to further expand theirs.

¹² OECD, "Fiscal Gimmickry in Europe: One- Off Measures and Creative Accounting"

¹³ World Health Organization, "Are current debt relief initiatives an option for scaling up health financing in beneficiary countries?"

¹⁴ Investment Watch Blog, "Belgian Central Bank Says 25 Tons or 10% of Gold Reserves on Loan", May 2013

¹⁵ Kitco, "Venezuela's Woes Weighing on Gold", March 2016

¹⁶ CNN Money, "Venezuela is Shipping Gold to Pay Debt", February 2016

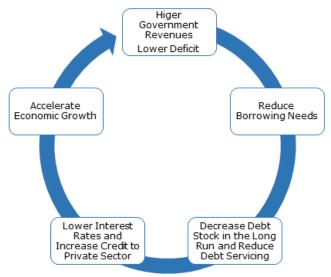
III. REFORM MEASURES

A. Trapped in a Vicious Circle

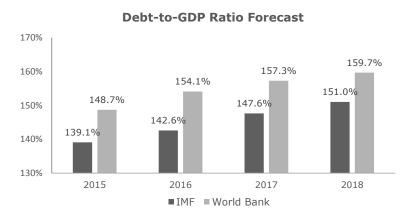
The post-war Lebanese economy has witnessed persistent fiscal problems and external imbalances, not to mention the social and political disparities. In the same context, high public indebtedness has plagued the economy since the mid-1990s, and the economic policies undertaken by the successive governments have in many aspects fallen short of expectations. For the past two decades or so, Lebanon suffered from recurrent budget deficits resulting in increased borrowing needs and consequently higher debt servicing as illustrated in the below diagram:



Several scholars and policymakers have approached the high debt burden by proposing potential remedies ranging from tax reforms, increasing value-added taxes, expenditure rationalization, privatization, debt management and restructuring, etc. In fact, they contend that once the right reforms are set forth, it will be possible for the economy to reverse the current vicious circle of debt and debt servicing and embark in a virtuous circle of financial reform. The latter would be characterized by a decrease in the government's deficit, which will lead to a simultaneous drop in the need for borrowing, hence curb the pace of growth in public debt and debt servicing in the long run. It is believed that once public sector borrowings are reduced, credit to the private sector would increase driven by a lower interest rate environment, hence accentuating economic growth, which will again curb the deficit and lower public debt, as sketched hereunder:



Furthermore, and in the absence of any reform measure, Lebanon could remain trapped in the current static economic environment where the debt burden continues piling-up and debt service straining the public finances, resulting in growing the proportion of debt-to-GDP. This can be reflected by the World Bank and IMF forecast for Lebanon, in which they both foresee a substantial increase in the country's indebtedness as a proportion of GDP over the 2016-2018 period as portrayed in the chart below. These figures factor out any fiscal reforms during the forecast horizon.



Source: WB, IMF, Credit Libanais Economic Research Unit

Moreover, the extravagant public debt is weighing negatively on Lebanon's sovereign rating and outlook, with pertinent rating agencies such as Standard & Poor's, Moody's Investors Service, and Fitch Ratings changing the country's outlook to "Negative" in recent years as illustrated below:

Republic Of Lebanon Sovereign Ratings							
Rating Agency Tenor Rating Outlook							
Standard & Poor's	Long-Term Short-Term	B- B	Negative				
Moody's Investors Service Ltd.	Long-Term	В2	Negative				
Fitch IBCA Ltd.	Long-Term Short-Term	B B	Negative				

Source: Moody's Investors Service, Standard & Poor's, Fitch Ratings

In fact, these agencies have stressed that Lebanon's rating could be downwardly revised in the event of a larger-than-expected deterioration in the nation's public finance indicators amid the slump in government revenues, the strained domestic political situation, the prolonged crisis in Syria and the threats of lower remittance inflows from GCC countries¹⁷.

B. Possible Remedies

This section enumerates the possible remedies that can be considered by the Lebanese government to either lower public debt or contain the pace of growth in the budget deficit:

¹⁷ World Bank, "Lebanon Economic Monitor: A Geo-Economy of Risks and Reward" report, 2016

i. Privatization

By definition, privatization is the process by which the management or ownership of a public entity is transferred, partially or completely, to the private sector. In Lebanon, public sector assets are greatly mismanaged with some of them being dreadfully costly, such as the EDL, which has been consuming about half the government's revenues. This has prompted many scholars and economists to recommend privatizing some of the public sector entities with the objective of sparing the government sizeable expenses and additional debt.

Privatization has been long-debated in Lebanon, and several international agencies and conventions mainly Paris I, II and III have urged the Lebanese authorities to embark in the privatization process, which could cover cell phone operators, the local airline company, Electricité Du Liban, the Tobacco Company, and Casino du Liban. In fact, privatization should be a major component of the government's reform program, as it is crucial to both the objective of stimulating growth and that of reducing debt stock and consequently lowering debt servicing. It would also contribute to the expansion of Lebanon's capital markets through the potential launch of IPO activities, which would be highly beneficial to the Beirut Stock Exchange. The privatization program is anticipated to enhance the reliability and quality of the previously offered public services, expand the array of services offered to customers, reduce the cost of services to businesses, introduce competition, and thus improve the competitiveness of the economy. In December 2002, the government estimated the proceeds from the sale of the telecommunication and energy sectors¹⁸ at \$1 billion per year over the 2003-2004 period. In February 2003, the Lebanese Ministry of Finance projected some \$3 billion in proceeds from the privatization of the two mobile networks, and in March of the same year, the IMF projected total privatization proceeds to attain \$3.2 billion, out of which \$1 billion would be allocated to the energy sector's power and distribution operations, as compared to a \$5 billion target set by the government. In October 2005, and according to the Lebanese Ministry of Finance, the privatization of the two mobile networks and Middle East Airlines was estimated to generate some \$2 to \$3 billion. Later in November 2007, an equity research report drafted by Credit Suisse estimated proceeds from the privatization of each mobile license to range between \$2.4 billion and \$3.4 billion.

The privatization program can attract foreign direct investment, reduce public debt, and promote economic growth. The proceeds from the sale of the state-owned utilities can be used to pay back a portion of the public debt stock, hence reducing the debt servicing cost and financing needs. In addition to the sale proceeds, privatization of public enterprises such as EDL would put a limit to the financial drains of state-owned companies that have put a strain on the public treasury. The bottom result of successful privatization efforts is a reduction in interest rates, an increase in employment rates, a more active involvement of the private sector, and consequently an acceleration in economic growth.

However, the implementation of privatization in Lebanon has been postponed on several occasions amid the several rounds of hostilities, political instabilities, and lack of consensus from different political factions, added the most recent instabilities in the region and the global recessionary environment. This reform tool may not be appropriate to consider at the time being (except for the electricity company) as it would result in an undervaluation of offered public sector assets for sale when embedding country risk. Privatization would be successful only if real competition, transparency and accountability are guaranteed.

. .

¹⁸ Privatization Barometer 2008-2009 Reports

The Lebanese authorities established the Higher Council for Privatization (HCP) under the Law 228 in the year 2000. HCP is the authority responsible for planning and implementing privatization programs and their relevant operations. As a part of the privatization efforts, a Telecommunications Regulatory Authority (TRA) was created and has been entirely functioning with a mandate of supervising the proper governance laws in the telecommunications sector.

The Case of Electricité Du Liban

The privatization of the electricity sector is deemed a priority given its severe permanent supply shortage relative to the growing demand. This problem escalates further during the summer seasons when the supply gap widens as a result of the increased demand for electricity. During the postwar period, the government's investments were particularly aimed at overhauling the already damaged power plants, which crowded-out investments geared towards upgrading the network, leaving as such citizens to suffer from prolonged power outages and prompting them to seek substitutes for power generation such as power generators, uninterrupted power supplies ("UPS"), etc. Furthermore, the total investment in the electricity sector reached only \$1.6 billion from 1992 to 2009¹⁹ (with a capital expenditure of only \$50 million from 2002 to 2008) while the subsidy for the same period was \$6.4 billion (EDL).

According to a study published by the Ministry of Energy and Water in 2010, EDL operations are characterized by high inefficiencies, noting that the company is incurring substantial losses which are financed from the government's budget. Transfers to EDL have been a major drain on public finances, with the government transfers to EDL reaching \$10.45 billion between 2010 and 2015, with that amount skyrocketing to \$16.85 billion over the 1992 -2015 period, accounting for 23.96% of gross public debt at end of year 2015 as shown in the table below.

Tranfers to EDL \$ billion							
1992 until 2009	2010	2011	2012	2013	2014	2015	Total
6.40	1.19	1.74	2.26	2.03	2.09	1.13	16.85

Source: MOF, EDL, Credit Libanais Economic Research Unit

Moreover, a study conducted by the Ministry of Energy and Water revealed that Lebanon's electricity transmission and distribution losses were estimated at 40% of electricity production in the year 2009 (i.e. \$300 million), broken down into technical losses (15%), non-technical losses (20%), and uncollected bills (5%). The study also quantified the indirect financial burden on the government and the economy, which includes the opportunity cost from private generators and the cost of energy not supplied, at \$2.44 billion in 2009 alone and the direct cost from subsidies at \$1.5 billion.

Thus, and according to the same study, the government should pursue the implementation of long-lasting plans to improve generation capacity and shift to less expensive natural gas, noting that several power plants were originally designed to function on natural gas. The enhancement of transmission and distribution would also assist in reducing business and consumption costs. Concurrently, a reform would ensure equitability in the distribution of electric power across the different Lebanese regions. Most importantly, an electricity tariff adjustment that would bring electricity tariffs in line with current oil prices (given that the current electricity bill is based on a per barrel oil price of circa \$21) would increase generated revenues and reduce as such the burdensome size of transfers to EDL from the budget.

¹⁹ Ministry of Energy and Water

In the event the government foregoes the privatization of EDL, the aforementioned reforms are compulsory to contain the losses borne by the economy, improve public finances, and curb the pace of growth in public debt.

ii. Public-Private Partnerships

As an alternative to privatization, Public-Private Partnerships can be an effective solution to Lebanon's ailing public finances to what it can add in benefits of efficient private sector involvement. PPPs would allow the public sector to retain control over the asset at the end of the PPP contract, waiving as such one of the most important shortfalls of privatization, the thing which would ensure a wider political consensus.

The implementation of Public-Private Partnership schemes would reflect positively on the economy in terms of improving efficiency, limiting corruption, attracting foreign investments, enhancing private sector participation, creating new job opportunities and subsequently accentuating GDP growth. Embarking aggressively on a set of PPP projects could bring upon a domino effect on public finances through fueling government revenues, increasing efficiency, and trimming expenditures, paving as such the way for the government to tackle its crippling debt burden. In details, PPPs would generate additional income to the government, ease the deficit and reduce the borrowing needs to finance its expenditures.

Public-Private Partnership schemes would also help improve the quality of public services through allowing for private sector management of said enterprises. Concurrently, lower levels of job security and better work-related incentives, which are key characteristics of private sector jobs, would foster a more competitive working environment lured by motivation and incentives for creativity. Potential successful PPP candidates in Lebanon are the same for privatization, mainly including the electricity sector, the provision and operation of transport facilities (including roads contraction and public transport), the water sector, MEA, and the telecommunication sector. In fact, the mobile network in Lebanon was initially structured under a build-operate-transfer (BOT) agreement back in 1994, yet is operated at present under the provisions of management contracts with the current network operators. It is worth noting, however, that the economic impact of the implementation of PPPs depends on the entity chosen to overhaul.

The framework law for the Public-Private Partnerships (PPPs) has been long-delayed as it has been awaiting parliamentary consensus for nearly three years.

In the light of the recent discovery of oil and gas reserves in the Lebanese offshores, the oil and gas sector shows a real potential for the establishment of a successful PPP in the near future.

The Case of Oil and Gas Decrees

First and foremost, Lebanon could tap its recently discovered wealth of offshore oil and gas reserves in an endeavor to tackle its weak public finances and alleviate the debt burden. It is worth highlighting, in this context, that the Credit Libanais Economic Research Unit had previously issued a publication titled "Oil & Gas Sector: A New Economic Pillar for Lebanon" in which it estimated the impact of the exploitation of said hydrocarbon reserves on the Lebanese economy. We have updated some of the assumptions of this research paper to adjust for the drop in oil prices and for the four-year delay in the extraction process due to

the inability of the government so far to pass the required laws. According to our new estimates, Lebanon can generate some \$1.85 billion in government revenues from its hydrocarbon reserves in the year 2021 (assuming extraction kicks-in in 2021), with this figure increasing gradually to \$3.66 billion by the year 2040.

iii. Expenditure Rationalization

In order to attain long-run fiscal sustainability, the government is required to rationalize investment spending, focus on social and regional development programs, and enhance the administrative efficiency of expenditure management. Nevertheless, expenditure rationalization has been hard to accomplish in Lebanon given the government's failure to pass a budget law proposal note since 2006. Political paralysis amid the presidential void since May 2014 explains the current status quo.

The government is also required to strengthen capacity building for the macro-fiscal department, improve the transparency and accountability of public accounts, and enhance cash management. As a result of the absence of budget law proposal for more than a decade and the decaying Lebanese statistical system, the application and the estimation of expenditure rationalization is not possible for the short run.

iv. Fiscal Reforms

Lebanon's current tax system relies heavily on indirect taxation, primarily the value added tax (VAT) and taxes on consumption. In 2015, value added tax revenues and customs tax revenues (\$3.46 billion) constituted 50.56% of total government revenues (\$6.85 billion)²⁰, with the share of income tax revenues being 27.95% (\$1.92 billion).

While the obvious solution would be to raise taxes in order to improve revenues and consequently reduce the budget deficit, bearing in mind that the government discussed at several occasions the possibility of raising the VAT from 10% at present to 12% and then 15%, in addition to raising the tax on interest income from 5% to 7%, we believe that said solutions will be counter-productive. In details, and taking into consideration the current stagnating economy, raising the VAT would further curtail consumer spending, reducing as such VAT revenues and further slowing economic growth. Similarly, raising the tax on interest income form 5% to 7% would have a negative impact on pensioners relying on interest income and would reduce the appeal of investing in Lebanese Treasury bills and certificates of deposit.

In this perspective, we suggest an increased focus towards fighting tax evasion and improving tax collection through the further deployment of e-government in Lebanon (as with the case of the built-up property tax, the water bill, etc.).

As a prerequisite to improving tax collection, the Lebanese authorities should strive to improve the statistical system by publishing timely, accurate, and reliable data that enhance accountability and transparency.

_

²⁰ Ministry of Finance

v. Financial Engineering Schemes

Similar to the case of Italy previously discussed in this paper, Lebanon can consider numerous rounds of financial engineering schemes to alleviate the financial burden of its piling public debt. The year 2016 already witnessed the structuring of a financial engineering tool under the provisions of which the Central Bank of Lebanon gave Lebanese banks the opportunity to subscribe in the newly issued (\$2 billion) ROL Eurobonds and consequently benefit from the discounting of their Lebanese pound denominated treasury bonds at attractive rates. Said operation would reduce the average interest rate on domestic currency bonds from 7.53% to 6.59% on the new bonds and would extend the average debt maturity on domestic currency bonds from 7.92 years to 9.89 years for the Eurobonds, without altering neither the value of the public debt stock nor the Central Bank's stake in the public debt. Subsequent to this transaction, the Lebanese public debt would be 59% denominated in domestic currency and 41% in foreign currency, compared to around 62% and 38% respectively prior to this scheme.

The Central Bank could continue to implement similar financial engineering schemes that would lower the government's cost of borrowing and improve public finances.

CONTACTS

RESEARCH

Fadlo I. Choueiri, CFA fchoueiri@cl.com.lb 961-1-608 000 Ext. 1280 Mayda Zaarour mzaarour@cl.com.lb 961-1-608 000 Ext. 1282 Jad Abi Haidar jabihaidar@cl.com.lb 961-1-608 000 Ext. 1283 Joelle Samaha jsamaha@cl.com.lb 961-1-608 000 Ext. 1281 Joanna Gergi joannagergi@cl.com.lb 961-1-608 000 Ext. 1284



This economic research publication has been prepared by the economic research unit at Credit Libanais SAL on the basis of published information and other sources which are deemed reliable. It is intended for limited use only and its re-distribution without the prior written consent of Credit Libanais is strictly prohibited.

Credit Libanais does not make any warranty or representation, expressed or implied, as to the accuracy or completeness of the materials contained herein. Neither the information nor the opinions expressed herein constitute, or are to be construed as an offer or solicitation of an offer to buy or sell investments. Opinions and data expressed herein may be subject to change without prior notice.