AMERICAN UNIVERSITY OF BEIRUT

MISMANAGEMENT AND POOR STRATEGIES, THE ROOT OF CORRUPTION. A WAY OUT OF THE CRISIS

by

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ABSTRACT
OF THE THESIS OF

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Over the years, Lebanon did not live up to its expectations and descriptions. Since the 1990's, corruption, branched in diverse ways, like mismanagement of policies, government resources, expenditures, and possible revenues have drastically hurt the Lebanese economy. The governmental fiscal and monetary policies have been subpar and inefficient. Moreover, the strategies and mismanagement of the country's financials and resources have also played its fair share in corruption. This paper studies these ideas and proposes a methodical way out of this crisis.

This paper was written in the last quarter of 2022 and presented in January 2023.

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INTRODUCTION

Lebanon. The 10,452 Km², the Switzerland of the east, the home of co-existence, the land of cultures, the phoenix of the Middle East. A phoenix is a representation of resurrection, resilience, and strength.

Lebanon has been a truly remarkable economic phenomenon. It has defied all economic basis and theory we have deeply studied over the years. The same has been evident ever since the start of the Second World War.

In the mid 1900's and after the independence, Lebanon's history has been marked with a period of economic and political stability and prosperity. Beirut was a hub for regional trade and a center for maritime economy. Beirut quickly grew to attract the eyes and money of wealthy tourists and was truly one of the strongest westernized countries in the Middle East. It is worth noting that the banking sector was a pillar of the Lebanese economy ever since the 1950s and 1960s.

Lebanon did not get to enjoy its prosperous times for long. In the late 1960's and with the start of the Arab Israeli war, Lebanon quickly became a field to serve these tensions. Soon after the Lebanese civil war was set off, lasting from 1975 until 1990, these challenging times were accompanied by more outer intervention and interferences with the Israeli and Syrian entries. By the early 2000s, all foreign troops were finally out of Lebanon. The country can now look forward to becoming independent, and at peace once again.

But how hard would that be? It is quite challenging for a small, 10,452 km2 country to go through all this in only two decades. Even after the civil war, Lebanon has

had its fair share of problems, serial assassinations, a big war in 2006, and the repercussions of a war declared in its bordering country, Syria in 2011. Historically speaking, Lebanon has not had a fair chance at a re-rise, the phoenix's wings were quite damaged this time.

However, one cannot deny that there were high hopes and expectations for Lebanon. With a strong banking system, fascinating touristic sector and solid field for finance and trade, in theory, Lebanon had all it needed, to rise from the ashes and become a stable and prosperous country.

However, these expectations were not met. Since the 1990's, corruption, branched in diverse ways, like mismanagement of policies, government resources, expenditures, and possible revenues. These have drastically hurt the Lebanese economy. Fast forward a few decades, in 2019, following a perfect storm crisis, mainly characterized by a depreciation of the exchange rate, severe hyperinflation, deterioration of purchasing power, and a sudden stop in capital inflows, the low LBP/USD rate has not been used to increase local production contributing to an unstable monetary policy. Instead, the country is still facing a severe and continuous depreciation. Policies that are put in place do not show effectiveness and efficiency, the allocation of the country is not generating favorable results and an excessive waste of resources and money is noticeable. The negative and strong decline of the Lebanese GDP over the past half-decade shows that all the above-mentioned characteristics have been building up for the crisis and harming the country's economy.

The government policies and strategies related to expenditure, economic plans, and nation-wide strategies had many gaps. In addition to that, flaws in budgeting, fiscal and monetary policies contributed to the corruption and worsened it.

It is worth exploring: *how did miss management nationwide policies and strategies feed into the Lebanese corruption? How to plan the reshape of Lebanon?*

This paper will be structured as follows:

The second chapter of this paper will be a Macroeconomics overview of the country since the 1990s.

The third chapter will focus on policies, budgets, and strategies. We try to explore all financial inconsistencies, fiscal and monetary policies in addition to government strategies and relate them to the actual financial state of Lebanon and the root of corruption that has been present over the past few decades.

Due to the lack of accurate data in Lebanon, our study will use macroeconomic components available for Lebanon to study the way the corruption, and financial inconsistencies have been major catalysts for the crisis. As well as indicators such as the Social Expenditure Monitor (SEM), Multidimensional Poverty Index (MPI), which show the dimension of poverty and weak links causing poverty in specific areas. This is mainly to highlight the inconsistency between the government's policies and e

Expenditure, and their less-than-optimal outcome.

Second to last, in our fourth chapter, we find a methodical viable way out of the crisis, with strict reforms and a five-year detailed recovery plan.

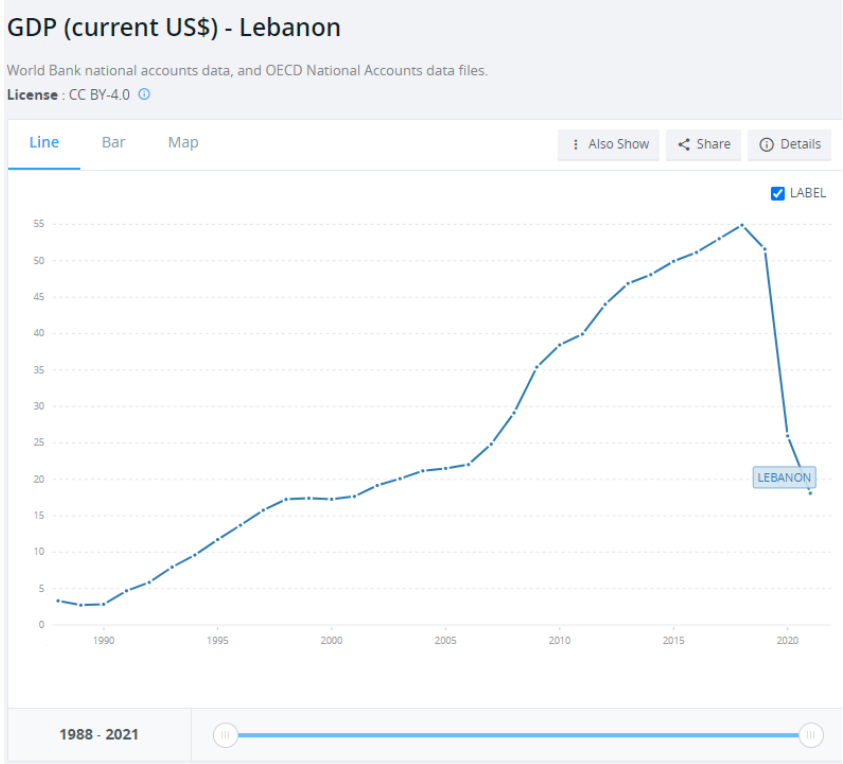
Finally, chapter Five will give a brief conclusion and some policy advice.

CHAPTER II

MACROECONOMIC OVERVIEW

A. GDP

First let us start by looking at the most basic macroeconomic component of a country, its expenditure. Since the ninety's, Lebanon has been in what looks like the expansionary part of its business cycle according to the below graph. Starting with a shy 5 billion USD around the times of conflict in Lebanon, the GDP rose to 20 billion USD in the early 2000's and reached 55 billion USD in 2018, its highest to date. Right after that, the Lebanese GDP started plummeting. In less than 2 years, until 2020, the GDP has more than decreased by 50% reaching a low of 18.5 billion USD in 2021, a level that erased the past 20 years of expansion.



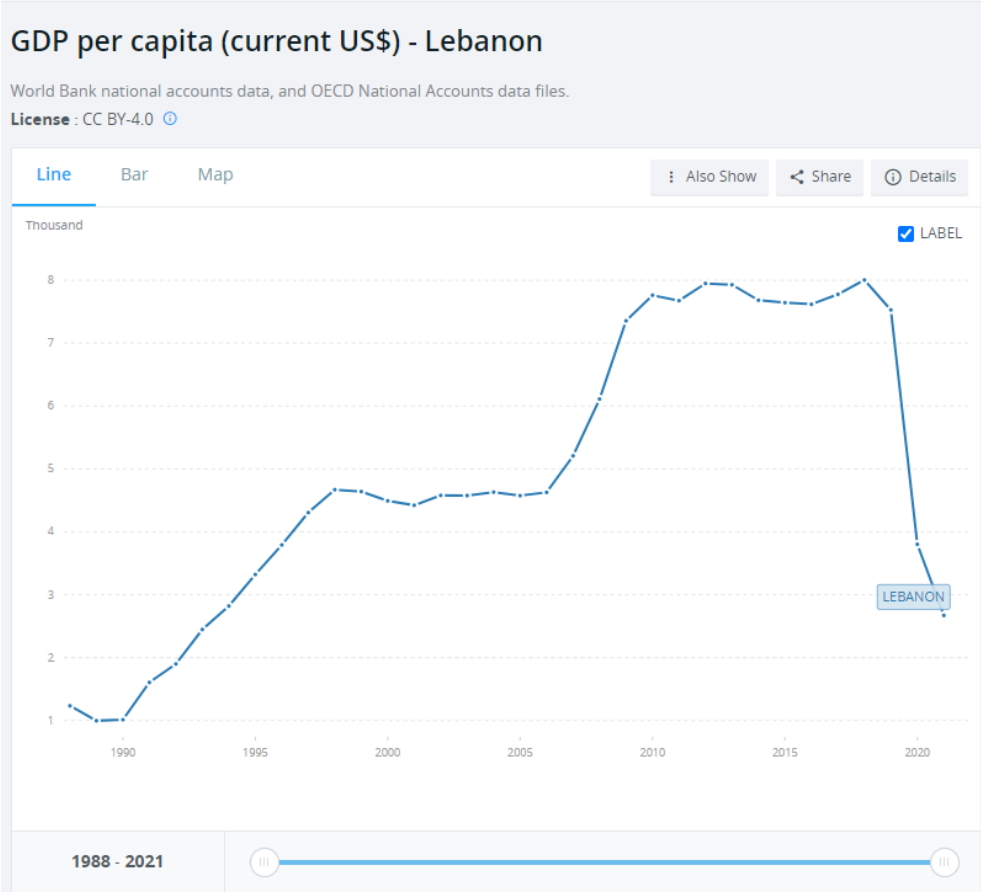
Source: World Bank, 2022

Figure 1. GDP (current US$)- Lebanon

B. GDP Per Capita

GDP is a particularly vital component to study. However, it is a little vague, how do we know how much is too little, or how much is just enough? A straightforward way to do so is to look at GDP per capita which shows how much of this expenditure is allocated for each person.

GDP per capita of Lebanon follows a similar trend to GDP. The dominating trend, in the below graph, is mostly a positively growing one until 2018, with some periods of stability instead of growth. Also, like the GDP, the GDP per capita takes a strong hit and decreases by more than 65%.



Source: World Bank, 2022

Figure 2. GDP per capita (current US$) - Lebanon

C. Inflation

Beirut has always been one of the most expensive cities in the world. However, the inflation rate in Lebanon has rather been stable at less than 5% until 2019. All of this changed with the depreciation of the currency, the inflation rate jumped from a mere 5% to an explosive 160%. It is also believed that actual inflation is higher than the reported one. That is because reported inflation still takes into consideration all the subsidized goods. This notion is quickly changing, since by the end of 2021, the subsidies over energy goods were lifted, increasing the price of production, hence making everything exponentially more expensive.

Source: World Bank, 2022

Figure 3. Inflation, consumer prices (annual %) - Lebanon

D. Unemployment

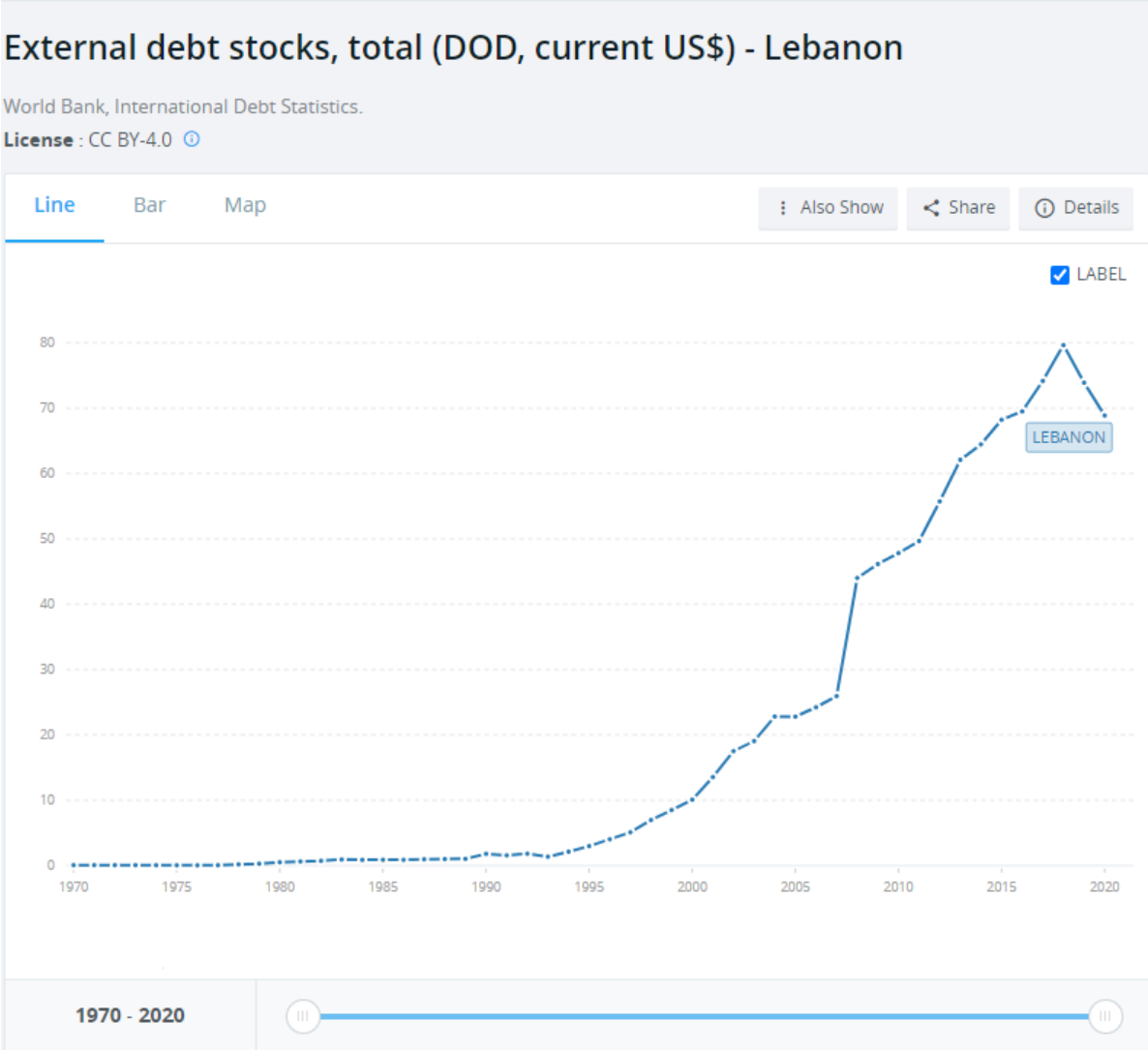
Unemployment is an indicator that can truly express the shape of the economy we are studying whether in a steady state or not. Lebanon has always had a problem of unemployment, being around 8.5% until 2009. There was a small drop in 2008 around the financial crisis. It is believed the government was benefiting from the depreciation of the USD by accumulating the same, to keep the LBP at a fixed exchange rate and the currency from appreciating. After that, unemployment was strictly increasing, even before the 2019 crisis. Around that date, a sharp and steep increase is noted. It is now estimated that Lebanese unemployment rate is around 15%. However, it is believed that this number is strongly underestimated. A major reason for this would be the massive outflow of skilled laborers due to the lack of decent job availability, this reduces the labor force hence reducing unemployment rate. (World Bank, 2022)

Source: World Bank, 2022

Figure 4. Unemployment, total (% of total labor force) (modeled ILO estimate)Lebanon

E. Debt

Lebanese debt has always been one of the most critiqued components of the economy. The debt has always had a sharply rising trend. We notice a small drop around 2020, and that would solely be due to the default on our Eurobonds.

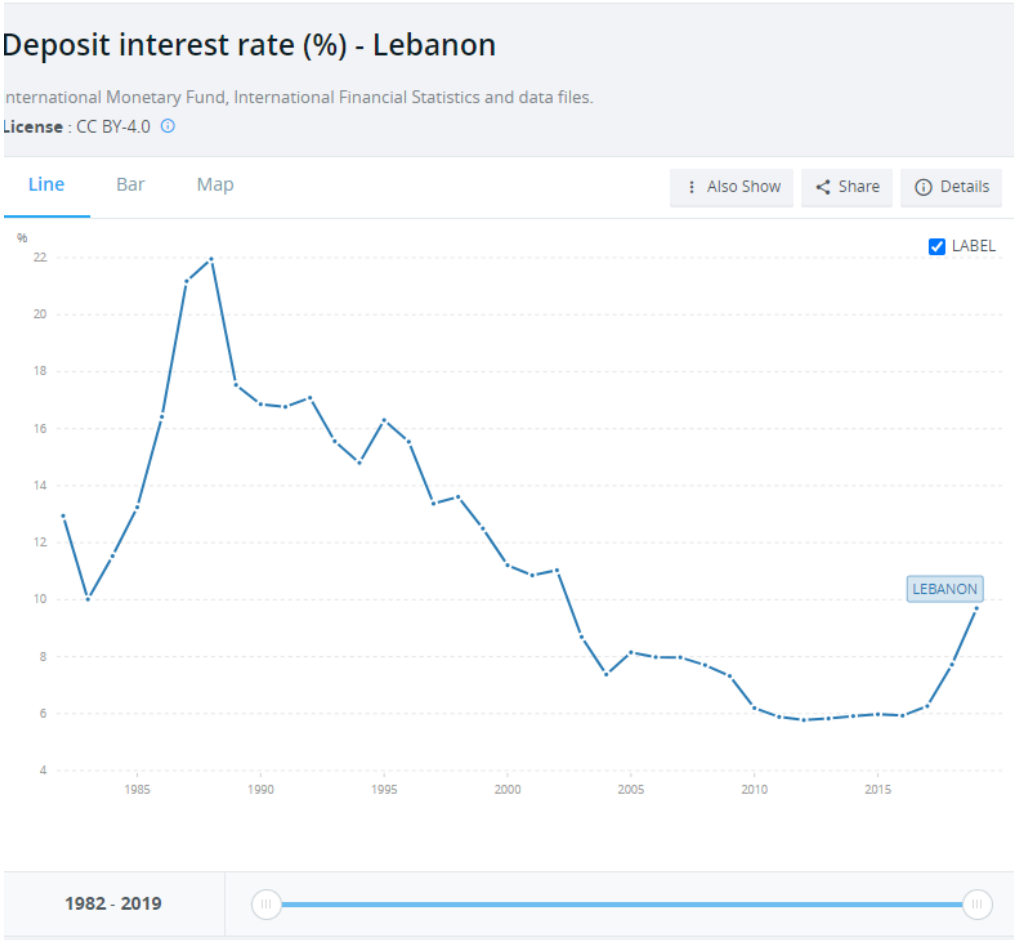


Source: World Bank, 2022

Figure 5. External debt stocks, total (DOD, current US$) - Lebanon

F. Interest Rates

The interest rate in Lebanon fluctuates quite a bit. It is high in times of wars and conflicts (1990's) and gets lower in times of prosperity (early 2000's). After the war, the country's interest rate started following a less volatile trend, staying between the bracket of 6-8%. The interest rates increased exponentially around 2017, despite no wars, conflicts, sharp increase in inflation or any economic explanation behind the need of the central bank to decrease money demand. This has tipped off many economics savant people that something was off, these interest rates were a trap. These worries were validated when the 2019 crisis occurred. (World Bank, 2022)

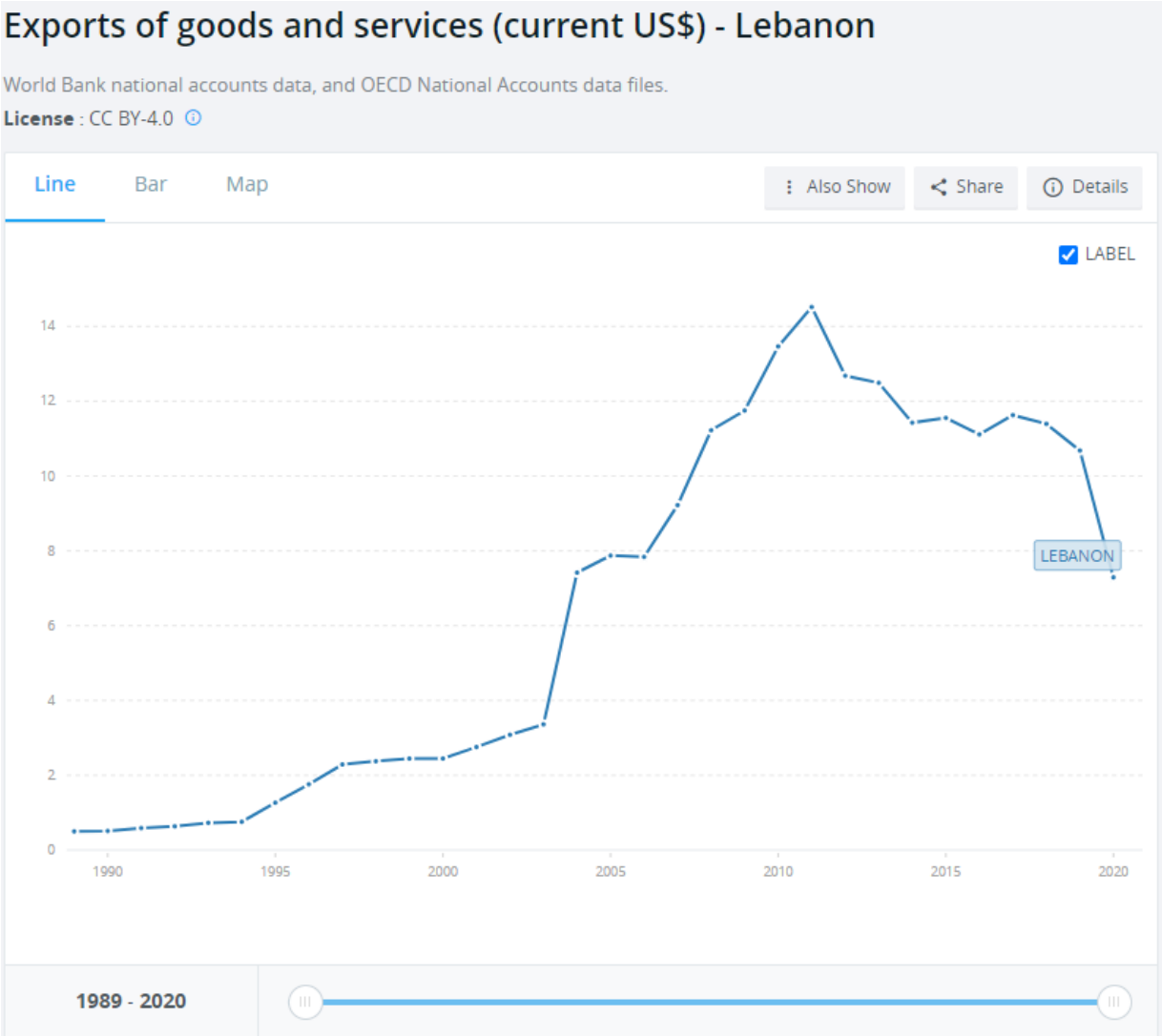


Source: World Bank, 2022

Figure 6. Deposit interest rate (%) - Lebanon

G. Exports and Net Exports

In the below graph, we can see that the exports of Lebanon had followed a rather positive trends from the ninety's until around 2010. However, exports took a hit around the neighboring Syrian war. Another hit was during the crisis and until 2020. From then on, expectations about increasing exports due to the depreciation of the local currency, and the supposed increase in competition, did not materialize. Exports further decreased. (World Bank, 2022)



Source: World Bank, 2022

Figure 7. Exports of goods and services (current US$) – Lebanon

Although we saw a positive trend above, it is worth noting that the net trade of Lebanon does not follow the same pattern. In fact, it follows a decreasing trend, which would be due to the increase in exports that is not compatible with the even bigger increase in imports. Although exports decreased even more in the crisis, the net exports increased. That is because we are importing less than before. That is a healthy approach, to encourage local production and incentivize a future increase in exports. (World Bank, 2022)

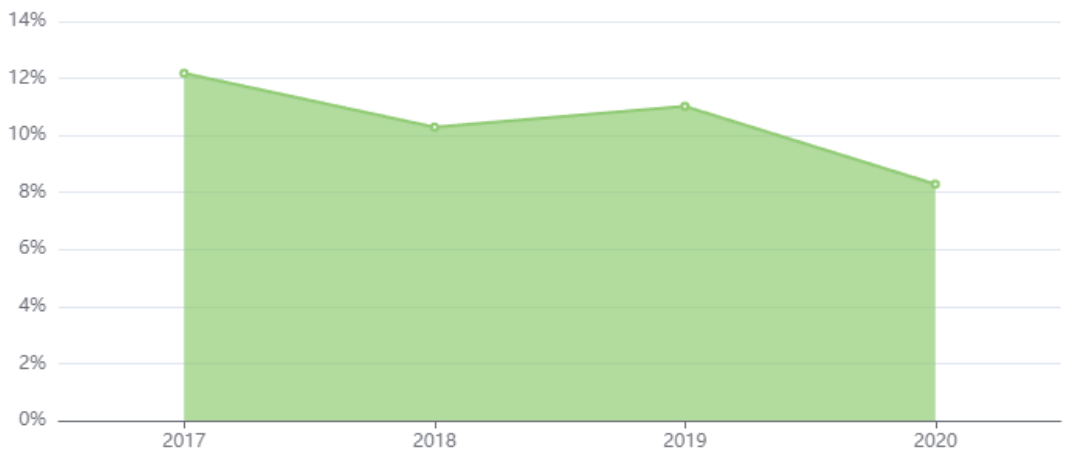
Source: World Bank, 2022

Figure 8. Net trade in goods and services (BoP, current US$) -Lebanon

H. Social Expenditure Monitors

In the below graph, (UNESCWA, 2022) we can see the percentage of total expenditure that is spent on social expenditures. In 2017, the percentage was 12%, which dropped to reach 8% by 2020 during the crisis. When comparing said percentage to similar countries in the MENA region, Lebanon is often below its neighboring countries.

In comparison, between 2017 and 2020, Oman had an average of 18% of total GDP on social expenditure, Kuwait 25%, Jordan 15%, Egypt 16%, and Tunisia 21%. (UNESCWA, 2022)



Source: UNESCWA,

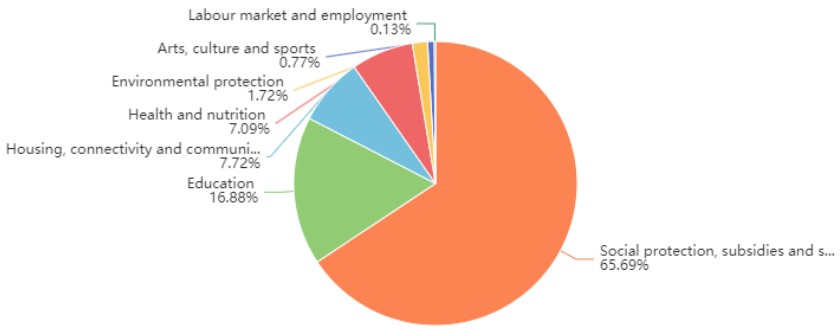
Figure 9. Social Expenditure Monitor - Lebanon

CHAPTER III

FISCAL POLICIES, GOVERNMENT STRATEGIES AND CORRUPTION

A. Social Expenditure Monitor (SEM)

In our first chapter, we discussed social expenditure allocation and compared them to neighboring and comparative countries. Based on this data, it is noticeable that Lebanon might have an inefficient allocation of budget resources, with an allocation percentage significantly lower than comparative countries. Between 2017 and 2020, more than 65% of the expenditure allocated for social matters was spent on social protection and subsidies. All other components, like education, health, and nutrition among others, barely constitute a third of social expenditures. Compared to other countries, we have one of the highest expenditures on social protection and subsidies, compared to a 30% in Kuwait, 37% in Tunisia and Oman, 40% in Morocco and 44% in Jordan. (UNESCWA, 2017)



Source : UNESCWA, 2020

Figure 10. Social Expenditure Monitor of Lebanon by Criteria

It would benefit the country to have in place a more efficient strategy for allocation, especially on social matters.

B. Multidimensional Poverty Index (MPI)

The second aspect of inefficiency that will be discussed is the deprivation indexes.

According to the multidimensional poverty indexes of Lebanon developed by UNESCWA, it is noted that more than 34% of the entire population and 47% of the poor do not have access to education, i.e., there are no schools at walking distance. 55% of the entire population and 77% of the poor are deprived of health insurance. More than a quarter of the population and 41% of the poor are deprived of sanitation, i.e., improved drainage techniques. These are examples of a general trend that shows general nationwide deprivation. (UNESCWA, 2019). This shows again a mismanagement of funds or policies. A country will not succeed without improving the quality of life of its subjects.

C. Fiscal Approach, Budgeting

We will continue this chapter by discussing the most important financial and fiscal tool, a country's budget. The first thing to note is the absence of budgets from 2012 up until 2016. In fact, it is not until 2017 that the government started issuing yearly budgets again.

The last four budgets available from 2018 until 2020 and 2022 were studied and the outcome is as follows:

1. Revenues

In 2018, the government had planned in its budget a total of 18,686 (LBP billions) in revenues of which 76% (14,276 (LBP billions)) is a revenue generated by taxes and about 24% (4,410 (LBP billions)) is a non-tax revenue, (i.e.: Revenue arising from state-owned enterprises and from public institutions making profits.) Below is a graph of the revenue distribution for that year. (Institut des Finances Basil Fuleihan, 2018, pp. 16-17)

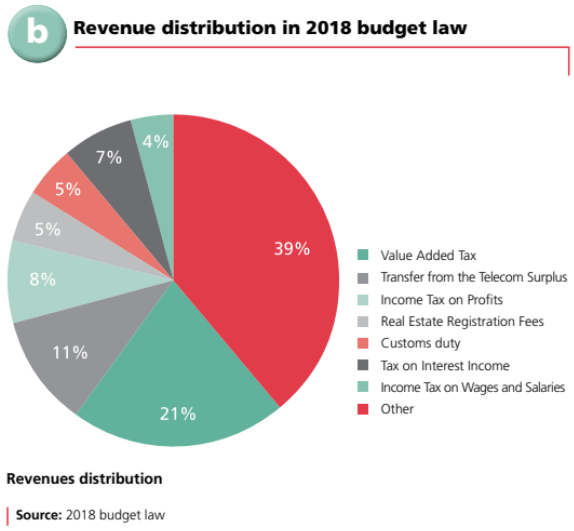


Figure 11. Revenue distribution in 2018 budget law

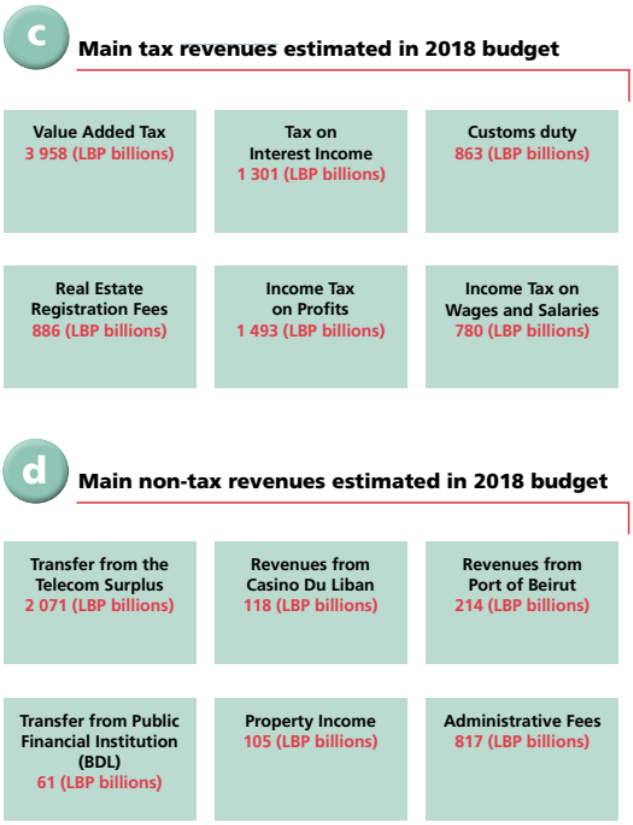


Figure 12. Main tax and non-tax revenues estimated in 2018 budget

It is noted that the non-tax revenues are minimal when compared to all the revenues generated solely from taxes. Another note worth mentioning is that even in the non-tax revenues, the highest two incomes are from the Telecom Surplus and the Administrative Fees, which both are a burden on the citizens and do not arise from the efficiency or the productivity of governmental activity. In fact, incomes from the Casino, EDL and the port are the lowest revenues in the above table.

In the year 2019, we can see a terribly similar pattern, discussed above, of the government revenues for that year. Again, tax revenues constitute more than three quarters of total revenues and non-tax revenues barely 22%. (Institut des Finances Basil Fuleihan, 2019)

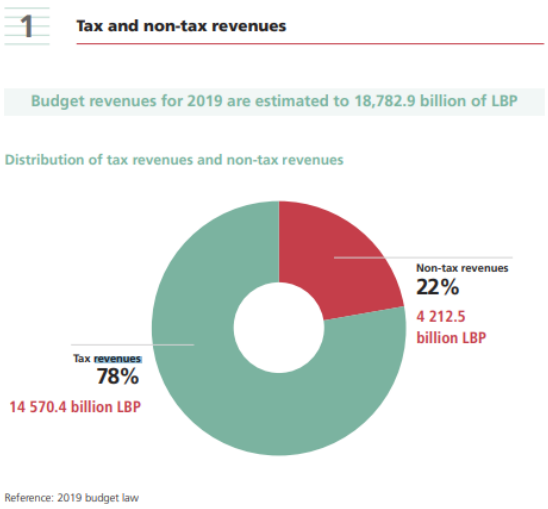


Figure 13. Tax and non-tax-revenues

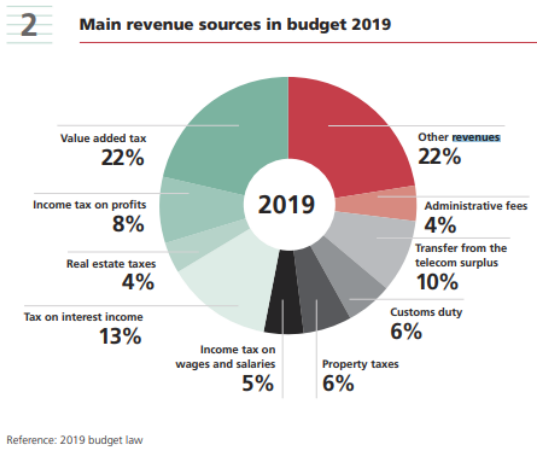


Figure 14. Main revenue sources in budget 2019

The same trend applies for the years 2020 and 2022, with about 75% of revenue from tax revenues and 25% from non-tax revenues, and a shocking 85% to 15% in 2022, an all time high for tax revenues. (Institut des Finances Basil Fuleihan, 2020,2022)

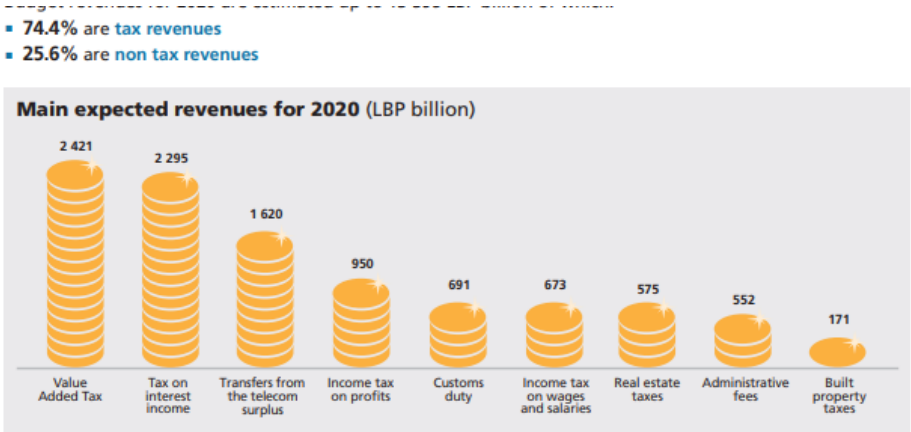


Figure 15. Main expected revenues for 2020

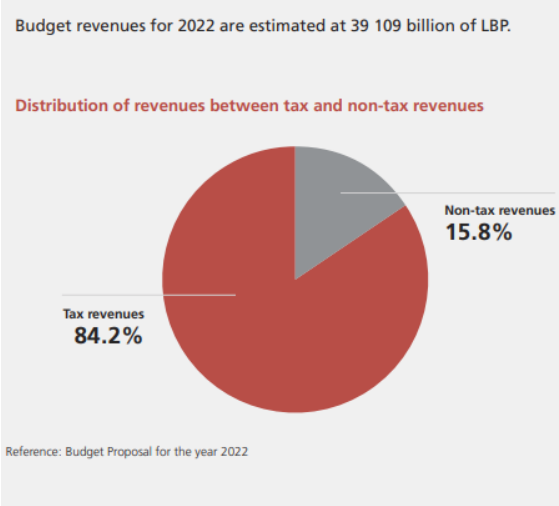


Figure 16. Distribution of revenues between tax and non-tax revenues 2022

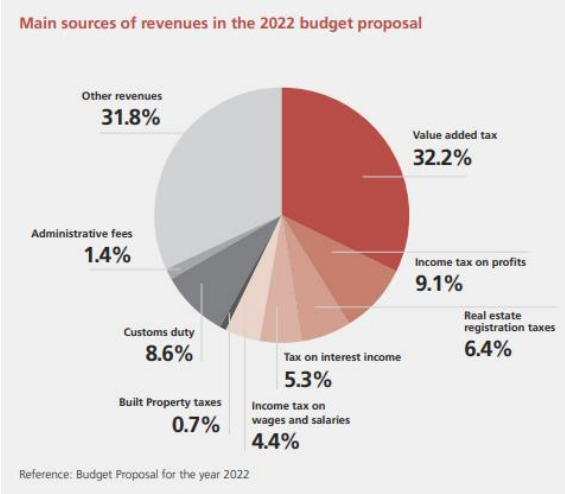


Figure 17. Main sources of revenues in 2022 budget proposal

The most flagrant matter in the above discussed topic is not only how inefficient government incomes are, and how much of the country's revenues depend on taxes. It is the fact that all these taxes collected do not go into the favor of the citizens. With remarkably high deprivation levels, limited access to health and education, and lack of public services, one can argue about the inefficiency of this country in resource allocation and income generation.

2. Expenditure

The first thing to note in the expenses of the government is the expenditure on defense. Out of the total expenditure of 23,891 (LBP billion) in 2018, about 11% is allocated for the defense ministry, which shows a structural problem present in Lebanon. (Institut des Finances Basil Fuleihan, 2018, pp. 11-14) Unless in a state of war, such expenditure on defense is higher than it should. Approximately the same percentage is allocated as a treasury advance to the EDL, since it is always in deficit. That is a quarter of the allocation of expenditure already accounted for, in my opinion inefficiently.

In the table below, it is clear that the capital expenditure of the budget is marginal, once again showing that citizens do not get much in return for their taxes. About 42% of expenses go on personnel and 35% on interest payment. These are completely dead weight expenses, not generating any profit and weighing the entire system down. (Institut des Finances Basil Fuleihan, 2018, pp. 11-14)

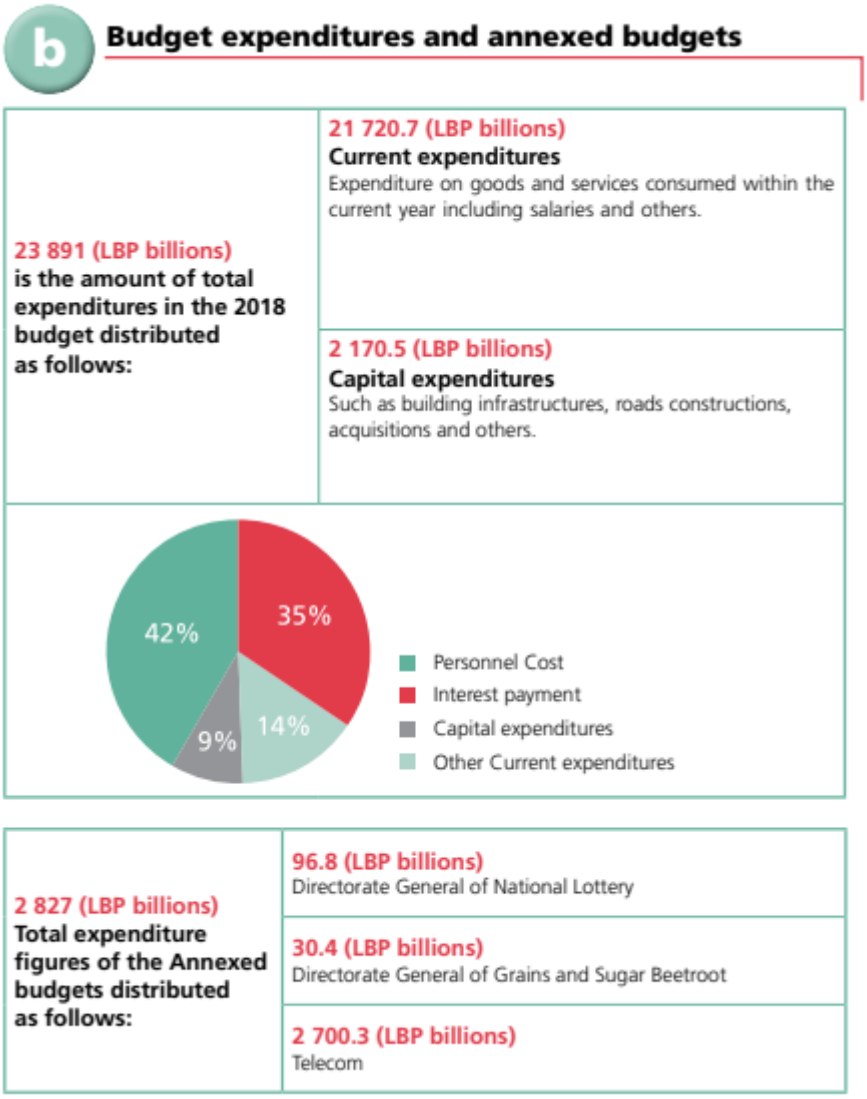


Figure 18. Budget expenditures and annexed budgets

Moving on to the year 2019, we can see a terribly similar behavior in the expenses as per the below chart. (Institut des Finances Basil Fuleihan, 2019, pp. 24)

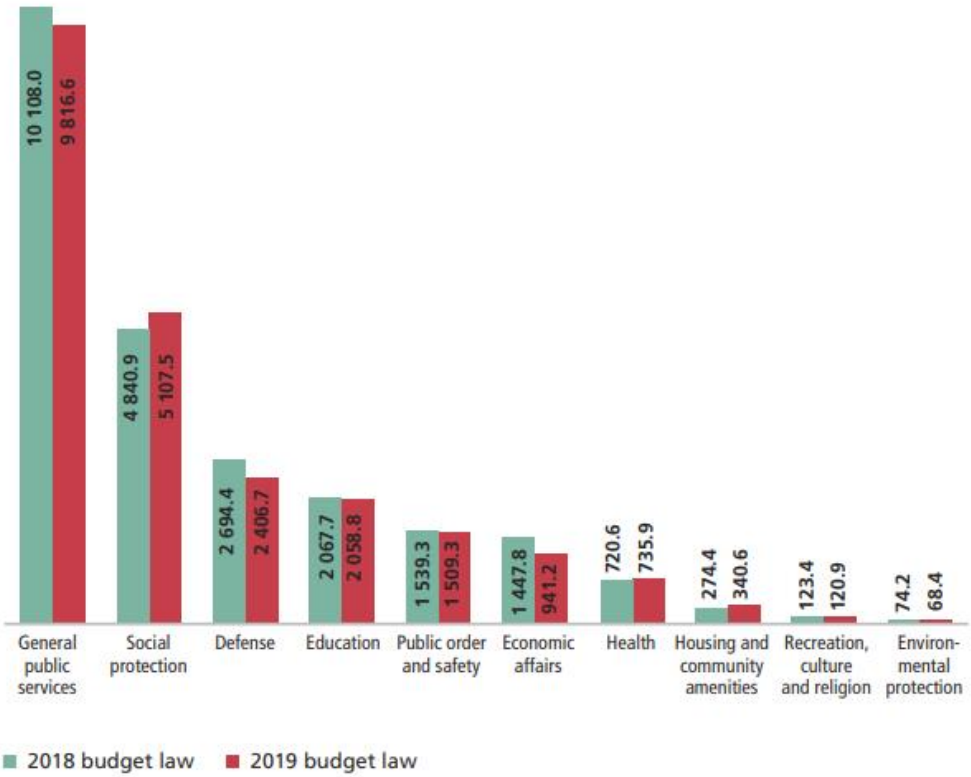
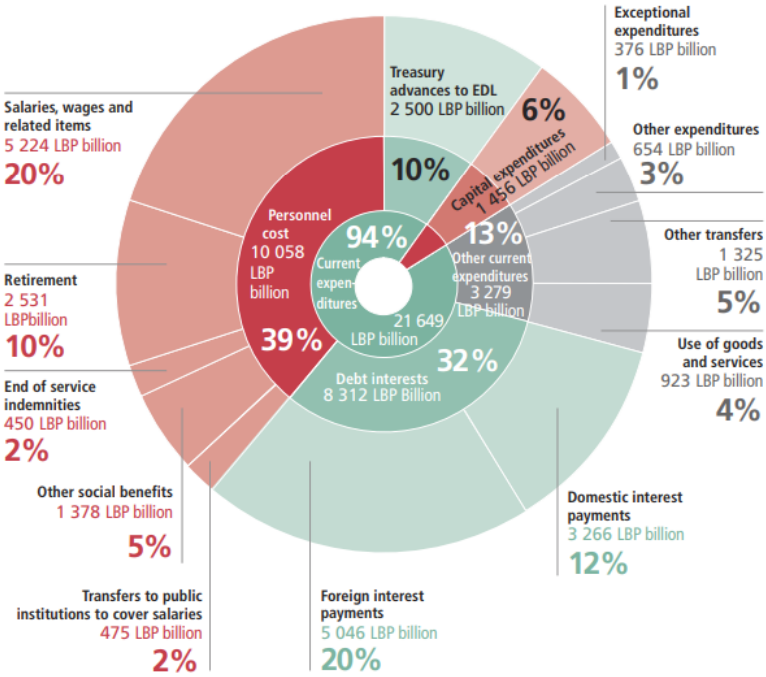


Figure 19. Comparative budgets between 2018 and 2019

References: 2018 and 2019 budget laws

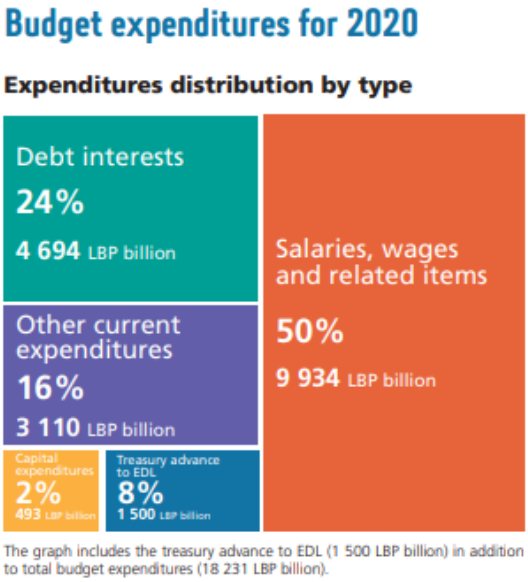
We can also see that in that year as well more than a third of the expenditure goes on salaries and retirement payments in addition to another third in interest rate payments. (Institut des Finances Basil Fuleihan, 2019, pp. 25). The same behavior is noted in 2020 and 2021 as per the below graphs. Based on these trends, it is evident that dead expenses are reoccurring phenomena



Note: This chart includes budget expenditures in addition to treasury advances to EDL

Reference: 2019 budget law

Figure 20. Budget expenditures in 2019



Source : (Institut des Finances Basil Fuleihan, 2020, pp. 2)

Figure 21. Budget expenditures for 2020

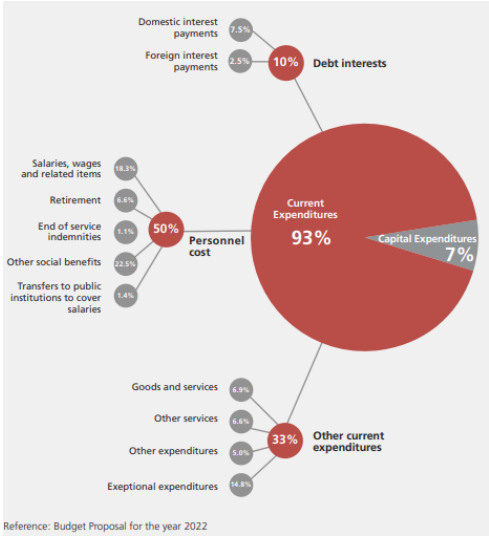


Figure 22. Budget expenditures for 2022

3. *Manipulation*

In this section, I would like to shed light on some manipulation that happens in the budget. First, we notice that every loan given to the EDL is constructed as a treasury advancement and hence does not account as a part of the budget, despite the EDL draining a significant amount of the country's funds. We will discuss the EDL more in future parts.

A second and particularly important part is the manipulation of the budget in regard to subsidies. In accordance with the UNESCWA SEM data, we can see that subsidies were a part of our daily lives, up until they were lifted by the end of 2021. Instead of accounting for subsidies in the regular budget, the government accounts for it in a treasury manner as well. That is a way to decrease expenditure and make it look like we spend less as a country. It is worth noting that subsidies are not efficiently allocated in Lebanon and that will be discussed in the next parts of the paper.

4. *Fiscal deficit*

In conclusion, it is worth noting that the country is in constant fiscal deficit, even with all the manipulation to remove expenditure on EDL and on subsidies. With nothing to show for its expenditure, a low quality of life and social benefits, Lebanon finds it hard to rise from being a third-world country.

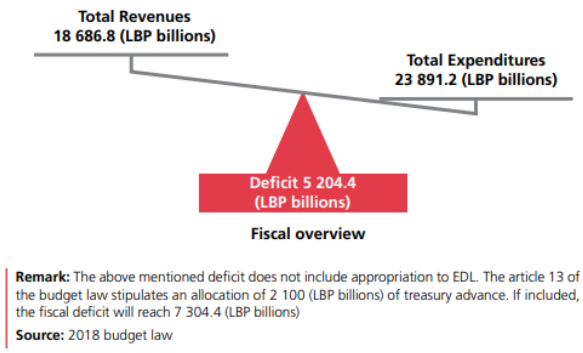


Figure 23. Fiscal overview 2018 Lebanon

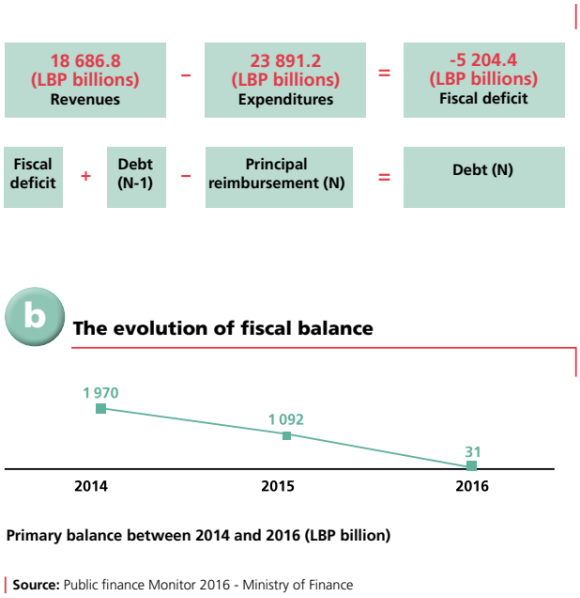
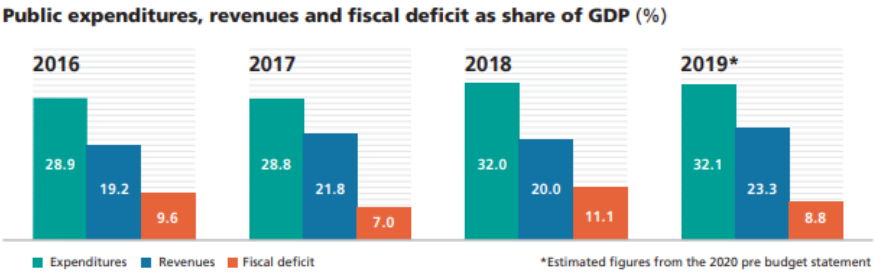


Figure 24. Evolution of fiscal balance Lebanon



Source : (Institut des Finances Basil Fuleihan, 2020, pp. 1)

Figure 25. Public expenditures, revenues, and fiscal deficit as share of GDP (%)

D. Financial Engineering and the Ponzi Scheme

Lebanon's economy is widely referred to as a prolonged Ponzi scheme. A Ponzi scheme is merely based on collecting money from its subject always promising prominent returns without providing said returns. This money is usually not invested in viable and profit generating projects, however this scheme remains successful as long as its subjects keep faith in the liquidity of the scheme. (Rickards, 2022, pp. 8-10)

Said scheme began when the government started giving high interest rates on Lebanese Pounds deposits, incentivizing the Lebanese diaspora to deposit their money in local banks. The failure of this scheme did not start in 2019, but before, since 2014, when the Lebanese diaspora's inflow of funds started decreasing due to global oil price hit. (Rickards, 2022, pp. 8).

What we witness in 2019 is a sudden stop phenomenon. This shock is one that made prolonging the inevitable impossible. The Sudden stop created a clear cut in the economy.

A sudden stop happens when access to foreign capital markets is suddenly lost, resulting in a collapse of cash flow or remittances. Then, there is the abrupt decrease in capital flows into a country's economy because of credit frictions (a circumstance in which lending to a country's government or enterprises simply stops). To put it another way, an abrupt stop occurs when international investors stop investing in a country due to bad economic performance, locals are more likely to invest abroad due to high inflation, and the country is unable to borrow from international institutions such as the World Bank.

Sudden Stops are preceded by some expansions combined with deficits. The data below will show us that it is exactly the case of Lebanon. We had some growth before 2018.

The Lebanese deficit was financed by expats and international borrowings. Interest payments consumed 48% of domestic government revenues in 2016, not allowing the revenues to be put to better use. Unable to attract more foreign currency using the old methods of high interest rates, expats refrained from sending money; a typical case of a "Sudden Stop Model." This led to an abrupt and very rapid devaluation of the currency, leaving citizens and producers unable to retrieve their foreign currencies, making it hard for them to import foreign products and decreasing their purchasing power.

The crisis had economical warnings as follows:

We can start from the obvious decreasing trend in the real GDP of Lebanon reaching a negative of (-1.9) by the end of 2018, a few months before the start of the crisis.

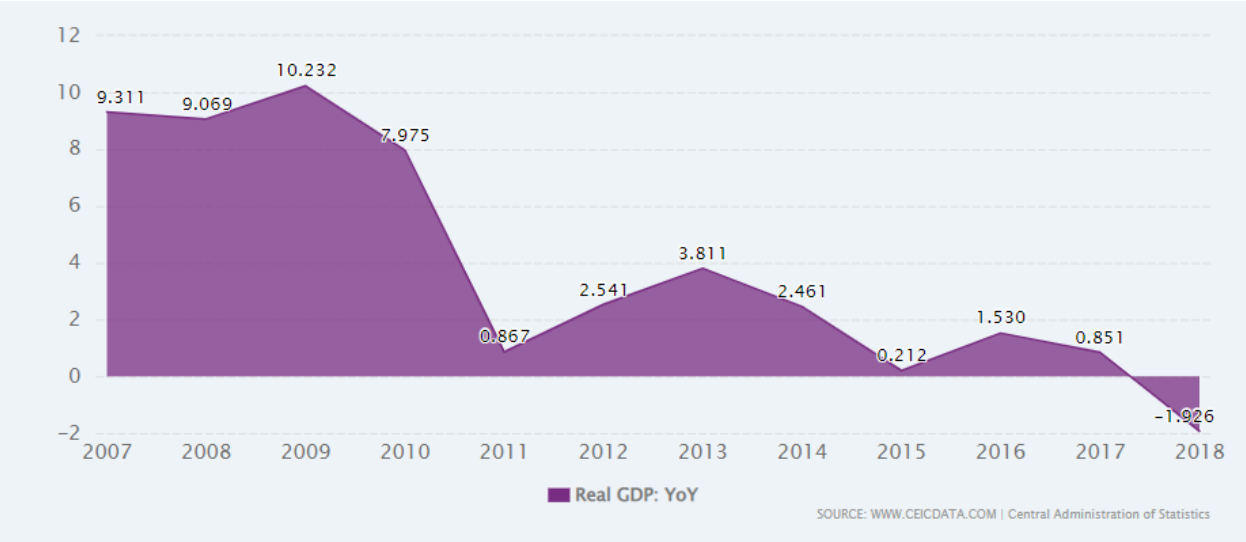


Figure 26. Real GDP of Lebanon

As per the World Bank, real GDP growth contracted by 20.3% in 2020. And GDP started with a very prominent and sharp decreasing trend by the end of 2018 reaching a low of (34) by 2020.

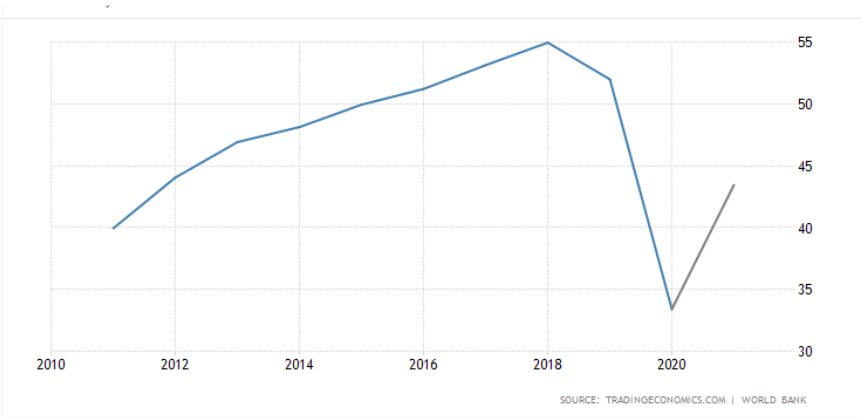


Figure 27. GDP growth Lebanon

This would lead us to re-inspect the idea discussed above. The crisis started long before 2019 and was only well hidden until then. (World Bank, 2020) It was evident that a silent run on the banks was happening. Before capital restrictions by the banks took effect, elites moved sizable USD deposits out of Lebanon. Ordinary companies and individual depositors relied on the fixed exchange rate set by the central bank and kept their dollar deposits in the banks until it was too late. Capital controls were required as remittances dwindled, and depositors lined up to withdraw cash. These frozen USD deposits are now essentially worthless. The central bank and commercial banks keep stating that they are not bankrupt, although the movement of the funds between entities is restricted, except in what is known as Lollars, (i.e., local dollars) or in local currency that keeps on depreciating and becoming more worthless.

The application of mathematical methods to resolve financial issues is known as financial engineering. Financial engineering addresses contemporary financial

difficulties and creates new and inventive financial solutions using tools and expertise from the fields of computer science, statistics, economics, and applied mathematics. Regular commercial banks, investment banks, insurance companies, and hedge funds all employ financial engineering, often known as quantitative analysis.

This is what Lebanon's Central Bank tried to follow in 2016 when they swapped Lebanese Pound (LBP) treasury bills (TBs) held in its portfolio with equivalent Eurobonds issued by the Ministry of Finance, amounting to USD 2 billion. (Banque Du Liban, 2016, p. 3)

The financial engineering scheme sought to apply quantitative easing to expand the monetary base and encourage business activities and investments as well as prevent liquidity shocks of up to 30 days long (IMF, 2017). This led to an increase in the broad money supply until 2018 when it sharply reversed course and was tightened by BDL. Since BDL was intervening heavily in the foreign exchange market to support the peg and fund the government's USD deficits (IMF, 2019), it was forced to clamp down on LBP liquidity to stifle speculative foreign exchange transactions by investors attempting to take advantage of BDL's support for the LBP.

In fact, the central bank of Lebanon, who was supposed to bring a recovery plan to the table ended up being a key player in the Ponzi scheme taking place in the country. The plan worked as follows. The commercial banks that received the foreign deposits of the Lebanese diaspora and deposited said amounts with the central bank of Lebanon in form of CDs backed by Eurobonds for above market interest rates. In every country, depositing money with the central bank should be a risk-free investment. However, that was the opposite of what was happening in Lebanon. The central bank used all deposits to finance unprofitable projects. One would wonder how they expected to pay back

these deposits, without generating any returns. One would never be able to tell if they were indeed planning on repaying or stretching out the Ponzi scheme way above its due date.

Back to our financial engineering expenditure, the money as stated above was spent on various aspects, paying imports, supporting government spendings and paying interest on debt, all of the above with a fixed exchange rate of 1,507 LBP/USD. However, the dollars were flowing out, no projects contributing to their inflow, making it hard to maintain a fixed exchange rate. (Rickards, 2022, pp. 8-10).

In summary, citizens' money went into the bank system, with a supposedly prosperous future, as the money was intended to be used to generate profits to pay back loans and interest. However, the money went to support deficits and government projects that never saw the light of day, nor did they bring any income to the table like electricity growth or oil and gas extraction and more. With the failure of the above, no money was able to be paid back.

E. Electricity Mismanagement:

To give a for instance of the previously discussed failed expenditures, we will talk about the mismanagement of the electricity plans for Lebanon. This will also serve as an example of failed profitable prospect projects from the government's end.

EDL's subpar technological and financial performance has a long history. According to statistics from 2018, 63% of Lebanon's electricity needs are met by EDL, which results in lengthy power disruptions, particularly during times of high demand. These outages are unevenly distributed around the country, with prolonged outages that can last up to 12 hours per day on average (Ahmad, 2020). The essential figures and indicators for EDL are listed in Table 1. The large technical and non-technical losses, which combined account for a third of the entire electricity generation of EDL, are the most telling of these. In comparison to other vertically integrated utilities in the Middle East and North Africa (MENA) area, EDL is the second most expensive to operate and the least profitable (the average tariff is around 27% of the cost-recovery level) (Camos et al., 2017).

Table 1: EDL's performance in 2018

Performance parameter	Value
Total capacity (owned and purchased) (MW)	2512
Generation capacity (% of peak demand capacity)	72.7
Total generation delivered (terawatt hours, TWh)	14
Total generation (% of total demand)	63
Average load factor (%)	75
Technical losses (%)	14
Non-technical losses (%)	20
Average tariff (US cents per kilo-watt hour, kWh)	9
Average tariff (% of cost-recovery tariff)	27
Collection ratio (%)	66 (2017)

Source: various sources.

Table 1. EDL's performance in 2018

Four important performance metrics for the energy sector were identified by the World Bank in 2008 as a "first order signal" of potential corruption in the industry (Halpern et al., 2008). These metrics include cost recovery, system losses, collection

ratio, and electricity coverage. The fact that Lebanon, an upper-middle-income country, has such a dysfunctional power coverage in terms of both quantity and quality, shows that resources are not being used effectively. High technical losses are an indication of subpar infrastructure and maintenance work, as well as a propensity for resource mismanagement. A significant 20% of non-technical losses are caused by theft, the giving of free electricity in exchange for favors, bad governance, and a lack of law enforcement. According to Smith (2004), corruption and non-technical losses are inextricably linked, and weak governance fosters the growth of electricity theft. Along with significant losses, EDL has also experienced low collection rates (66% in 2017). (Bramley et al., 2020). This ratio is caused by several things that are related to corrupt behavior, like how some politicians refuse to pay their electrical bills (Al Akhbar, 2008). Additionally, payments made by the public sector are incredibly low, even for significant consumers like water utilities. Furthermore, EDL's low average tariff, which ranges from nine cents per kWh to 16-22 cents per kWh depending on oil prices, is considerably less expensive than the cost of generation. EDL's inability to recover costs is the key factor in the company's decision to reduce production, as production increases losses. Diesel generator networks increase their production while EDL decreases its generation to fill the void, diverting billions of dollars from consumers to fuel and generator cartels and diesel fuel importers. Although there has been no proof of a conspiracy between EDL and the fuel or generator cartels to date, the inferior quality of EDL's maintenance of the generation and transmission infrastructure causes them to frequently operate below their operational capacity, which ultimately allows fuel importers and generator network owners to profit more. EDL also tends to be less accountable to its clients when cost recovery is subpar. (Ahmad et al., 2020, pp. 10-13)

While it is possible to measure and evaluate EDL's technical and financial performance, the underlying causes of its catastrophic situation are less clear. Beyond the broad terms of corruption, poor leadership, or incompetence, it appears that the industry is governed by a complicated web of factors. This web's initial (historical) stratum dates to the era just before the Civil War. According to Abu-Rish (2015), structural flaws and conflicting interests harmed the delivery of electricity in Lebanon even before the civil war (1975–1990), leading to the same problems that are debated today, such as unequal distribution and access to electricity, power outages, and mediocre quality and pricing of electricity. Further, Abu-Rish claims that rather than creating a structural problem, the civil war "changed an existing structural problem" (MESPI, 2019).

The second layer has its origins in the post-war political economy, which distributed power and rents among recognized and connected religious and political parties, giving each one a portion of public sector jobs, services, and contracts to give to its devoted adherents.

According to Salloukh (2019), the Taef agreement that put an end to the civil war in Lebanon more than 30 years ago provided a more equitable consociation power-sharing system, but it also resulted in a "larger, more clientelist, more corrupt public sector."

Beginning with the first post-war development projects, Lebanon's power sector has had inadequate governance and performance (Verdeil, 2008). One factor in this is the absence of a unified vision and the sectarian distribution of public funding, as in the case of the Council of Development and Reconstruction (CDR). According to Dibeh (2005: 24), the Council of Ministers' CDR approach to post-war development was

largely a "collection of projects offered to the council of ministers without social return or cost benefit analysis."

Decentralized and fragmented decision-making processes have characterized Lebanon's planning and operation of the energy sector since the early 1990s. (Ahmad, 2020). This directly leads to a lack of accountability, wherein the sector's shortcomings cannot be linked to particular people or organizations. The public and politicians frequently use the blame-shifting tactics and "everyone is accountable" mantra to add to the tumultuous environment that fosters corruption. One may wonder why the political elites are so protective of EDL given its lengthy history of deficient performance, tarnished reputation, and unethical management methods, as well as how it has managed to maintain its current business model for so long. A complex solution is offered by the political economy literature that was reviewed. Despite the economic difficulties it causes, Diwan and Haidar (2019) contend that the Lebanese political elites are protective of the status quo because they stand to gain from it. EDL operates at a loss, yet despite this, it has a lot of service contracts, job possibilities, and a place where political favors may be traded. For instance, it has been revealed that EDL's overstaffed personnel and subcontracting firms serve as a base to uphold a clientelist system by giving jobs to those with connections to politicians and top officials in the public sector. If you want to work at EDL, you need to pull some strings, as one of the company's employees described it (CSKC, 2014). (Ahmad et al., 2020, pp. 10-13)

The above explanation and detailing of the financial handling of financial structures like the financial engineering project or governmental projects like the electricity of Lebanon company show how the country is mishandling potential beneficial and profit possible tools, due to corruption, mismanagement, and greed.

F. Net Trade Deficit

It is no secret that the export sector in Lebanon is very negligible, having net trades at a negative number as previously shown in our macroeconomic overview. This is traced back to an extremely poor productivity level in said sector. That would be due to many causes of which being the bad subsidization plans mentioned previously. Lebanon has been subsidizing goods by the bulk without in depth analysis and reasoning, this has killed any incentive for local production, and hence restrained exports. As per the ministry of Economy's 2020 report we can notice that the subsidies are not exclusively applied by the government on necessities, as they should be. We note a wide range of goods that are subsidized by the government without any clear incentive, like dried cranberries, coffee creamers, sweet condensed milk and more. Said behavior is at best a massive mismanagement of resources and a source of corruption at worst. It would be beneficial to ask ourselves, who benefits from subsidizing imports so unprofessionally? A question I would not further dwell on. Another way local production lacks incentive is that there is no tax exemption on any part of the process of production to encourage exports.

Despite emphasizing the importance of the manufacturing sector in its plan, the 2019 Mckenzie report did not pursue the sector's export potential.

In truth, the industrial industry has received little attention from successive Lebanese governments. Instead, policies were restricted to a few financing plans based on subsidized interest rates and a couple of trade pacts with the EU and Arab nations. Industrialists were left to deal with a variety of difficulties, such as high production costs, ineffective public service delivery, and large skill gaps. Therefore, despite

employing 25% of the labor force, the manufacturing sector's contribution of the GDP has decreased from about 10% in 2005 to 6.2% in 2017. (Atallah et al., 2019, pp. 2-4) Since empirical evidence based on worldwide experience reveals that a manufacturing-led structural transformation promotes higher productivity and better paid jobs, the absence of an industrial policy presents a barrier to economic progress. Therefore, it is crucial to encourage Lebanon's manufacturing industry through an export-driven strategy for three reasons. First, manufacturing-led structural transformation generates direct employment possibilities, which the nation desperately needs as its post-war growth record has not been successful in producing jobs. Second, because of its extensive connections to other economic sectors and the fact that its product promotes more economic activity than that of any other sector, the manufacturing sector is regarded as having the highest employment multiplier. Third, increasing exports—which are seen as a vital source of foreign currency—would reduce the cost of imports and boost foreign currency reserves at central banks. In light of this and the ongoing trade deficit, Lebanon should instead increase exports, particularly industrial exports, to fund its imbalances rather than relying solely on capital inflows primarily in the form of remittances and deposits. (Atallah et al., 2019, pp. 2-4)

Less than $1 billion in exports from Lebanon in 2000 to $5 billion in exports in 2012, a steady rise. It has since decreased, reaching $3.9 billion in 2017. A record trade deficit of $16.9 billion resulted from the widening of the export-import gap, which increased from about $10 billion in 2006 to $20.8 billion in 2017. (Atallah et al., 2019, pp. 2-4)

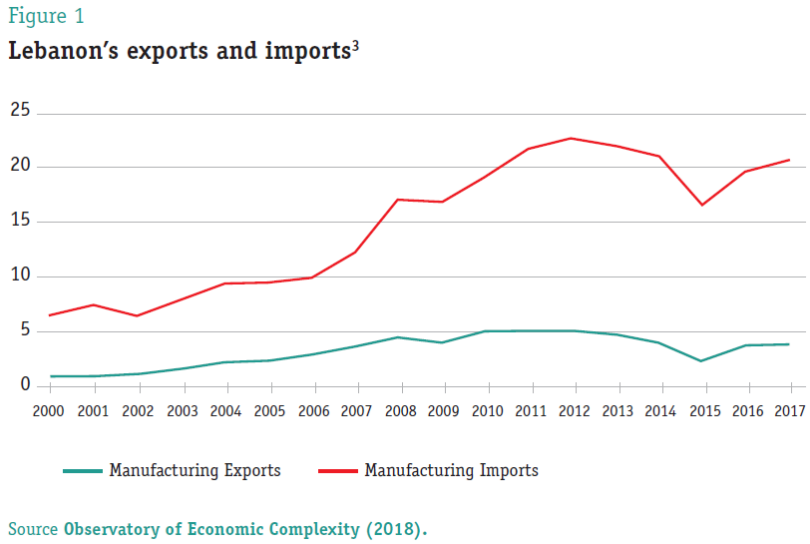


Figure 28. Lebanon's exports and imports

A more thorough examination of the elements contributing to Lebanon's 13% export growth between 2009 and 2013 sheds some light on the challenges standing in the way of the nation's capacity to boost its manufacturing industry. Even though world trade increased by over 49%, products specialized by almost 24%, and regions specialized by 36%, Lebanese exports nevertheless suffered from a lack of competitiveness. This is mostly a result of high local production costs, which are primarily caused by expensive utility services, high labor expenses, high expenditures associated with improving the business, such as providing training and purchasing equipment, as well as high borrowing prices. Among these costs, the losses and expenses brought on by Lebanon's electrical problem are the most important. Manufacturing businesses in Lebanon experience an average of 273 hours of electrical interruptions each month, which costs them 7% of their annual sales, according to the World Bank's 2013 Enterprise Surveys. (Atallah et al., 2019, pp. 2-4)

Disaggregated growth in exports between 2009 and 2013

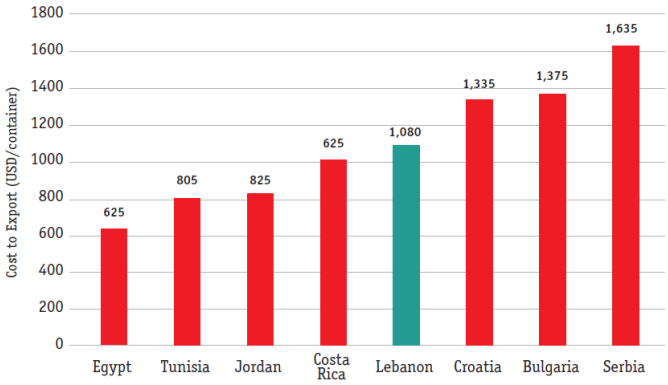
Marginal growth due to	Change (in USD)	Percent Change
World trade growth	1,699,716	48.8
Product specialization	831,504	23.9
Geographic specialization	1,238,229	35.5
Competitiveness	-3,316,859	-95
Sum of the marginal growths	452,591	13

Source **International Trade Center (2013).**

Table 2. Disaggregated growth in exports between 2009 and 2013

In addition to high production costs, Lebanon also has a poor history for trade coordination, which limits the growth of exports. Customs and trade laws are cited as a major barrier by 26% of manufacturing companies in Lebanon, compared to 21% globally and 17% in the Middle East and North Africa (MENA) area. In terms of trade friendliness, Lebanon was placed 79th out of 160 nations in 2018 by the Logistics Performance Index (LPI). In addition to all of this, Lebanon claimed in 2014 that the cost of exporting was $1,080 per container, which is more expensive than other nations in the region. (World Bank 2016). (Atallah et al., 2019, pp. 2-4)

Cost to export in Lebanon versus other countries



Source **World Bank World Bank; World Development Indicators (2016).**

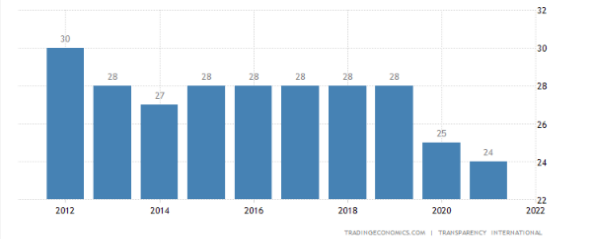
Figure 29. Cost to export in Lebanon versus other countries

G. Corruption in Lebanon:

Let us take a very quick look at the corruption index of Lebanon. Lebanon ranks as 154 out of 180 (transparency international, 2021). Its corruption index fluctuates between 24 and 30 over the last 10 years, being the lowest now at 24, (the higher the index the cleaner the country).

Lebanon scored 24 points out of 100 on the 2021 Corruption Perceptions Index reported by Transparency International. source: Transparency International

10Y 25Y 50Y MAX Chart Compare Export API Embed



Related	Last	Previous	Unit	Reference
Corruption Rank	154.00	149.00		Dec 2021
Corruption Index	24.00	25.00	Points	Dec 2021

Lebanon Corruption Index

The Corruption Perceptions Index ranks countries and territories based on how corrupt their public sector is perceived to be. A country or territory's score indicates the perceived level of public sector corruption on a scale of 0 (highly corrupt) to 100 (very clean).

Actual	Previous	Highest	Lowest	Dates	Unit	Frequency
24.00	25.00	36.00	24.00	2003 - 2021	Points	Yearly

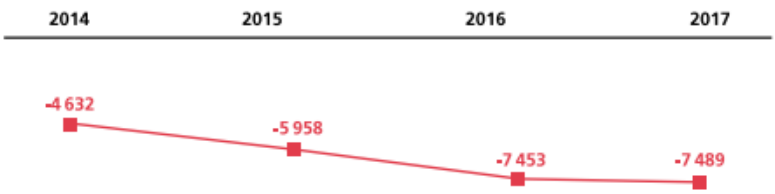
Figure 30. Lebanon corruption index

Everything discussed in this chapter shows the weakness of all government strategies and highlights its wide inefficiency. The manipulation of the data is also a problem faced, i.e., budgeting. Based on the above, Lebanon keeps spending money, but its situation of incompetence keeps falling and degenerating, and should be addressed at the soonest.

CHAPTER IV

CRISIS AND WAY OUT

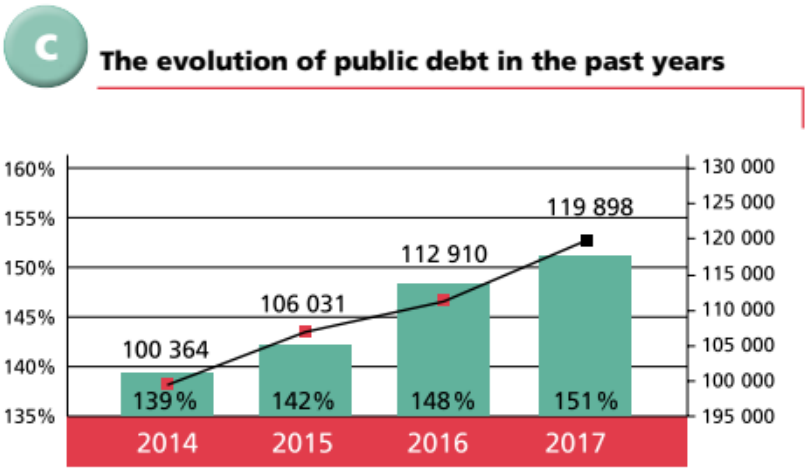
The previous parts of this paper show what a drastic situation Lebanon has been in for the past few years and more. With the country facing a fiscal deficit and a current account deficit over the past decade, we now have a twin deficit that the country cannot seem to handle.



Total fiscal balance between 2014 and 2017 (LBP billion)

Remark: The above illustrates the evolution of total revenues as per the reports published by the ministry of finance, except for the year of 2017 where the number was taken from the 2017 budget law

Source: Public finance Monitor 2016 - Ministry of Finance



Debt evolution between 2014 and 2017

Source: Debt and Debt market report 2017 - Ministry of Finance

Figure 31. Evolution of public debt in the past years

Lebanon's GDP severely decreased from 55 billion USD in 2018 to a mere 20.5 billion USD in 2021 and real GDP per capita fell by 37.1% (World Bank, 2021). Such drastic suffocation in expenditure is usually a result of wars or severe conflicts.

Ever since the fall of 2019, the country has been entering into the realm of multifaceted crises of which are political, social, currency, environmental and financial. The current account balance of Lebanon as per the World Bank was a negative 22% of GDP, stressing on how much Lebanon imports compared to how little it exports.

Additionally, and due to lack of governmental, political, and financial stability, the confidence in the country was almost nonexistent, leading to a big hit on the production and inflow of capital. Lebanon is now entering the eye of the storm. Interest payments consumed 48% of domestic government revenues in 2016, restricting the revenues to be put to better use. Around 50% of total bank deposits were acquired by the central bank who lent an average of 75% of them to the government. Bankrupt, the government could only drag the banking sector with it.

Lebanon's GDP growth rate has been in decrease since 2010, from 5% to -25% in 2019. Similarly, GDP per capita witnessed a sharp decrease since 2018 from 8,000 USD to 5,500 USD. GDP decreased from a high of fifty-five billion in 2018 to 33 billion USD in 2020. Unemployment reached 40%. Investment was almost nonexistent at 10%, and debt reached an excessive amount of 167% of GDP.

Assuming that Lebanon is able to secure a twenty billion loan from the IMF, through a deal like CEDRE or similar, given a certain set of rules that we will discuss below, this would help Lebanon's economy recover drastically.

Nonetheless, Lebanon still has the capacity to be a sufficient, self-fulfilling, and independent country. This is why we do not approach Lebanon as a case of humanitarian

aid, but we approach it with a structural program to target equity and growth. But most importantly, smart, and sustainable growth. Thus, it is crucial to note that the 20 billion USD received from the IMF will be necessary however not enough to revive Lebanon fully. Throughout our analysis, we spread the 20 billion USD as we see fit, counting on injecting more funds where necessary, coming from expenditure cuts and revenues from privatization, and new income-generating projects.

To be able to implement our strategy, and to regain confidence from its own people, partners, and donors, we need to assume a set of pre-requisites:

A. Prerequisites

- The first set of prerequisites are taken from the IMF short-term stabilization policies. Given the situational analysis, we estimate that the Lebanese government already started with the IMF reforms in order for it to get the loan:
    - The Devaluation of the Lebanese Currency. We would want the Lebanese currency to be managed-floating around its true value of 30,000 LBP to the USD.
    - Independent monetary policy: this would come as a result of the floating exchange rate, and the need to regulate it to correct deficits, fight inflation, and control the value of the LBP.
    - Restructuring of local debt, which is intuitive after devaluating the local currency to the USD, as the value of local debt would decrease instantaneously.

- Completely lifting subsidies on goods and services: this will have terribly negative impacts on livelihoods, which will be addressed in the preliminary stages of our intervention.

➢ The second set of pre-requisites are our own necessary conditions for our intervention to succeed and have an adequate impact:

- Since corruption is prevailing in the political world, and the people and most importantly the donors have little faith and trust in the ruling class, we need to assume a minimum political consensus. Politicians should have a minimum level of willingness to cooperate and work together.

- To limit the executive power of government, the loan given by the IMF will be transferred to different United Nations agencies, depending on each agency's mandate and interventions; like ILO, UNDP, ESCWA, UN Women, and others, which in turn will coordinate with related ministries and with national implementing partners.

- To encourage employment and put a limit to brain drain, we can enforce a quota on UN agencies and to all implementing partners to employ and charge at least 60% of Lebanese staff on projects.

B. Reforms

To make change irreversible, the structural reform program will focus mainly on ensuring growth through different channels on the macro, meso, and micro levels. On the macro level, we will aim to construct an enabling policy environment through policy reforms and needed interventions from the government and the central bank. On the meso level, we will explore the investments and interventions needed on the intuitional level. On the micro-level, our main objective will be to support individuals and direct beneficiaries.

This reform plan focuses on the areas of improvement that Lebanon would benefit from, it also focuses on prioritizing actions before others. Finally, on allocating an estimated amount of the total loan to each required step. Since at many points the reforms taking place might require much more than is allocated, bound by the limit of the loan, and focusing on creating solutions that generate profits, we limit the resource allocation to nominal estimated amounts. The complete financial analysis of the funds would require backup from a full financial team, which is not the main aim of this paper.

Our 5-year proposal using the 20 billion USD IMF loan will be expanded on a yearly basis, with budgeting and a timeline of actions emphasizing their importance.

1. *Year One: Bleeding Control*

Year I: Bleeding Control

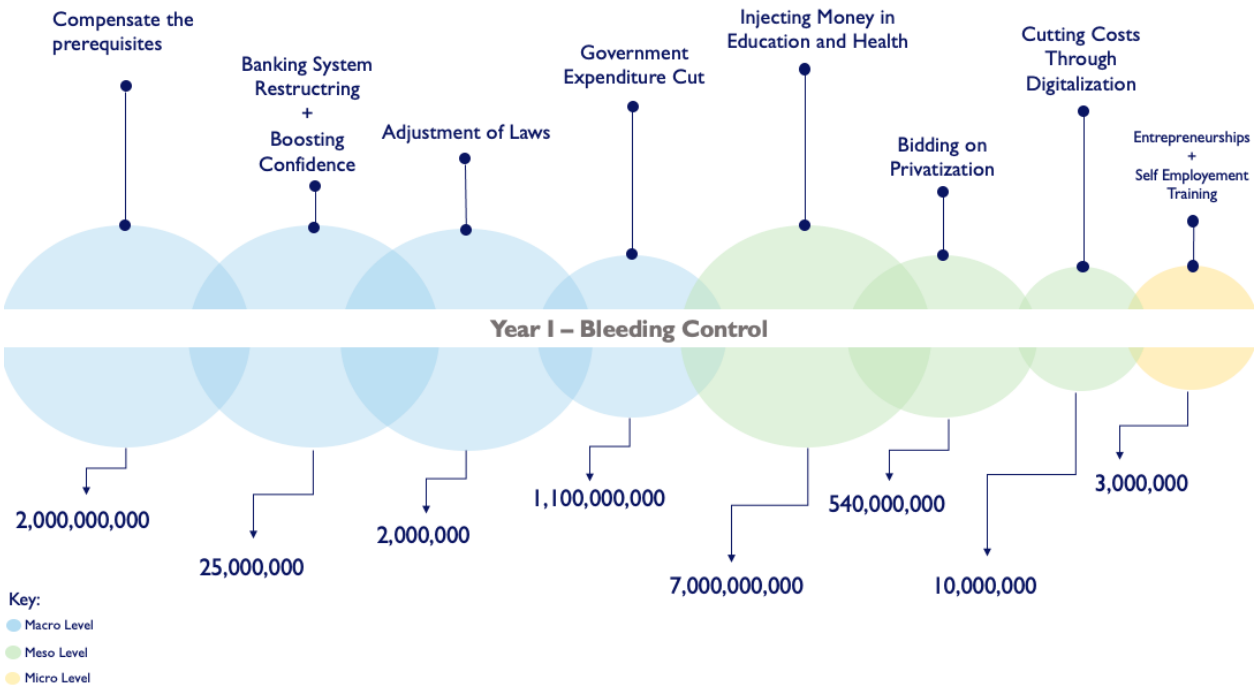


Figure 32. Year 1 – Bleeding Control

In this reform, we are treating Lebanon like a wounded human we are trying to heal. During the first year, we start by controlling all the drainages of the country and act on the most time sensitive matters using the below series of reforms and steps.

- Compensate the pre-requisites: Reforms are painful. The pre-requisites of lifting subsidies and - the devaluation of the currency will mostly hurt the poor. To prevent further burdens on the population at risk and ensure a peaceful transition with minimal retaliation, we need to compensate them, at-risk people. Targeted subsidies programs will be established, and a budget of 2 billion USD will be disbursed as petty cash aid to 500,000 families under the poverty line over a 3-year span.
- Banking system restructuring: Mergers, banks acquisition, restructuring of balances and budgets are much needed. Additionally, employment structures need to be

reassessed. Employing qualified and well-known people across institutions and in managerial positions will restore confidence in the banking sector and make it an efficient one. We estimate a cost of 25 million USD as loans to banks, for them to reinforce their credibility among the population and provide loans on the institutional level.

- Adjustment of privatization law: The management of publicly owned institutions is inefficient. Laws that address the necessity of privatization and its related processes, and the permissible amounts to state-owned assets and institutions, should be tackled at the beginning of the reform to avoid future recurrence of exploitation. We estimate a cost of two million USD in staffing and lawyers that will also assist in future law creations under this project.
- Government expenditure cuts: Governments' resources drain needs to be limited. To do so, budgets should be revised and assessed, debts should be restructured, mergers of unnecessary and duplicated public establishments should be done as well as layoffs of unnecessary employees. (Employees in non-active sectors like train sector or employees hired by power or “who you know”). We estimate a cost of 1.1 billion USD that will be spent on unemployment benefits resulting from the above-discussed measures.
- Injecting money in education and health: These two sectors are awfully hard to resurrect once gone. In order to avoid costly and irreversible consequences, we will inject approximately 7 billion USD in TVETs, public schools, and universities in addition to public hospitals to equip them with the necessary gear. This will provide the country with sound and reliable educational and health systems limiting academic and medical staff’s brain drain.

- Bidding on privatization: The need to privatize certain companies acquired by the government is crucial. Enterprises such as Electricite Du Liban, Middle East Airlines, Ogero, Eau du Liban, Casino du Liban, and others, have been in deficit and barely able to provide the services needed for the past several years, eating up the government's budgets meant to be spent on other social goods and services. During the first year, we would allow local and foreign private companies to submit their bids and acquire the above-stated companies. We estimate a cost of 540 million USD in staffing and operational costs related to studying and conducting all bids under this project.
- Cutting costs through digitalization: This will help cut costs of unnecessary public jobs, improve the efficiency of legal documents and permissions acquisition, facilitate the information sharing of new laws and regulations issued, and rendering overall processes easier and faster. We estimate a cost of 10 million USD in software development and training programs.
- Entrepreneurship and self-employment training and awareness: It is important to instruct children at a youthful age about the business world, and to positively change their attitudes towards entrepreneurship and self-employment options post-graduation. For this, we will allocate 3 million USD for the training of teachers in schools on entrepreneurship education programs which will be included in the nation-wide education curricula given to students.

Expenditures	Compensate Pre-requisites	Banking system restructuring + confidence boost	Adjustment of Loans	Government expenditure cut	Injecting money in education and health	Bidding in privatization	Cutting costs through digitalization	Entrepreneurship + self employment training
Y1	2,000,000,000	25,000,000	2,000,000	1,100,000,000	7,000,000,000	540,000,000	10,000,000	3,000,000

Figure 33. Split of funds for year 1 with numbers.

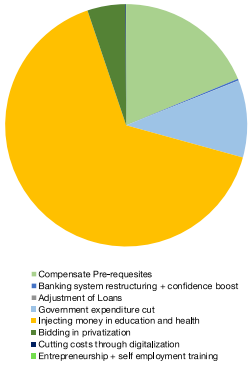


Figure 34. Split of funds for year 1

2. *Year Two: Oxygen Stabilization*

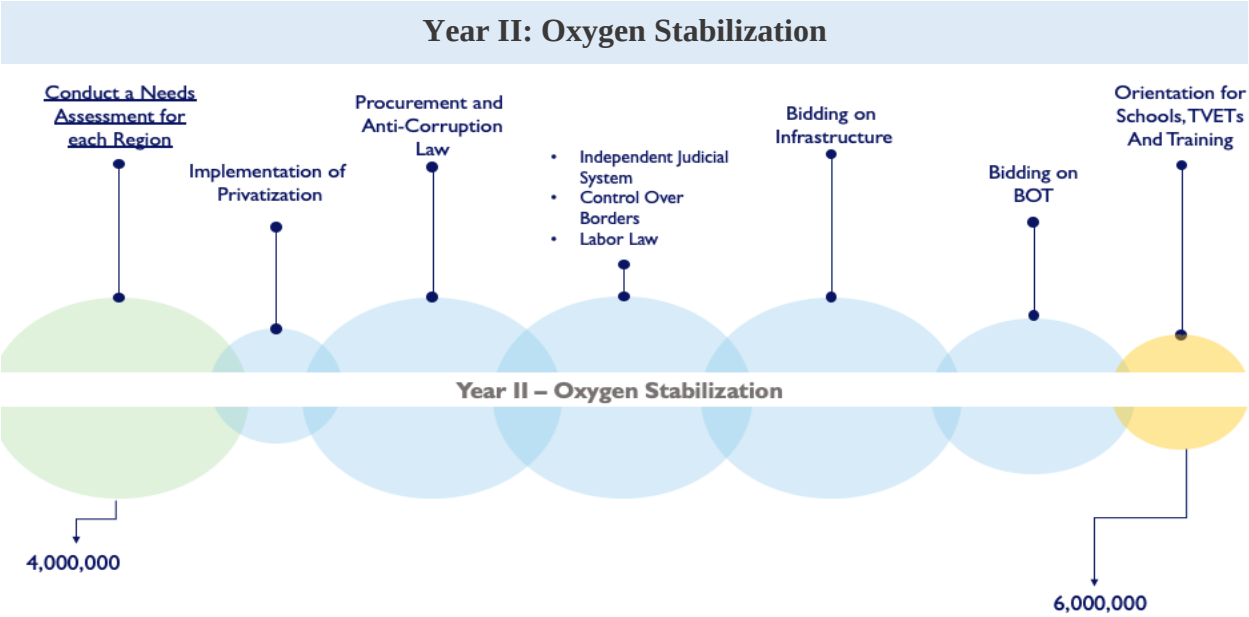


Figure 35. Year 2- Oxygen Stabilization

During the second year of our reform, we start stabilizing the country and working on root issues like laws and structure following the below steps.

- Conduct a needs assessment for each region: An in-depth needs assessment needs to be conducted to evaluate the potential in different value chains and productive sectors in order to make the most out of the country's resources. A team of consultants will be hired to conduct this assessment in four fundamental areas of Lebanon. Based on quick desk research, in the North, we expect our main opportunities to lie in grains, vegetables, olive and related products in addition to petroleum refining and textile like clothing and carpets.

  In Mount Lebanon, opportunities could be industry oriented like steel, pipes, and aluminum production in addition to cement, and finally light industries like jewelry and pottery.

In the South, vegetables, petroleum refining, olives and its related products have immense potential, in addition to citrusy production and light industries.

Finally, in the Bekaa, there is a wide range of opportunities, like food processing, textiles, fruits, grapes, wine, opium for medical uses, tobacco, and cannabis production.

The figure shows an allocation of all opportunities in the four areas of interest. We estimate an average of 4 million USD in staffing and salaries cost.

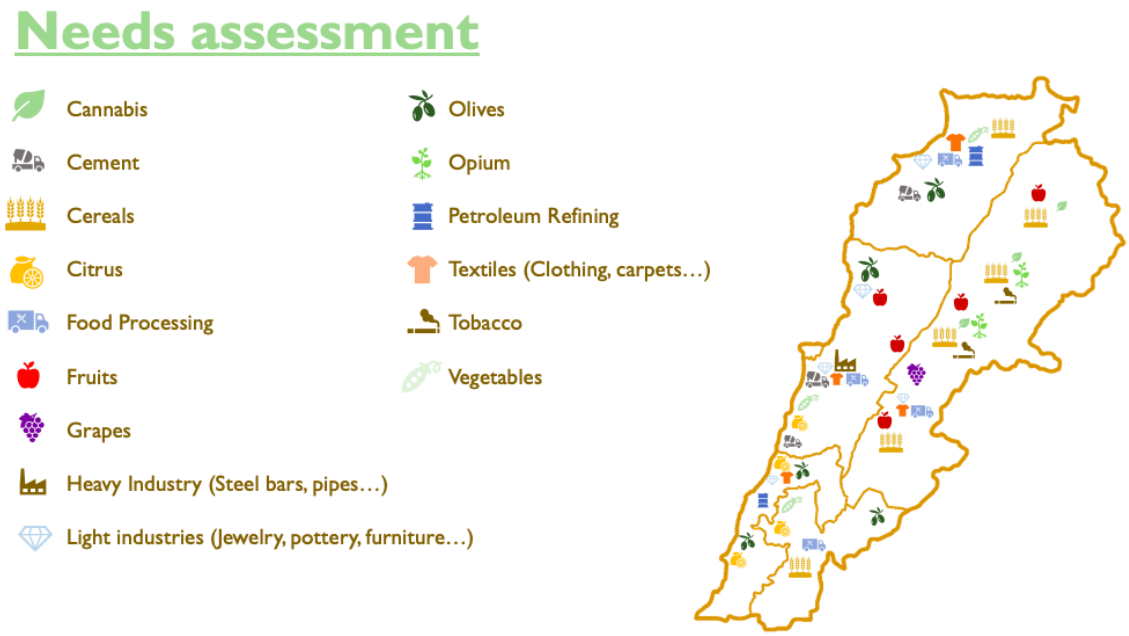


Figure 36. Needs assessment

- Implementation of privatization: Following the finalization of the bidding on privatization, projects can now start operating, a major step towards an efficiently growing ecosystem.
- Procurement and Anti-Corruption law: Procurement and anti-corruption laws need reforms to create a transparent and smooth ecosystem, linkages between sectors and ensure sustainability for past and future reforms.

- More laws: Major laws are lacking in the Lebanese constitution, a few that we should work on are a transparent and independent judicial system, in addition to control over borders and finally fair equitable labor laws including disabled people and women's quotas in employment and in managerial positions.
- Bidding on infrastructure: we would allow bidding to the private sector in order to build needed infrastructures efficiently.
- Bidding on Build-operate-transfer (BOTs): We are in need of BOTs agreements to construct, finance the construction of, and operate and maintain investments, namely the port of Beirut and the oil extraction companies. These BOTs will allow efficient execution and will lift a heavy responsibility off the government in addition to providing the country with revenues once ownership is transferred back.
- Orientation for schools, TVETs and training: It is essential to create an efficient equilibrium between the demand on specific jobs in the market and its supply. Hence, a rich orientation program that will allow a smooth school-to-work transition for students will be valuable. We estimate a cost of 6 million USD to train professionals and create an orientation program that will be incorporated in the education curricula.

Exprenditures	Conduct a needs assessment for each region	Implementation of privatization	Procurement and anti-corruption law	Independent judicial system, control over borders and labor law	Bidding on infrastructure	Bidding on BOT	Orientation for schools, TVET's and training
Y2	4,000,000	0	0	0	0	0	6,000,000

Figure 37. Split of fund for year 2 with numbers

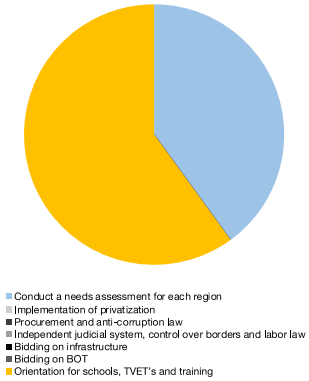


Figure 38. Split of funds for year 2

3. ***Year Three: Operation***

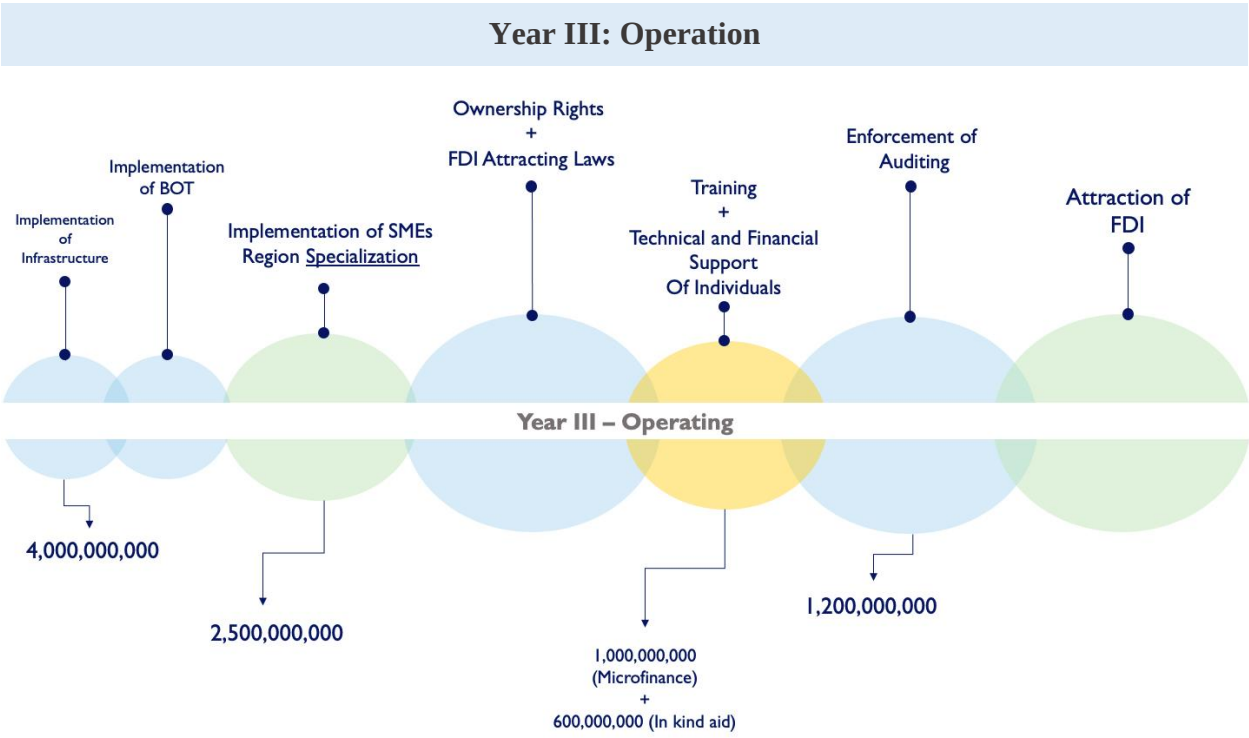


Figure 39. Year 3- Operating

During the third year the harshest steps are taken, the ones with the most effect as the below steps.

- Implementation of Infrastructure: Since bids on infrastructure are completed, projects can now start. The amount of 4 billion USD will be allocated for infrastructure costs. Private companies will manage this project, however, financing the cost will be the country's responsibility.
- Implementation of BOTs: BOTs will start to be implemented, alleviating the country of major responsibilities.
- Ownership rights and FDI attracting laws: The legal aspect of FDIs should be tackled to create a secure environment for foreign investments. In addition to ownership rights, our team of lawyers will tackle all the laws that incentivize foreign investors while making sure not to overcrowd local opportunities.

- Attraction of FDI: After the infrastructure construction and the reforms on the laws related to FDIs, new FDI projects can take place.
- Enforcement of Auditing: What has been done so far has been a prominent step in the right direction. However, given Lebanon's history with corruption and to avoid any relapse, a thorough and strict auditing on various aspects should take place. We estimate an approximate of 1.2 billion USD for a 5-year auditing contract on several aspects like legal, financial, and monetary levels.
- Implementation of SMEs Region Specialization: Following the in-depth needs assessment conducted in the previous year, we begin supporting technically (through training) and financially (through loans) the different institutions in each value chains and productive sectors identified all over Lebanon. We will allocate 2.5 billion USD to this project.
- Training, technical, and financial support for individuals: In addition to the above, we would also need to support individuals on the micro level so that they can provide raw products and inputs to industries and build linkages with the latter. We estimate an amount of 1 billion USD in micro financing loans, and 600 million USD in training and in-kind aid. This split aims to limit the provision in unsustainable grants and provide individuals incentives to work efficiently.

The potential of weed production and its benefits on the economy will be examined as a case study example

a. Case Study: Bekaa, Amsterdam of the East:

Despite whether one supports or opposes cannabis farming in Lebanon, we cannot deny the loss in added value from not investing in this sector. In 2018, Mckinsey estimated a 1 billion USD revenue per year from cannabis farming in Lebanon. Based on this study, we would like to present how we can benefit from cannabis farming in all three sectors, increasing exponentially the profits estimated by Mckinsey.

We would first need to discuss the Laws reforms that would enable us to implement our vision. We then will explore potential investments in the agricultural, industrial and tourism sectors, and lastly, we will explore the means to advertise for such a project.

i. Laws:

- Legislation of the production, consumption and export of the recreational THC and CBD oils will enable us to open this industry to commercial markets.
- Establishment of tax and permit laws to restrict the farming of cannabis to a certain number of farmers and avoid overproduction, compromising other agro-agri farming and production.
- Establishment of coops which aim is to preserve farmers' rights, avoid their exploitation from intermediaries, and any monopolistic behavior.

ii. Interventions in each of the three sectors:

- Agriculture: What is really nice about this investment opportunity is that the knowledge is already there. Farmers already know the basics of farming and harvesting superior quality cannabis and have decent land spaces combined for a mass production. There is, however, so much room for innovation. We

could bring in specialists from around the world to teach farmers on new ways to farm, such as indoor farming and flavoring the cannabis. We could support the farmers through microfinance loans and in-kind support of machinery. And finally, we could evaluate the unused land for potential expansion.

- Industry: The intervention under this industry can be split into two. Pharmaceutical production and commercial production. In the pharmaceutical production, there is potential to build new plants and start producing our own medicines using cannabis. In the commercial, cannabis-based production is very diversified. From it, firms can make ready to smoke cannabis joints packs, produce edibles, and CBD oil which is a much healthier alternative to tobacco cigarettes. However, we lack the physical firms and the know how to do so, so perhaps exploring the option of FDIs is important here.

- Tourism: We could provide incentives to build resorts where the cannabis production is the main area of interest should be put in place. We can learn from the Chateau Kefraya and Chateau Ksara examples, where we can organize weed tours from cultivation to production, and other activities built around the cannabis experience.

Advertisement of the project: The need to advertise for this project derives from the fact that this subject is somewhat of a taboo in our region. Although a substantial portion of the Lebanese population consumes this substance, it has a negative view to it due to its current criminal status. Through advertisement, not only can we attract more tourists (locals and foreigners) to enjoy such experiences, but we can also normalize its consumption in the local community.

We estimate a budget of 100 million USD in micro financing for farmers, 60 million USD in in-kind support, and 250 million USD on the industrial and advertisement interventions.

Exprenditures	Implementation of infrastructure	Implementation of BOT	Implementation of region specialization	Ownership rights + FDI attracting laws	Training, technical and financial support of Individuals	Enforcement of auditing	Attraction of FDI's
Y3	4,000,000,000	0	2,500,000,000	0	1,600,000,000	1,200,000,000	0

Figure 40. Split of funds for year 3 with numbers.

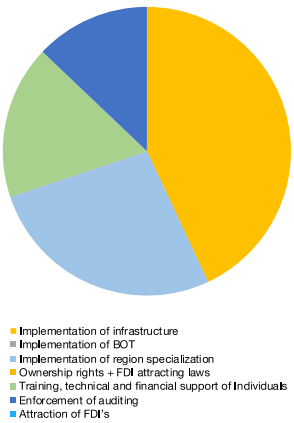


Figure 41. Split of funds for year 3

1. *Year Four: Oxygen Rehabilitation*

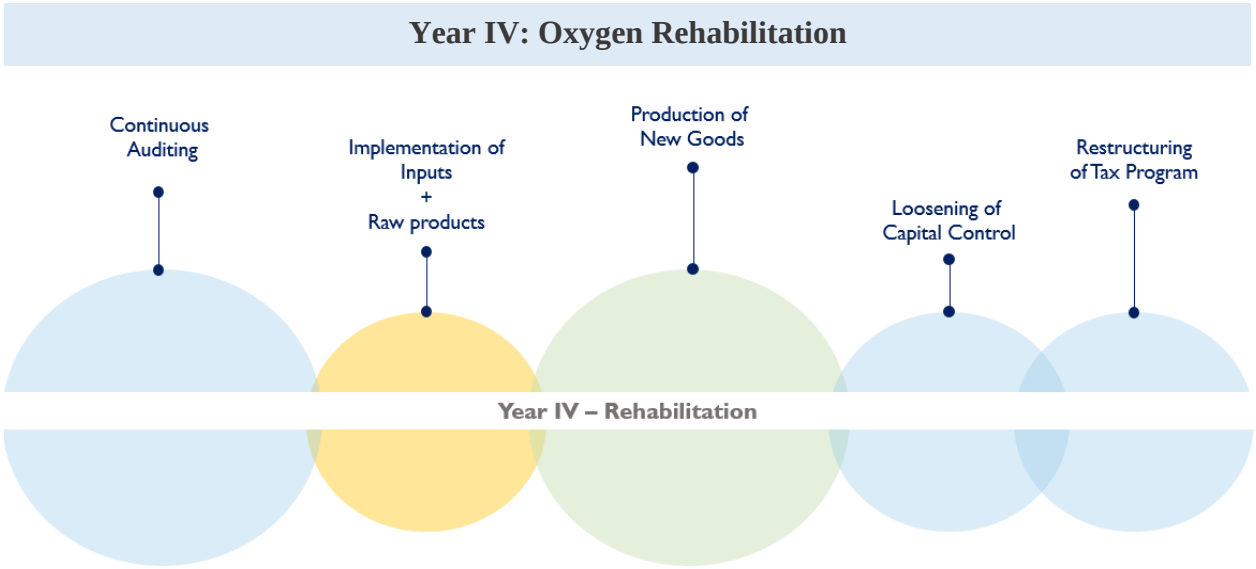


Figure 42. Year 4- Rehabilitation

In our fourth year we start rehabilitation, it is just a phase of transition and stability, we need the below steps to achieve that.

- Continuous auditing: it is mandatory to stay on the right track until the end of the project and beyond.
- Implementation of inputs and raw products: As previously discussed, on the micro level, raw material and inputs will be locally produced. Financing and training were provided, it is now the time for execution and income generation.
- Production of new goods: By linking the above micro level inputs to the meso level industries and enterprises, the ecosystem can now start producing new final goods. Hence, increasing growth, self-sufficiency, and independence. Our aim is to strengthen local production enough to drown the market with it and start exporting. Noting that a floating exchange rate is now favoring Lebanese competition.

- Loosening capital controls: The country is now in rehabilitation as investments are flowing in and revenues are being generated. It is now necessary to start loosening capital controls in order to create a sense of freedom for the people and more incentive for capital inflow.
- Restructuring of taxes: Finally, at the end of year 4, a program to restructure taxes will be put in place. Taxes are a main source of revenue for governments. On average, Lebanon's tax rates are lower than the rest of the world, however we still have low level of compliance. The latter is mostly a result of lack of tax benefits and revenues. Therefore, the main goal of the program is to create a well sustainable tax program in order to increase tax rates and increase compliance as well.

Exprenditures	Continious auditing	Implementation of inputs + raw products	Production of new goods	Loosening of capital control	Restructuring of tax program	Enforcement of auditing	Attraction of FDI's
Y4	0	0	0	0	0	0	0

Figure 43. Split of funds for year 4 with numbers.

2. *Year Five: Recovery*

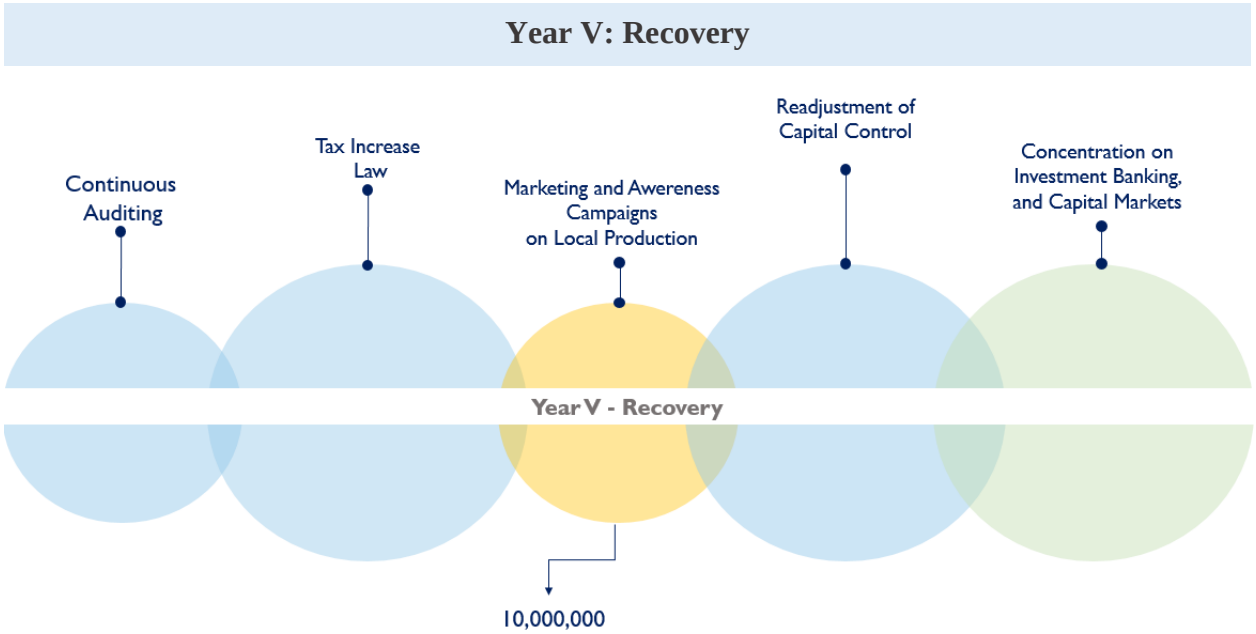


Figure 44. Year 5- Recovery

During the last year of our reform, we work on keeping the country stable and starting to recover from the crisis that we have now started getting out of.

- Continuous auditing: Auditing, as discussed before, is still important and plays a key role.
- Tax Increase Law: The tax reform program is finalized and can now be implemented creating instant revenues and benefits.
- Marketing and awareness campaigns on local production: We have created a well behaving and sustainable ecosystem for employment and production. Nevertheless, to keep this system sustainable we need to provide local production and access to consumption markets. Awareness and marketing of local production will decrease imports and enhance self-sufficiency and sustainability. We estimate an amount of 10 million USD for marketing and advertising.

- Readjustment of Capital Controls: At the end of year 5, the country is fully recovered, and it is now possible for capital controls to be re-evaluated and not only loosened. Some regulations might still apply; however, the country will start to transition to an open financial border country.
- Concentration of investment banking and capital markets: Finally, since the ecosystem is working soundly, we start boosting investment banking activities and capital market transactions. With more investment and expansion, there will be a need for investment banks and for investment opportunities through capital markets. This in turn will lead to more growth and prosperity.

Expenditures	Continuous auditing	Tax increase law	Marketing and awareness campaigns on local production	Readjustment of capital control	Concentration on investment banking, and capital markets
Y5	0	0	10,000,000	0	0

Figure 45. Split of funds for year 5 with numbers

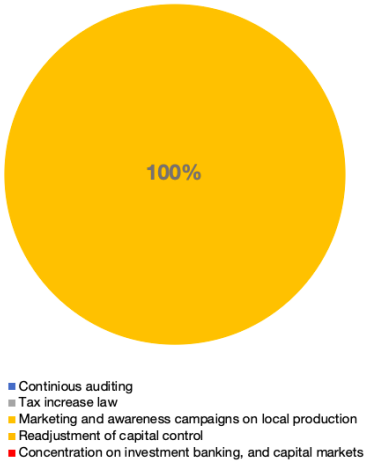


Figure 46. Split of funds for year 5

C. Summary of Reform

In conclusion, we start the road to recovery with a deep array of multifaceted reforms, which open the door to a sound financial system, alongside drain control on the deficits in the fiscal balance, which are accompanied by new procurement, anti-corruption laws and continuous auditing. Followed by mass privatization of public assets and Build-operate-transfer contracts aimed at the efficient use of current assets.

Moreover, we will be restoring confidence in the economy with a series of large capital injections that are aimed at creating growth in some important sectors, mainly health and education. In addition, we will be exploring possible national investment opportunities following need-based assessments that are to harness growth within new sectors. In addition, we are to create a sustainable eco-system for innovative entrepreneurs, which will also see the legislation of FDI attracting laws.

Onwards, we create a 2030 vision and look a little further in the future, 3 years from the end of the project. We expect to see sustainable growth, propelled by sound government expenditures that conform to well-studied fiscal and monetary policies and that are allocated towards the creation of new job opportunities (Limiting brain drain), increases in local production and export volumes, need based assessments and investments. Moreover, these expenditures will be allocated towards a solid social security net, which will include public health and education coverage.

We have now achieved the smart and sustainable growth goal. A table below shows our forecasts of the results. A drastic increase in GDP accompanied with a high expenditure cost is observed at the beginning of the timeline. However, expenditure continues with a decreasing trend and GDP with an increasing one, nonetheless with a slower rate.

Year	Expenditure($)	GDP ($)	GDP growth(%)
2018		55,000,000,000	
2019		52,000,000,000	-5.454545455
2020		33,000,000,000	-36.53846154
2021		20,600,000,000	-37.57575758
2022	10,680,000,000	22,700,000,000	10.19417476
2023	10,000,000	37,500,000,000	65.19823789
2024	9,300,000,000	41,000,000,000	9.333333333
2025	0	49,000,000,000	19.51219512
2026	10,000,000	56,000,000,000	14.28571429
2027		59,000,000,000	5.357142857
2028		62,500,000,000	5.93220339
2029		66,500,000,000	6.4

Figure 47.Expenditures expectations for 2029

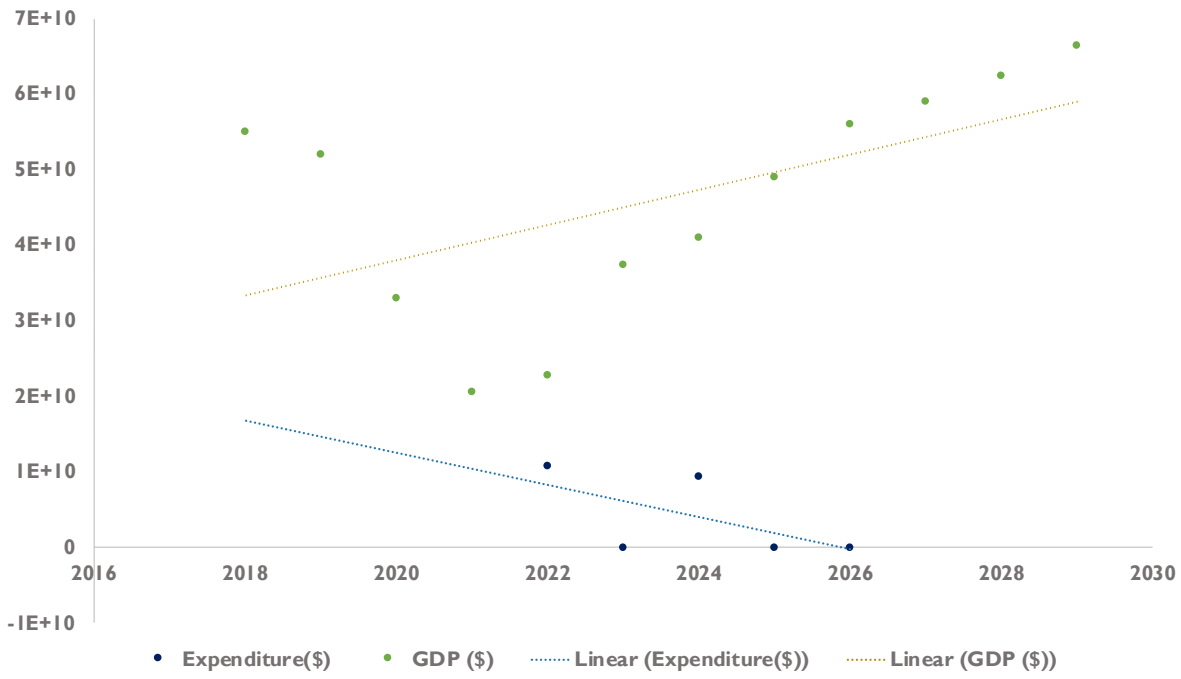


Figure 48. Expenditures expectations graph

At the end of our 5-year timespan we expect growth to be stabilized at a 6% average onwards.

CHAPTER V

CONCLUSION

In this paper we have thoroughly investigated the many aspects of contribution to the Lebanese corruption. Multifaceted in different layers, the corruption is nothing short of self-infliction. With a wide array of mismanagement of funds and resources, like the EDL and Budget manipulation, the Lebanese government has driven itself into a plummeting road of failures. Combining that with major failing strategies to provide a fruitful and efficient economy, like Ponzi schemes, Lebanon finds itself with low indexes in several areas such as social expenditures, poverty and deprivation indexes, corruption and much more.

Even though Lebanon is in the eye of the perfect storm right now with truly little to go on about, if we can reach an economical deal with the IMF resembling the CEDRE opportunity, using the reform plan that we develop in earlier stages of the paper, it would take Lebanon about five years to reach some steady state from which growth can continue to happen solidly. The reform plan is thoroughly spread over this timespan with prioritization of steps and allocations. The aim of this reform plan is to stay away from humanitarian aids for Lebanon and create a self-sufficient country that would strive on its own without the help of external intervention and monetary aids.
In the paper we already discuss reforms and a way for Lebanon to stay on track after its survival. However, one crucial point would tie everything together; Judicial Responsibility.

What keeps people in place is fear, the fear of consequences. And as we have seen during our study, Lebanon resembles the law of the Jungle. Anyone can get out of anything at any time. No consequences for actions.

If our judicial system in Lebanon stays weak and politically affiliated, we can expect to see this inefficient behavior rise again. With great power comes great responsibility, and responsibility starts with consequences and accounting.

Once the judicial system gains back the trust of the people, Lebanese citizens will believe that actions have consequences, and slowly build up their trust in the political institutions and governmental entities.

The above discussed matter is truly a key element to the success of any country. Even if we get Lebanon back on its feet and guarantee minimal corruption, the faith in the government must be present. That is because, for any country, at some point of its existence, said country will face a recession and most of the time it might not be due to any internal inefficiencies or mistakes. In this case, some instances might require the intervention of the government and the central bank, and as any economist knows, the interventions of the government will never achieve any goal if the people do not trust these reforms.

So, in order to be able to have effective monetary and fiscal policies in times of need, the Lebanese government should gain back the trust of the people.
Ultimately, Lebanon has a lot of potential to be one of the most beautiful countries it can be, with its strategic geopolitical location, its access to maritime ports, its agricultural weather, and wide infrastructural and entrepreneurial opportunities. Lebanon can become a hub country for outsourcing companies and increase all possible economic prospects.

We hope Lebanon utilizes all its chances, and becomes once again the 10,452 Km^2, the Switzerland of the east, the home of co-existence, the land of cultures, the phoenix of the Middle East for a long and prosperous time.

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