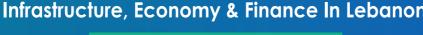


## BELIEF in Lebanon

Blueprint to Establish Leading Infrastructure, Economy & Finance In Lebanon





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## BELIEF in Lebanon

Lebanese Institute for Market Studies April 2020 - Lebanon

## **Executive Summary**

People in Lebanon lost their incomes, jobs, and life savings due to a massive economic slowdown coupled with high inflation and a devaluation of the currency. The Lebanese government suspended the payment of a \$90 billion debt, mostly held by the domestic banking system. The central bank accumulated losses on foreign exchange operations as well. Banks became insolvent, froze deposits and requested the establishment of official capital controls. The "Lebanese Government's Reform Draft" proposes a way out of the crisis. This blueprint builds on that document and aims to complement it. The key components of our proposal are:

**Growth-driven reforms:** The crisis calls for a new approach to fiscal policy. In current circumstances, tax increases will lead to lower revenues and public monopolies will keep on spending borrowed money on useless projects. High debt burdens and debt haircuts on future generations will follow. We recommend replacing current taxes with a single, simple flat tax, similar to what many former communist countries have done. We also recommend dismantling monopolies and opening markets to competition. Competition would reduce the need for government to borrow and spend. It will substantially improve the quality of infrastructure and reduce the cost, while setting the base for sound economic growth.

Currency board: We expect the suggested dirty float of the exchange rate to lead to recurrent devaluations, further impoverishing the population because of the central bank's tendency to finance fiscal deficits. To solve the currency crisis, we argue for replacing Banque du Liban (BdL) with a currency board. Unlike the dirty float, a currency board would ensure a sound, stable, and fully convertible Lebanese pound. A currency board would also deprive the monetary authorities of the ability to finance the government and thus would impose monetary discipline that Lebanon has clearly lost since at least 2015.

Cumulative interest: The costs of government debt and BdL's mismanagement should not be entirely borne by depositors. Both entities need to dismantle monopolies, liquidate their assets, and cover a part of their losses. Furthermore, rather than imposing an unfair haircut on depositors above a certain threshold, we recommend revealing cumulative interest paid by Lebanese banks to their depositors since the 2015 Ponzi scheme, including depositors who already transferred their money outside Lebanon. Cumulative interest should be the second source of a bail-in, after banks' shareholder equity. This process, used in the Bernie Madoff fraud case, allowed the conservators to preserve the initial principal invested.

Our suggested reforms would enable the government to raise more income without increasing taxes, to cut spending without discouraging investment, to stabilize the Lebanese pound without making losses on foreign exchange operations, and to restructure banks without shifting the entire burden onto depositors.

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#### 1. The Exhaustion of the Old Model

Lebanon is experiencing its worst-ever peacetime economic crisis, while the world is simultaneously going through the worst economic crisis since World War II because of COVID-19. Lebanon can no longer count on external funding to support the economy. The old model of buying political peace with debt-financed government spending, supported by external funding, is exhausted.

**Debt ratio:** The Lebanese Government's Reform Program, Draft for Discussion (also called the Lazard Plan) estimates public debt at 175.6% of GDP or \$90.2 billion. The debt consists of \$56.8 billion of LBP-denominated debt and \$33.3 billion of Eurobonds, multilateral debt, and bilateral debt.

Haircut: GDP in 2019 was \$49 billion, and the plan projects a contraction of 30% in nominal US dollar terms to \$34.2 billion in 2020. Real GDP is expected to decline by 12%. Despite the vicious depression, public debt is estimated to decrease to 92% of a \$34.2 billion GDP, bringing it to \$31.43 billion in 2020. This decrease is partly due to valuing the LBPdenominated debt at the 2020 exchange rate of LBP 2302 per U.S. dollar and partly to a 62% haircut on all bondholders (excluding the \$2 billion multilateral and bilateral debt).

**Budget deficit:** Between 2019 and 2020, the plan projects government revenues to decrease from \$10.5 billion to \$6 billion, and government primary expenditure to decrease from \$10.9 billion to \$7.4 billion. The primary government budget balance will accordingly deteriorate from -\$0.44 billion to -\$1.33 billion. By 2024, the plan projects that Lebanon will have a primary budget surplus of \$0.49 billion and an overall budget balance of -\$0.4 billion, representing -1.3% of a \$30.4 billion GDP.

**Spending cuts:** The plan sets a scheme to reduce spending by scaling down on many benefits that are given to public sector employees, a long overdue. The 33% reduction in expenditure will mainly come from cutting the wage bill by \$2 billion and reducing transfers to Electicité du Liban (EDL) by \$0.43 billion.

**Revenue-enhancing measures:** Government income in dollar terms is expected to decrease by 43% given the sharp recession. The plan suggests revenue-enhancing measures in the form of increases in tax rates, on personal income, capital gains, and corporate income. To be specific, the corporate tax would increase to 20%, interest tax to 20%, capital gains to 15%, and income tax for high salaries to 30%. In addition, a myriad of indirect taxes such as vehicle inspection fees and port revenue would be collected through various channels.

Risks: Protests are expected once the COVID-19 lockdown is lifted. Opposition could be tempered by deploying a social safety net and by making merit-based appointments at Banque du Liban (BdL) and EDL. Politics as usual, on the other hand, especially in BdL and EDL appointments, would fuel popular unrest and reduce the chances of an external support. We also expect actual GDP growth and the budget deficit to be worse that the plan projects. The plan does not factor in the impact of COVID-19, and the projected broadening of the tax base seems overoptimistic. Also, Lebanon may be on the downward-sloping side of the Laffer curve, and increasing taxes in a depression will yield counter-productive results. Even if Lebanon is on the upward-sloping side of the Laffer curve, any increase in revenue would come at the expense of large reductions in economic output.



## 2. Budget Reforms: More Taxes Won't Work

The Lazard Plan mainly deals with the consequences of Lebanon's problem: the high interest payments and level of debt. The debt is due to excessive government spending and outdated fiscal policy. A haircut on debt and interest payments does not address the root of the problem.

Government spending is the problem: The period since the end of the Lebanese civil war has witnessed an enormous increase in public debt and spending to finance failed infrastructure investments, overemployment in all public sector institutions, overpriced public contracts, and skewed welfare programs. The large debt yielded growing debt service payments, reaching 50% of budget revenues before government decided to suspend them. The Lazard Plan has the courage to suggest cutting the wage bill, but fails short on lavish investment projects in energy, water, telecoms, and internet financed by additional public debt.

Overspending on electricity: The electricity plan rejects removing subsidies in the short run, despite the sharp decrease in the world price of oil, a major generating fuel. The plan's assumptions are based on increasing production capacity, gasification, and improving collection, all of which remain uncertain. In the medium run, the plan relies on the government borrowing \$5.4 billion to further invest in EDL, which is unrealistic.

More dubious spending on infrastructure: Projected plans for the water, telecoms, and internet sectors repeat previous experiences that proved unsuccessful and extremely costly for the treasury. The national strategy for the water sector would add another \$4.85 billion in and focuses on building dubious water dams. Ogero, the state-owned telecommunications operator, plans to invest in the fixed-line network and in the deployment of fiber optics, funded by the treasury. The government also plans to finance the nationwide deployment of 3G and 4.5G networks planned by the two mobile companies, both stateowned but privately operated.

**Inefficient government:** According to the Global Competitiveness Report 2017–2018, published by the World Economic Forum (WEF), Lebanon ranks number 130 of 137 countries in efficiency of government spending, 126 in favoritism by government officials, 121 in irregular payments and bribes, and 124 in the transparency of government policymaking. In recent decades, Lebanon has diverted resources away from productive sectors and into a growing public sector, leading to a collapse in competitiveness, widespread cronvism, and an increase in debt service. This economic model left few funds for the private sector to borrow, invest and hire. Companies became less competitive and unable to meet the growing needs of the population for jobs and services. The Lazard plan leaves the model unchanged and hopes for better results.

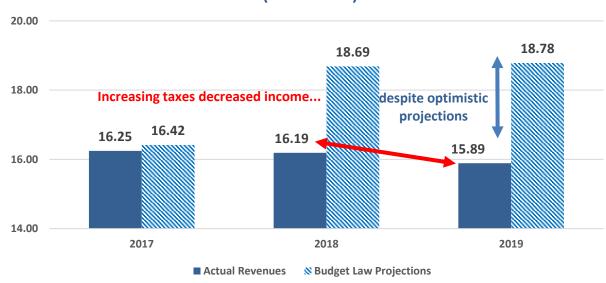
Future haircuts: The post-civil war economic model, based on increasing government debt to finance projects related to public monopolies, has reached its limits. The same old strategy of borrowing money to spend on failed public investment projects will not work anymore. This system fattens cronies who rely on political connection to win public tenders. It also threatens to lead to more haircuts in the future, as it would keep public debt high: 92.0% of GDP in 2020 and 103.1% in 2024. The risk of future haircuts would substantially delay Lebanon's ability to return to the bond markets and more generally to find local and



international funding.

**Smaller pie:** The government is planning "revenue enhancing" measures that would increase the tax yield by 4.1% of the GDP by 2024. The GDP however, according to the government's own assessment, is expected to shrink by around 40%. We caution against raising government revenues through taxation in an adverse economic and financial environment. Taxes should be tools to change behavior from a consumption state to a production, savings, and investment state.

## Lebanon Government Revenues: Projected vs. Actual (trillion LBP)



**Direct taxes:** Given the country's dire need for hard currency, investors should be encouraged to bring in capital to Lebanon. The taxes suggested put Lebanon on par with rich countries. Why would anyone invest in Lebanon if the tax rate is the same as in a country with a well-functioning economy, regulatory system, and judiciary?

**Indirect taxes:** Indirect taxes are subject to abuse, and we advise viewing them as a social cost, not a revenue center for the government. Measures that started out to keep people safe, like traffic tickets, or road tolls, are now considered as part of core government funding. We do not expect any substantial increase in revenue from those taxes. We recommend they taxes be removed from the plan and returned to their original purposes, i.e. keeping people safe and maintaining proper roads.

**Difficult negotiations:** We believe that the Lazard Plan's lack of boldness is in fact risky, because the same old imbalances will lead to a quick buildup of unsustainable new debts, given the sharp economic deterioration. We doubt that bondholders will accept a haircut before seeing a credible plan that deals with the underlying factors that led us the current situation.



## 3. Alternative Plan: A Growth-Driven Approach

We suggest an alternative plan based on enhancing government revenues by growing the tax base rather than taxing a shrinking economy. Ireland provides a good example. It had a corporate tax rate near zero for many years to attract new companies to the country and even nowadays it only sits at 12.5%. The Irish grew their tax income by reducing tax rates. On the spending side, public debt in Lebanon often originates from dubious public contracts signed by government monopolies that have been engaging in exclusive, long-term partnerships with a close network of select acquaintances. Fighting corruption starts with dismantling those monopolies and opening different sectors to competition.

**Subsidies:** We recommend taking advantage of current low world oil prices to change the way the average electricity price is set and move from a fixed to a variable tariff. The new price formula should be transparent and based on oil prices, while taking other costs into account. Part of the saved funds can be transferred to the social safety net to help the poor afford higher rates, while the other part should be used to cut the deficit.

Competition: Competition (not privatization) can help Lebanon rebuild infrastructure without the need of further debt, by shifting costs to the private sector. This move would stimulate innovation, reduce investment requirements from the government, and leave less room for cronies to profit from public contracts, since fewer public contracts would be available. It would also give power to consumers, who would be able to change suppliers if they believe the service is too expensive or of poor quality. Consumer purchasing decisions would push suppliers to improve their services and keep prices low. Competition in infrastructure may seem counterintuitive at first glance, but experience in the European Union, Chile, Britain, and many other regions has shown its effectiveness (more details in Section 7).

**Electricity:** Conditioning electricity reform to substantial external funding ignores the current financial distress. We recommend full compliance with Law 129 of May 2019, which requires private funding through the use of a build-operate-transfer format, for all investment in the electricity sector. Private funding can be attracted under two provisions: (1) bidding conditions should be modified in line with the specifications of the Tenders Department, and (2) the government should be cut out from the revenue stream by relying on electric distribution companies that would directly pay producers. No company will engage in an investment if the promised revenue comes from a government in default (for details, see Section 6).

**Public procurement law:** It is crucial for Lebanon to learn from the few cases where public expenditure has been successfully controlled. Those cases have happened when the Tenders Department has been allowed to repeal irregular tenders. The proposed draft public procurement law expands the jurisdiction of the Tenders Department, while simultaneously making it harder to repeal irregular tenders. The parliamentary subcommittee should amend the draft after taking into account the remarks of the main stakeholder, which is the Tenders Department.

**Spending cap:** There is a need for immediate and significant spending cuts, and then a fiscal rule should be set to ensure long-run stability. We suggest Lebanon adopt an annual "spending cap" or "debt brake" rule similar to the ones used in Switzerland or Hong Kong.

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The rule sets a limit on the growth of government expenditure which applies in both boom and recession periods. If spending deviates from this limit, the difference has to be corrected in the following years. The existence of such a law would provide a good excuse for government to dismiss demands for additional spending. It would also give a strong signal to the international community and the financial markets of the credibility of Lebanon's engagement for fiscal reforms. The IMF and the World Bank have studies showing that a spending cap is the most effective rule.

**Tax reform versus tax increase:** Lebanon's current tax system penalizes productive activity, discourages work and investment, encourages tax evasion, and makes Lebanon less competitive. The government increased tax rates in 2018 and 2019 and ended up creating stagnation and joblessness. The Lazard Plan hopes to generate revenues by changing the tax structure. Past experience in Lebanon shows that the revenue generated from taxes remains roughly constant as a share of GDP despite changes in tax rates.

Flat tax: Flat taxes, which apply a single rate to personal income, corporate income, and value-added taxes, have been successful in many former communist countries. Estonia adopted a flat tax of 26%, Latvia 25%, and Lithuania 33%. Along with other reforms, the flat tax significantly improved economic growth, and the "Baltic Tigers" became role models for the region. Russia followed in 2001 with a 13% flat tax and scored a significant success. Over the next decade both Russia's GDP and tax income increased six-fold as tax evasion and avoidance became less profitable. Tax reform continued to spread in the region: Serbia adopted a fat tax of 14%, Slovakia 19%, and Ukraine 13%. Early adopters discovered that they had set their rate too high, so Estonia and Lithuania decreased it to 20%. There has since been some backsliding, but the countries raising rates have not achieved good results. Hong Kong may be the best role model for Lebanon. Its flat tax has been in place since after World War II and the jurisdiction have become enormously prosperous. For Lebanon, we recommend repealing all taxes and replacing them with a single plain flat tax of 15%. We also recommend exemption from the tax for low-income people.

**Educational finance:** The recession will drive more parents to switch their children over to public schools, which will accelerate private schools closure that started with the salary-scale crisis. The government should improve the level and efficiency of public schools on one hand and help slow closures in private schools. We recommend channeling the budget dedicated to public schools through an educational voucher system. Competition between public schools to attract voucher holders will drive schools to improve service and help separate effective public schools from ineffective ones. As for private schools, the government cannot afford to offer financial assistance but we believe that dissociating the legislation of private schools from public schools can give them a buffer (article 7 of Law 159 of August 2011; article 32 of Legislative Decree 112 of June 1959, etc.) The government should also consider allowing private schools to accept vouchers.

**Details of implementation:** Such a big change to current arrangements calls for a more indepth discussion than is appropriate here. We are currently working with Dr. Dan Mitchell, a leading expert on tax competition, spending restraint, and spending caps. His policy work has made a lasting impact in over 50 countries, and has been especially successful in the Cayman Islands, Panama, and Switzerland. As part of his consultations with the Cayman Islands government, he worked to ensure that they Caymans remained a low-tax jurisdiction. While in Panama, he advised officials to protect their financial services industry. In Switzerland, Dr. Mitchell consulted with government officials on financial privacy laws and the debt brake.

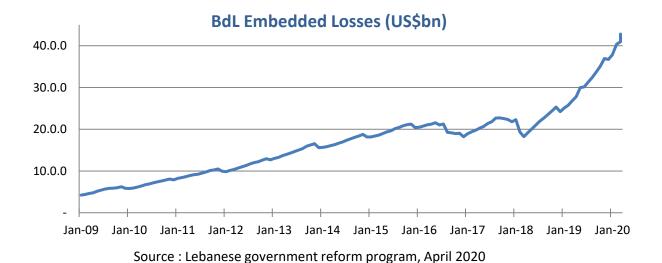
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## 4. The Central Bank and the Depreciation of the Lebanese Pound

The old economic model relied on expansionary fiscal policy funded by the central bank, which could only continue in a pegged exchange rate regime as long as capital was flowing into the country.

**BdL losses:** The Lazard Plan provides a measure of BdL's embedded losses carried forward against future seigniorage revenues. Accumulated losses fluctuated around \$20 billion from 2015 to 2018 due to maintaining an overvalued currency, and added another \$22.8 billion after 2018, mainly through financial engineering operations. BdL is also expected to take another \$20.88 billion loss due to the haircut on sovereign bonds, bringing the total loss to \$63.6 billion, or nearly twice Lebanon's projected GDP this year. The plan writes off the current \$3.7 billion capital base of BdL leaving it with a net capital position of -\$5 billion. Remaining losses amount for \$54.9 billion.



### Parallel Market Exchange Rate (LBP per US\$1)



**Dual exchange rate:** Accumulated losses hindered BdL's ability to maintain the pegged exchange rate goal for which it was originally designed in the early 1990s. The parallel market exchange rate reached LBP1530 per US dollar on August 2, 2019, then LBP1600 on

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September 27, and continued to plummet, reaching LBP3200 per dollar in April 2020. BdL kept the official rate at LBP1500 and allowed banks to refuse to reimburse deposits denominated in dollars, forcing depositors to withdraw their dollars in Lebanese pounds at the official rate rather than the market rate. On April 21, BdL devalued the official rate but the gap with the market rate persisted.

**Dirty float:** The Lazard Plan recommends shifting the exchange rate regime to a managed float or a crawling peg. The new system would in principle allow the central bank to change the exchange rate to prevent renewed losses like the ones accumulated in recent years. The plan projects a progressive devaluation to LBP2302 per dollar in 2020 and to LBP2979 in 2024, which would help preserve competitiveness.

**Risks:** We expect the exchange rate devaluation to be larger than projected given the low level of foreign exchange reserves and the persistence of large current account deficits. The government would need fresh dollar injections to cover the current account deficit, which we believe would be unreasonable. The government would rather use the possible support to finance the fiscal deficit. Furthermore, loose monetary policy would persist, as Circular 547 of March 3, 2020 allows more loans in response to COVID-19 and Basic Circulars 148 and 149 of April 3 allow small depositors to withdraw their deposits at LBP2600/\$.

Twin deficits: The Lazard Plan suggests keeping BdL in charge of managing the exchange rate while allowing it to make recurrent devaluations. The plan projects that there will be only limited devaluations every year from now until 2023. This expectation clearly misses the elephant in the room. BdL has made losses in recent years because of a current account deficit and an overvalued exchange rate. However, expansionary fiscal policy financed by BdL was the main contributor to the current account deficit, and the government took advantage of the overvalued exchange rate. The example of imported fuel for government power plants and the payments made to electricity power ships are a direct illustration of the links between the twin deficits.

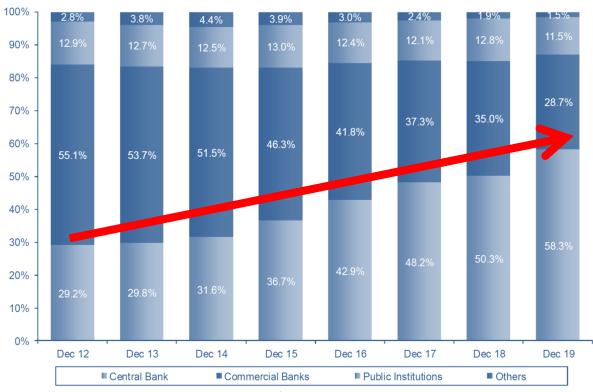
**Fiscal and monetary "fiestas":** In 2015, commercial banks realized the high default risk on Lebanese sovereign debt, so they progressively reduced their exposure to it. BdL then stepped in, buying LBP-denominated bonds from banks, hence pursuing an expansionary monetary policy. BdL then exchanged LBP-denominated bonds for newly issued Eurobonds, allowing the government to continue decades of expansionary fiscal policy. This policy led BdL's exposure to treasury bills to increase, banks' exposure to decrease, and the Lebanese pound to become overvalued. BdL also issued dollar-denominated certificates of deposits to banks at high interest rates, which captured dollar deposits that banks had been able to attract and increased BdL's foreign reserves war chest.

Credibility: BdL has lost both the powerful monetary policy channel and the weaker portfolio balance channel to control the foreign exchange rate. Raising interest rates would simply not attract funds, as people have lost confidence in the ability of the banking sector to return the funds. BdL is currently trying the signaling channel, with no visible success so far. Circular 546 of March 6 instructed foreign exchange dealers to trade the dollar at LBP2000 but met with no result because the rate was obviously unrealistic. Basic Circulars 148 and 149 of 3 April are trying to anchor expectations around LBP2600/\$, while the dollar is trading today at around LBP3200 on the black market. BdL is powerless: it has no credibility, depleted reserves, and faces a current account deficit and a budget deficit. What is to prevent



it from a repeat performance? Any arrangement involving a discretionary monetary policy brings us back to the same old game, where we have to trust the central bank's self-discipline and hope it avoids its past mistakes.

#### Lebanese Government Bondholders: BdL Takes over the Banks



Source: Ministry of Finance, December 2019

**Institutions:** In countries like Lebanon, suffering from weak institutions and an absence of checks and balances, the central bank can easily become a tool to finance government expenditure. The dirty float risks repeating the experience of countries such as Egypt, Iran, Sudan, and Turkey, which have had persistent problems with devaluation and high inflation. Therefore, we do not believe that a dirty float would be a good arrangement for Lebanon.

## 5. A Currency Board Solution for Exchange Rate Devaluation

Lebanon cannot maintain an artificially overvalued exchange rate. Likewise, the existence of two exchange rates has led to a scarcity of dollars, the disappearance of a number of goods from markets, a panic among bank account holders, and the substitution of productive activities with speculation on the black market. We recommend that Lebanon convert BdL into a currency board, after an appropriate devaluation of the official exchange rate.

Monetary discipline: A currency board would guarantee a fixed exchange rate and full convertibility of the Lebanese pound. A currency board would also deprive the monetary authorities of the ability to finance the government and thus would impose monetary discipline that Lebanon has clearly lost, at least since 2015. We are particularly concerned that BdL will supply Lebanese pounds without limit to meet the demands of banks and the public treasury. Such a move would lead to hyperinflation, the impoverishment of residents,

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and a collapse of the exchange rate.

**Sound money:** Lebanon desperately needs a currency that is stable, credible, and fully convertible. Stability means that current annual inflation is relatively low, usually in single digits. Credibility means that the issuer creates confidence that it will keep future inflation low. Full convertibility means that the currency can buy domestic and foreign goods and services, including buying foreign currencies at market rates without restriction.

The unsound LBP: The current high inflation and limited convertibility of the Lebanese pound hinder economic development and discourage domestic and foreign investment alike. Foreign capital has dried up and domestic capital has illegally fled or gone into hiding to avoid confiscation by means of inflation or a dual exchange rate.

What is a currency board? A currency board is a monetary institution that issues notes and coins (and, in some cases, deposits) fully backed by a foreign "reserve" currency and fully convertible into the reserve currency at a fixed rate and on demand. The reserve currency is chosen for its expected stability. In Lebanon's case, the obvious choice is the U.S. dollar, although in a currency board system, people would also have the freedom to hold deposits and do business in euro, Japanese yen, or any other currency they wished.

How does it work? As reserves, a currency board holds low-risk, interest-earning securities and other assets payable in the reserve currency. A currency board holds reserves equal to 100 per cent or slightly more of its notes and coins in circulation, as set by law. The simplest type of currency board accepts no deposits and issues no securities; if a currency board does accept deposits or issue securities, they too must be backed 100 per cent or slightly more by assets payable in the reserve currency.

Unlike BdL, currency boards are profitable: A currency board earns profits from the difference between the return on the reserve-currency securities it holds and the expense of maintaining its notes and coins in circulation. It remits to the government profits beyond what it needs to pay its expenses and to maintain its reserves at the level set by law. A currency board does not have discretionary control of the quantity of notes, coins, and deposits it supplies. Market forces determine the quantity of notes, coins, and deposits it supplies, and hence the overall money supply in a currency board system.

**Track record:** The record of currency boards in maintaining fixed exchange rates has been excellent. Currency boards have existed in more than 70 countries over the past 170 years. Few ever changed their exchange rates. In contrast, almost all central banks have devalued their exchange rates. The best-known currency board today, in Hong Kong, has existed since 1983, when it was established to end a currency crisis under a floating exchange rate. It has successfully withstood the East Asian currency crisis of 1997-98, the global financial crisis of 2008-09, and the current coronavirus shock. The Hong Kong dollar is tied to the U.S. dollar. Another well-known currency board, in Bulgaria, is tied to the euro. It was established in 1997 to end a hyperinflation, which it did almost instantly.

"Hard budget constraint": The lack of stability, lack of credibility, and restricted convertibility of the Lebanese pound today results from the subordination of BdL to financing government budget deficits. In recent years, government budget deficits have been typical for Lebanon. Because a currency board does not finance the domestic government, it

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imposes a "hard budget constraint." In other words, the government is limited to what it can borrow without resorting to inflation, exchange controls, financial engineering, or other measures that force people's savings where they otherwise would not go. Limiting government borrowing to what people will voluntarily finance tends to make it more limited and efficient, promoting economic growth.

**Details of implementation:** Such a big change to current arrangements calls for a more indepth discussion than is appropriate here. We are currently working with Prof. Steve Hanke of Johns Hopkins University on a more detailed proposal to implement a currency board. Prof. Hanke has been involved with all of the currency board stabilizations in the last 30 years. We would be happy to present our findings in a dedicated meeting.

## 6. A Banking System in Need of Restructuring

Banks became accustomed to continuously increasing their interest rates to attract new deposits from the public and then handing them to BdL for certificates of deposits. In 2019, the Lebanese economy entered a recession coupled with high levels of debt and deficit, escalating sovereign default risk and raising concerns about the exchange rate peg. Banks lost their ability to attract enough deposits to avoid a crisis and yields reached 14% on Lebanese Eurobonds, a level unseen in the history of the Eurobond market.

**Devaluation of bank dollar deposits:** Banks reacted to the market depreciation of the Lebanese pound by refusing to reimburse deposits denominated in dollars, forcing depositors to withdraw their money in Lebanese pounds at the official rate of LBP1500/\$. They also refused to sell dollars at LBP1500/\$, given that the market exchange rate was much depreciated from the official rate. Lebanese people not only suffer from the devaluation of their local currency, but also from the devaluation of their dollars deposited at banks in relation to *dollar notes*. A gap will likely persist until the banking system is restructured.

**Bank losses:** The Lazard Plan shows that BdL is insolvent, wipes out the capital, and transfers \$54.9 billion of losses to commercial banks since they have \$118.1 billion of currency and deposits with BdL. Banks should add another \$16.1 billion haircut on their treasury bonds and a \$12.2 billion in losses on their private loan portfolios. The total loss of the banks would therefore be \$83.2 billion. After deducting their \$20.7 billion capital, the banking system would have a remaining gap (negative net worth) of \$62.4 billion.

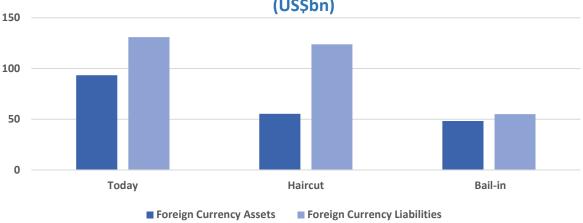
**Bail-in:** Given that banks are practically in default, the Lazard Plan proposes that depositors bear the combined BdL and commercial bank losses of \$62.4 billion. As debate has unfolded recently, first it was argued that 90% of the depositors should suffer no losses, meaning that holders of accounts with an amount larger than \$100,000 would suffer losses. The haircut would be 61% if limited to dollar-denominated bank accounts or 48% if LBP-denominated accounts are included. Recently, Prime Minister Diab announced that he wants 98% of depositors to suffer no losses, meaning that only accounts larger than \$500,000 would suffer losses. The haircut would be 68% if limited to dollar-denominated bank accounts (which we believe will be the case) or 54% if LBP-denominated accounts are also affected. A forced "lirafication" of deposits (forcibly converting dollar deposits into LBP deposits) has also been suggested at the rate of LBP1500 per dollar. It would constitute a haircut of 54% on all dollar bank accounts at the current market exchange rate.

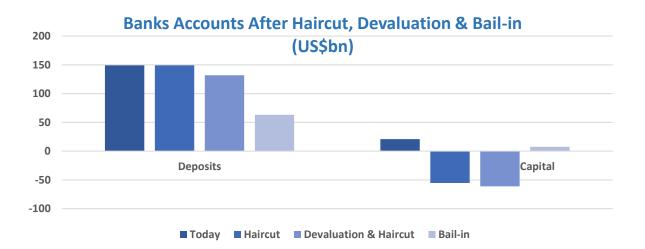
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**Compensation:** Creditors will become the owners after the banks' capital is written off, so one possibility would be to convert their deposits into equity in the restructured banks. The plan provides another option to transfer deposits to a recovery fund. The revenue streams of the fund would come from the recovery of stolen funds and future proceeds from state assets. Until the bail-in is completed, depositors would be able to withdraw their dollars in Lebanese pounds at the official rate.

**Forced mergers:** Under the Lazard Plan, the government would require new legal powers to enable it to downsize the banking sector and engage in voluntary or forced mergers of banks. Banks would need to ask permission before merging or injecting capital, and the government and supervisors would force mergers if necessary. Fresh funds would be provided to the reorganized banking sector by BdL, and a de-dollarization strategy would be devised.

**Risks of the proposed plan:** We expect the recovery of stolen funds to be less than expected and the proceeds from selling public assets to face a lot of opposition if dismantling monopoly does not happen first. Even if the ownership of some assets were transferred to the fund, we expect a high risk of principal-agent problems, rent seeking, and political capture. We strongly caution against forced mergers, given the risks of political capture. Instead, as

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we discuss in more detail below, we recommend enhanced governance and transparency and we suggest making the process voluntary and open. The new owners of banks whose deposits have been reduced should have the right to decide for themselves whether to merge.

**Equity:** While the Lebanese people were unable to withdraw more than a couple of hundred dollar per week in recent months, well-connected individuals transferred billions of dollars abroad. Those were accounts that profited from the financial engineering operations (Ponzi scheme) that started in 2015. By the same token, many depositors transferred their money into Lebanon in 2019, and did not profit from the Ponzi scheme; their money is now stuck in banks. The haircut should be able to take these matters into consideration.

**More equity:** The wealthiest 2% of depositors are those who currently have \$500,000 or more in the bank. This is around 40,000 accounts, representing the life savings of many honest business owners or expatriates bringing their money into Lebanon to support their families. The government should not penalize honest people and exempt cronies. This would have long-lasting effects on Lebanon, as no honest businessman would ever again invest a penny in the country.

## 7. Bank Restructuring: The Devil in the Details

The total losses of the banks under the Lazard Plan is \$83.2 billion. Of that, \$71 billion arise from transferring losses from the government and the central bank to commercial banks. Theoretically, banks have enough capital to absorb the \$12.2 billion losses on private loans portfolio, and therefore the current trouble facing the banks are essentially due to the public sector. Both the government and the central should assume their responsibility in this regard, especially that they hold some collateral.

Lender of last resort: Troubled assets triggered the panic of the account holders in a system where more than 70% of deposits are in dollars. Thus, the intervention of BdL as a lender of last resort is not possible, since BdL cannot print dollars. Moreover, BdL's exposure to Lebanese Eurobonds and the Ponzi scheme makes it illiquid after the suspension of payments from the government, at a time when banks are in desperate need for reimbursement of the certificates of deposit issued by the central bank. Banks therefore cannot rely on BdL to cover their losses through inflation and, given the current state of the public treasury and the suspension of payments, a bailout by taxpayers is also not possible.

**Steps for a bail-in:** The option of an internal bailout (or more accurately, bail-in) therefore arises. We recommend that each bank follow the process below.

- 1. **Audit**: All Lebanese banks already run internal and external audits. Audit companies would assess the losses of each bank.
- 2. **Shareholders**: Bank equity would be written down to reflect the reality of asset impairment, with existing shareholders being allowed to exercise their pre-emptive rights to recapitalize banks, without imposing any haircut on depositors.
- 3. **Fresh capital**: If existing shareholders are unwilling or unable to inject fresh capital, then investment banks should be called in as intermediaries. They would analyze the market, establish the banks' value, feel out who may be interested, and prepare financial information

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to help prospective buyers make an offer.

- 4. **Bail-in:** Some banks would be unable to absorb the losses and incapable of finding a buyer. In this case, the capital of the current shareholders would be wiped out by the losses and removed. Only then, would depositors be called for a bail-in.
- 5. Accumulated interest: Rather than impose an unfair haircut on all depositors, the cumulative interest paid by Lebanese banks to their depositors since 2015 should be calculated, with a detailed list of beneficiaries, amounts, and dates. Doing so would help identify account holders who may have managed to get their money outside Lebanon because of their privileged connections. This was the procedure followed with the Bernie Madoff fraud, in which reallocation of cumulated returns allowed conservators to preserve the initial principal invested.
- 6. **Property rights:** Equity in the banks would then be allocated *pro rata* to accumulated interest written off. If necessary, the principal of large depositors could also be tapped, since they were the beneficiaries of the financial engineering operations (not public authorities, nor the previous management, nor the previous shareholders). Consequently, small depositors' principal will be protected. The new owners will have the right to decide whether to liquidate the bank's assets or stay in business.
- 7. **Back to business:** If the majority of new shareholders decide to stay in business and succeed in appointing new management, the problem is solved, and the bank is operational again.
- 8. **Liquidation:** If new shareholders cannot agree about staying in business, the bank will be liquidated and (small) depositors will be paid before the new shareholders. A special taskforce should assist in an orderly liquidation of the bank, preventing a domino effect.

**Investment banks:** Investment banks are experienced in running multidisciplinary teams that include attorneys, financial analysts, accountants, and industry experts. Competition between investment banks would create an incentive to find potential buyers. This system would be more effective and transparent than the government or banking supervisors performing the steps above. It would also be more effective than a government-dictated approach in setting the identity, number, size, and ownership of the remaining banks in Lebanon. Transparency, fairness and credibility are better served when the market determines winners and losers.

**Risks:** Reshuffling the steps would be damaging, as it would lead to adverse selection and moral hazard. We will not run through all the possible scenarios; we will only highlight three.

- 1- Imagine that Lebanon imposes a haircut on depositors before deducting losses from current shareholders' equity. Such a policy would reward imprudent bank owners, and discourage shareholders from injecting fresh capital, hence transferring the entire bill to depositors.
- 2- Imagine if the government and banking supervisors controlled the whole process (steps 1 to 8). There would be a serious risk of conflicts of interest.

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3- Depositors will be required to bail in some banks and therefore they should have a presence in the decision-making process.

**Recovery fund:** Government assets have been mismanaged for decades and are mostly a source of deficit or reduced income. Their current status is a burden on future generations that risks perpetuating haircuts and/or devaluations. The recovery fund alone would not solve this problem. We recommend government to open the market for competition in monopolized sectors immediately by eliminating all barriers to entry. After well-established competitors arise (2-3 years horizon), the assets should be privatized, and their proceeds could be paid to bank depositors. This should not be confused with a bailout since the government is simply paying back its debt to the banks (partially).

**Competition**: Competition would reduce public spending on infrastructure projects, by shifting the burden of the cost to private companies. Further, it would eliminate oligarchies by empowering the consumer who would be able to change the supplier if they deemed the service expensive or of poor quality. Monitoring by consumers would thus motivate various suppliers to improve their services and become more competitive in terms of prices.

**Privatization**: It may be argued that the current monopolies should be maintained to increase the selling price and generate higher revenue from privatization. This argument overlooks Lebanon's suspension of payment on sovereign bonds. The government is already restructuring public debt and a haircut on bondholders is expected. Reaching an agreement will depend on the ability of the government to offer a credible engagement to service the remainder of the debt after the haircut. Maintaining monopolies that continue to extract rent from the productive economy does not inspire credibility. Bondholders would definitely prefer to see Lebanon on the path of economic recovery brought by unleashing the power of competition, private initiative and innovation.

**Spillovers**: In fact, competition in electricity, telecoms, the internet, air transportation, garbage collection, and other industries will produce positive spillovers to other sectors. Technology, services, industry, agriculture, and tourism need a reliable infrastructure to develop. Most Lebanese talents leave the country to work abroad because of the lack of proper framework. Those changes can bring businesses back to Lebanon, increase government's taxable pie, guarantee a faster return of Lebanon to the international capital market, and provide a healthy environment for the banking system to resurrect itself.

## 8. Beyond CEDRE: Attracting Investments in Infrastructure

On April 6, 2018, the Lebanese government went to the "Economic Conference for the Development of Lebanon through Reforms and with Businesses" (French initials CEDRE), organized by France, and obtained pledges of \$10.2 billion in loans to revitalize the country's infrastructure. The funds were to be invested in electricity, transport (mainly roads), water, telecommunications, and waste management. Despite the burden of additional debt, CEDRE gave hope for a better future. Two years later, though, the money is not disbursed yet despite the severe crisis and economic downturn compounded by the coronavirus. CEDRE is simply a continuation of the old system based on spending public debt on public contracts and then asking for more. The system collapsed and we believe that Lebanon should switch the funding model from debt to equity investments.

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#### a) Lebanon's Electricity Problem: A Zero Dollar Solution

**Deficit, debt, and electricity rationing:** People in Lebanon suffer from an average of 12 hours per day of rolling blackouts. Power rationing hurts almost everyone, since households and businesses have to acquire electricity in the expensive black market of private generators. The situation is no better in agriculture, which needs electricity for irrigation, or in the service sector, which consumes electricity for lighting, heating and air conditioning. Furthermore, the government's losses on electricity are responsible of 45% of the nation's debt.

The unsustainable path toward more public spending: Based on a plan developed in 2010, the Ministry of Energy and Water promised to secure electricity around the clock by 2014 and to reduce losses in the sector to zero, possibly earning profits in 2015. This plan was supposed to cost \$4.9 billion: \$1.5 billion covered by taxpayers, \$2.3 billion by the private sector, and \$1 billion by donors. Today, after eight years, the ministry has returned and asked CEDRE for \$5.6 billion in loans to build power plants, establish a gas network, and modernize transport, and distribution.

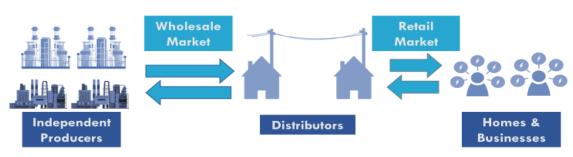
The plan doomed to failure: The plan repeats previous experiences that proved unsuccessful. Political polarization within the government prevents the implementation of electricity projects, as witnessed in the Zouk, the Deir Ammar and the Jiyeh power plants. Furthermore, the tendering process is generally biased in favor of one bidder over others. To illustrate, in one case, the tendering conditions have specified only floating generators, which only a specific "power ships" company can supply. Also, the ministry seems inappropriately focused on increasing in production capacity, which would simply increase the government's losses in the sector, since 45% of the energy produced is wasted and the remaining 55% is sold at a loss. Public debt in Lebanon is today an unsustainable 175.6% of GDP, which should restrain government from attempting dubious adventures of this magnitude.

**Unbundling and competition:** We propose unbundling generation, transmission, distribution and retail sales of electricity, and allowing competition in the generation and retail sales areas as follows.

**Independent Power Producers (IPP):** Production companies would enter the market without the need for licenses, permits, or bidding on tenders that are impossible to win. They would compete in selling their electricity to retail companies, which would keep prices low in the wholesale market and ensure high-quality service. Competition would bring dynamism, innovation, and private capital reliably providing electricity 24 hours a day.

Electrical Distribution Companies (EDC): Retail companies would buy electricity on the wholesale market and sell it to households. Unlike today's monopoly, clients—not the government—would choose which company they want to buy electricity from. Competition between retailers usually leads to abundant, reasonably priced energy supply. A common practice would be to charge lower prices at night, encouraging households to cut down their consumption during the day, which would secure more electricity for factories. Retail electricity companies would also have the incentive to ensure a high bill collection rate, because they would bear the loss from their own pockets otherwise.





**Transmission and distribution** would be transferred to private companies that would repair, maintain, and expand the network. Use of the network would then be rented out to producers and retailers. Given that the network is a natural monopoly, the real challenge at this level would be to provide access to all players without discrimination. An independent regulatory body aiming at facilitating, rather than obstructing, access to the network might provide a solution.

Unbundling and competition would eliminate blackouts, improve bill collection, repair the network, remove the need for \$5.6 billion of CEDRE loans, and eliminate the \$2 billion expected government losses on managing the sector in 2019. It would also ensure a reliable, affordable energy supply to productive sectors, improving Lebanon's global competitiveness.

#### b) Offering a Fresh Solution to Lebanon's Water Pollution

The water crisis in Lebanon: People in Lebanon use polluted water for their daily consumption such as bathing, cooking, and cleaning. The number of microorganisms that seep into groundwater from waste has reached 1 billion per milliliter; traces of mercury, salmonella, and *E. coli* have also been found. This is due to the absence of a sewage system and the leakage of wastewater into rivers, lakes, and groundwater. Lebanon needs about 2 billion cubic meters of water per year, but the government provides only about 35% of that amount, which reaches houses through the depleted state network, constructed during the Ottoman Empire and the French mandate. Therefore, people are forced to use water tank trucks and pay two bills for contaminated water.

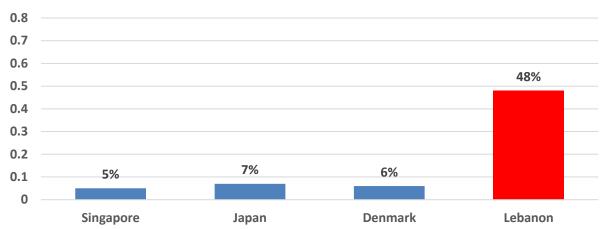
**Expensive solutions:** In 2011, the Ministry of Energy and Water set out a national strategy for the water sector and promised to solve the problem by 2020, at a high cost of about \$10 billion: \$7.74 billion for investment and \$2.1 billion for maintenance. The deadline is nearing completion and the water problem continues to grow. The treasury is unable to finance the entire project, and many disputes have emerged related to the dams, lakes, and riverbeds of the project. Today, the ministry is counting on CEDRE to obtain \$4.85 billion in loans for water spending, at a time when, as we have seen, the budget deficit and public debt are unsustainable.

**Independent Water Producers (IWP):** In view of the serious environmental and financial situation, we propose a new policy allowing private companies to invest in Lebanon's huge water wealth, which is 4.5 billion cubic meters annually. Production companies would treat surface water such as lakes, rivers, and springs (84% of total supply) and groundwater (16%) at their own expense. IWPs have the incentive to clean water to increase supply and sales. The government should open the market to all potential producers, in all regions, and let them compete on selling their water in order the keep a low price and a decent quality.



Competition among distribution companies: Distribution companies would purchase water on the wholesale market and sell them at retail as per consumption of households. Since they would also manage the billing service, distribution companies would make sure that their customers pay or else they would bear the loss of those who do not pay. This process improves the rate of collection, which does not exceed 50% currently. Lebanon already has experience with the efficiency of private sector operation in water. Between 2003 and 2007, the water concession in Tripoli was managed by a French company. It reduced waste by 20% in two years, raised the collection rate from 30% to 80%, and increased revenues from \$2 million to \$4.4 million annually. Again, allowing competing distribution companies to exist is of the utmost importance. If a company raises its price or reduces the quality of its service, the consumer can switch over to another company. This direct accountability places the consumer at the helm and companies compete for their business, by offering them inexpensive, reliable, and clean water.

#### **Percentage of Lost Water in Transmission**



Transport network management: Instead of relying on water tanker trucks, private companies would manage the transport network and rent it out to distributors and producers. Given that only 35% of today's demand is covered by the network, the transport companies would modernize, maintain, and expand the network to all households to increase their client base and their income. Furthermore, any leakage and waste in the network could be easily measured through the mismatch between the quantity supplied by the production companies and the quantity received by households. The cost of this mismatch would be borne by the transport companies which will motivate them to run a very efficient network.

This new formula would separate production, transport, and distribution. It would improve Lebanon's water, reduce prices, increase hours of service, repair the network, and save Lebanon's treasury from additional debt. It would attract private investments to the water sector, stops the sector from bleeding the government of funds, and transform water provision into a successful and efficient sector.

#### c) Grow the Economy by Boosting Telecommunications

Global Markets: Today, the telecoms sector has become the backbone of growth and progress globally. It connects more than 3.6 billion people with each other across the world and offers countless possibilities in communication, work, and education. Telecommunications contribute to increased business competition and lower prices by improving market

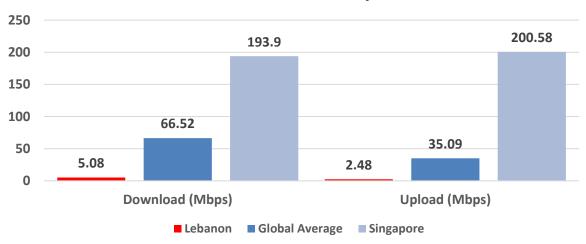




transparency and offering more options to buyers. E-commerce sales have increased by 113% globally over the past five years thanks to the internet. Social media has promoted the discovery of new goods and services. A study found that 78% of Facebook users in the United States had identified new goods and services and 55% of them had purchased these through online shopping. In addition, the telecom sector has made possible innovative new markets, including video on demand, music streaming, electronic payments, geolocation, and travel services, among others. Studies indicate that companies such as Uber have helped reduce pollution and crowding in many cities, and the telecommunications sector contributed to a remarkable growth in self-employment, which rose by 23% in 2017. Also, one study found that for every 10% increase in internet users, the economy grows by 1.21%.

**Slow connections:** According to global data gathered by the company Ookla, the average broadband internet speed in the world exceeded Lebanon's rate by about nine times. As for developed countries, such as Singapore, their speed exceeds Lebanon's by more than 33 times. Despite poor infrastructure that has discouraged Lebanese people from using the internet and taking full advantage of its benefits, the internet penetration rate in Lebanon is high, 76%, indicating countless lost opportunities. The country's productivity has weakened in the face of global competition: Lebanon also ranks 123<sup>rd</sup> out of 138 countries in foreign direct investments and technology transfer. The state of the telecom sector drives many Lebanese with high-tech talents to emigrate, instead of attracting capital to Lebanon.

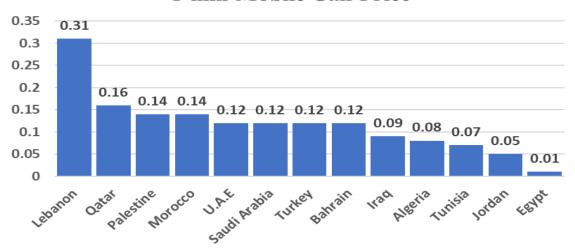
#### **Broadband Internet Speeds**



**Telecom monopoly:** The government's monopoly over the internet grid does not provide adequate services to its users, nor does it meet increasing demands. Many private companies are willing to install their own private internet networks but the laws prevent them. The government also limits the operation of mobile telephony to two companies. This duopoly is estimated to cost consumers about \$450 million annually, part of which goes to excessive employment. Despite having two private companies in charge, the treasury insists on paying all related costs, especially the draining investment costs. This system prohibits other companies from entering the sector and investing their own funds to improve this industry's services.



#### 1-min Mobile Call Price



**Competition:** Many countries have allowed private companies to establish their own networks at their own expense. This resulted in a rapid development of the internet grid at no cost to the state treasury. For instance, private companies have extensively invested in network maintenance and refurbishment to provide better services in South Korea, making the country a leader in high technology. Competition between those companies has reduced the price of internet service, making it more accessible to the whole population. Currently, Lebanon has only three international internet cables, while Singapore, which is just 1/14 of Lebanon's size, has over 26 lines. This is because Singapore opened the market to all companies wishing to enter and compete, instead of restricting it to the state.

Law of 2002: To help Lebanon progress technologically, we propose to implement the telecommunications law issued in 2002, which aims to open the sector to competition, as many other countries have successfully done. Telecommunications Regulatory Authority should be activated with a goal to motivate the maximum numbers of companies to enter the market, instead of giving licenses to a limited number of exhibitors. Furthermore, we recommend opening the process of obtaining international internet cables to a large number of companies, to ensure lower prices and keep pace with the increasing need for greater capacity. We also propose allow companies to deploy fiber optic networks inside Lebanon on their own expenses in order to deliver internet services at internationally competitive speeds to the general population.

#### d) Other Sectors

BdL owns 99% of the shares of Middle East Airlines and some shares in the Casino du Liban. Both companies own a monopoly privilege that hinders Lebanon's ability to attract tourists. Those sectors should be opened to competition and the monopoly dismantled. The government also owns a set of assets such as the ports of Beirut and Tripoli, the airports of Beirut and Qlayat, TeleLiban, a tobacco company, the lottery, fiber optic sea lines, stadiums, train stations, rail, etc. Most of those sectors should be opened to competition as well in order to stimulate growth and employment and to improve the service.



#### Conclusion

Lebanon's current economic model, in place since the civil war, is exhausted. The current world economic depression underscores the need for bold reforms to solve Lebanon's problems. To repeat, we propose the following steps:

- Switch to a growth friendly approach on taxation using a flat tax.
- Legalize private provision of key services to increase supply, improve reliability, keep costs low, and eliminate the drain on the government budget. These services include but are not limited to:
  - o Electricity.
  - o Water.
  - o Telecommunications.
- Replace discretionary monetary policy with a currency board to maintain a fixed exchange rate, after an appropriate devaluation of the official exchange rate of the Lebanese pound
- Use cumulative interest as the second source of a bank bail-in, after banks' shareholder equity.
- Dismantle monopolies, open different sectors to competition, and then use the proceeds from privatizing many firms owned by the government to compensate bank depositors and bondholders.

