Factors and Conditions Affecting Banks in Lebanon: Crisis of 2019

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Abstract

Lebanon is now facing a deep financial crisis, and commercial banks face the worse liquidity stress in the country's history. Researches done till now do not correlate other factors to each other and to the crisis. Those factors are mainly: banking activities and decisions, compliance, political issues, economic factors, as well as crisis and "black swans". In this paper we will analyze the factors that paved the way to the current situation, provide recommendation and suggest future research. This exploratory paper is based on a literature review of research papers, government reports, banks reports, newspapers, as well as information collected through observation during occurrence of the events. Results show that the huge capital inflows that entered the banking sectors for several years were funding the "financial engineering" instead of stimulating economic development. As Macro-economic and financial factors may combine supporting economic development and so the Sustainable Development Goals (SDGs) set by the United Nations for a better and safer future for society, the significance of this study is that, by defining and analyzing the fragility factors will assist to develop an effective and efficient early banking crisis warning system and developing a financial innovation framework which contributes to societies' well-being.

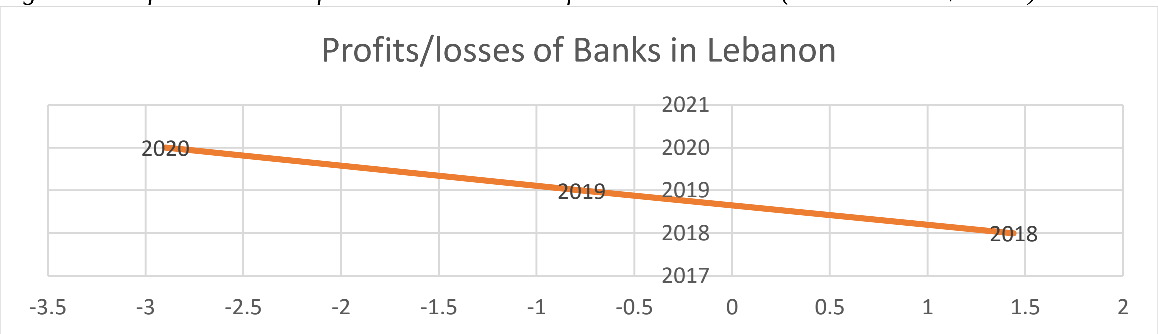
Keywords: compliance, economic factors, financial-engineering, liquidity, monetary policies.

1. Introduction

According to Miller (1998), as well as other researchers like Kunt and Levine (2008), the correlation between the financial markets and economic growth is too obvious to be discussed. But continuous debate is crucial as appropriate financial sector policies, regulations, and reformations should be a priority for risk management to enforce a strong and healthy financial sector which is secure enough to raise trust and stimulate economic development.

Lebanon is now facing a deep financial crisis which has roots to decisions made since 1990, following the civil war (Baumann 2019). The dramatic result of those decisions manifested by the end of 2019. The graph below shows the change from being a profitable banking sector to a sector facing the highest losses in its history.

Figure 1: Profits and losses of the banks in Lebanon from 2018 till 2020 (estimations in $billion)



Sources: Akleh, 2020; Bank Audi Sal, 2021, adapted by the author.

According to 2021, the losses are predicted to be even higher in the presence of crisis and general condition deterioration (banking, political, and economic).

According to Kunt and Levine (2008), countries tend to grow faster when they are supported by developed financial system. They also concluded that the banking system size and stock market liquidity proved to have a positive correlation with economic prosperity. And their third conclusion is that a financial system has the ability to back up external financing, thus support expansion of local industries facing obstacles.

Moreover, another study proved that there is a strong positive and statistically significant correlation between extent to which loans are directed to the private sector and the real GDP per capital. (Olowofeso, Emmanuel et al, 2015).

The operations performed by Central Bank of Lebanon (BDL) was refraining banks to play an effective role in the economy growth and supporting private sectors and SMEs. As in order to peg the currency since 1990s, and funding the government fiscal deficits and expenses, the BDL was actually draining commercial banks from foreign currencies (FC). The rates given to commercial banks was high enough, and in some cases paid upfront, minimizing the loans that should be given to the private sector and developing the economy. As a final result, the banks liquidity crisis led to inflation, business closures and poverty which reached more than 50 % by 2020 (ESCWA 2020).

The next part of this paper are the methodology, followed by literature review, discussion and evaluation, as well as conclusion and recommendations.

2. Methodology

The methodology of this exploratory paper is based on a literature review and information collected through observation during occurrence of the events. The research also covered scholarly and other literature (e.g. written documents, newspapers, and governmental reports) of the Lebanese economies and its banking operations. This step helped us to determine the characteristics and the most important factors as well as stakeholders involved in the stress of the economy and financial situations in the country. The next step was an evaluation of those factors before moving to conclusions and recommendations.

3. Literature Review

Many researchers in different time frames agree that the functions of financial institutions underpin economic prosperity despite their inherent fragility (Levine 1997, Merton and Bodie 2004).

While some researchers believe that the financial sector's operation mainly respond to economic development (Lucas 1988, Schinasi 2004), others concluded that financial system play a main role in influencing saving rates, investment decisions, technology innovation, offering diversified services and granting loans, by alleviating the market friction and so affecting long term economic growth (Miller 1998). According to Guillaumont Jeanneney and Kpodar (2011) a direct positive relationship exists between financial development and poverty reduction.

In Lebanon, even in times of wars and crisis, the banking industry was one of the most effective and resilient industry in the country and was able to capture capital inflow to boost the local system. While the country has a free and import-oriented market, its capital inflows in foreign currencies were huge. Its remittances were stably high to about 7 billion per year from 2008 till 2019 (Worldbank, 2019). Even with a decrease of 6.6 % in 2020, the remittances inflows is equivalent to 36.2 % of its GDP (Akleh, 2020).

In September 2019, the Lebanese government declared an economic state of emergency and a deep financial crisis followed

The problem was mainly uplifted by several factors which will be described next.

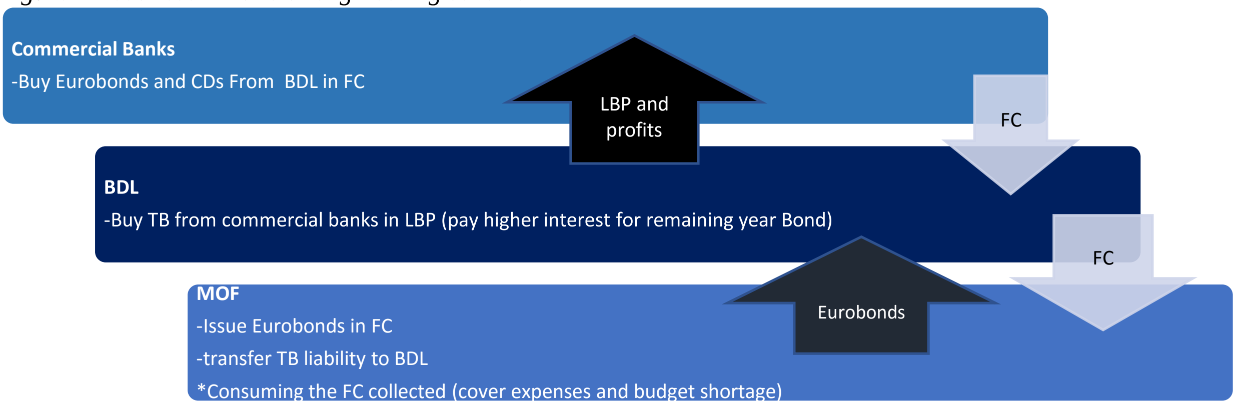
3.1 Banks Activities and monetary policies

3.1.1 Operations and the "Financial engineering"

Since 2016, BDL engaged with banks in swaps of sovereign bonds in order to refinance public debt and replenish its foreign exchange reserves. Banks used high interest rates to attract new dollar deposits, which they recycled at the BDL. This led to the so-called "financial engineering" which caused losses for the BDL, trapped dollar bank resources, and increased bank exposures to sovereign risk (Azar et al, 2020).

The mechanism used two swaps. In the first, BDL swapped Treasury Bills in Lebanese pounds (LBP) with Eurobonds from Ministry of Finance (MOF). While in the second swap, BDL sold the recently acquired Eurobonds by issuing Certificates of Deposits (CDs) in USD to commercial banks. That was against FC inflows provided by banks representing depositors' money (BDL, 2016).
The inter-linkages among MOF, BDL, and the commercial banks was enough to expand balance sheets. For BDL it showed a surge in liabilities to domestic banks, while balance sheet of commercial banks imposed a very large amount of assets, which was parked at BDL (IMF, 2019).
The two swaps are simplified in the image bellow:

Figure 2 Lebanese Financial engineering scheme



Source: adapted by the author.

The BDL incurs a negative carry on its FC borrowing from banks, due to the maturity mismatch on its FC portfolio.During the period that the inflow of FC was high enough, the system was covered, once the inflows decreased the system broke, and the FC deposits of costumers were already consumed.
The financial engineering was transferring a high percentage of its capital from commercial banks, to BDL and MOF. This is considered a Crowding out effect, which by definition is the phenomenon of government intervention to fund its spending by high interest rates, which in its turn decrease private investment spending (Broner et al, 2013).
Furthermore, the process was adding to the tier 2 (T2) of capital requirements of Basel committee, but it was far riskier than actually considered, as the money was going indirectly to the government. In its turn, the government was in deficit, meaning the bank capital were not secured. Far more capital should be reserved by banks to meet the real risk of its liabilities.
If we apply the capital adequacy ratio (CAR) formula:

$$CAR = \frac{T1 + T2}{RWA}$$

The T2 was inflated, making CAR appear higher than it actually was.The CDs contracts and swaps with the states made it possible for banks to show higher CAR.

3.1.2 Dollarization Rate and Foreign Exchange Rate Peg

The exchange rate is considered free floating as per de jure, while it is stable as de facto arrangement. But to be able to peg currency exchange rate at 1507.5 the BDL has been intervening by financial operations to raise capital inflows and its holding of foreign currencies. Those operations grew too large indeed as it attracted over USD 24 billion from banks since 2017 till February 2019, deposits and sales of CDs by the BDL (IMF, 2019).

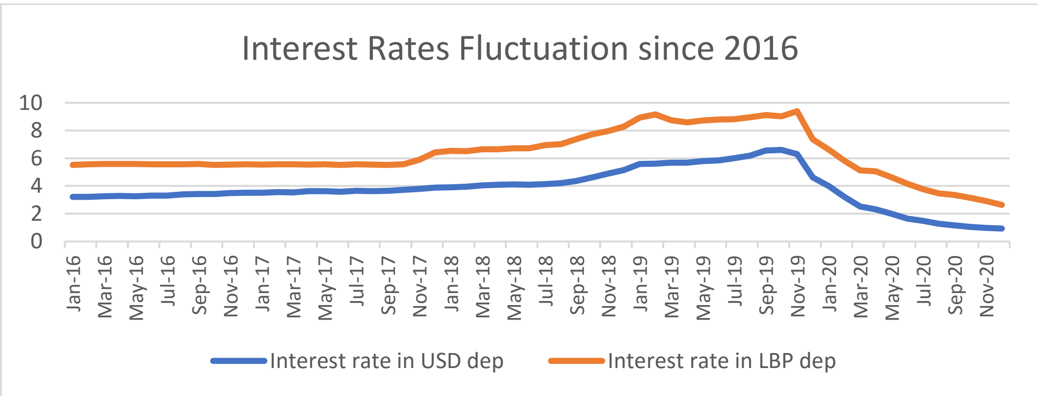
Meanwhile, Lebanon is one of the highest dollarized countries in the world since early 1990s (De Nicolo et al, 2005), representing lack of trust in local currency and institutions (Catao and Terones, 2016). This preference in holding cash and depositing foreign currencies instead of local currencies has been proved in several studies to induce a sequence of crisis (Durdu et al, 2009; Calvo et al, 2008).
By end of 2019 the deposit dollarization ratio was up to 76%, higher than the 70.6% of 2018, a 12-year highest ratio (BDL, 2019)

Even if the majority of bank accounts are in USD, the only way customers are now able to withdraw their savings since March 2020 is in LBP in a rate of 3900 LBP/USD (while the price in the market till this date reached the highest of 25000 LBP/USD). And the official exchange rate is still 1507.5.

3.1.3 Interest rates

The graph bellow summarizes the interest rate fluctuation since 2016. The increase was high when the banks were trying to attract capital and liquidity to the sector until the collapse of trust took place by the last quarter of 2019. Moreover, with the high rates of deposit savings, the cost of lending followed an increase.

Figure 3: Interest rate fluctuation since 2016



Source: BDL (www.bdl.gov.lb) Adapted by the author

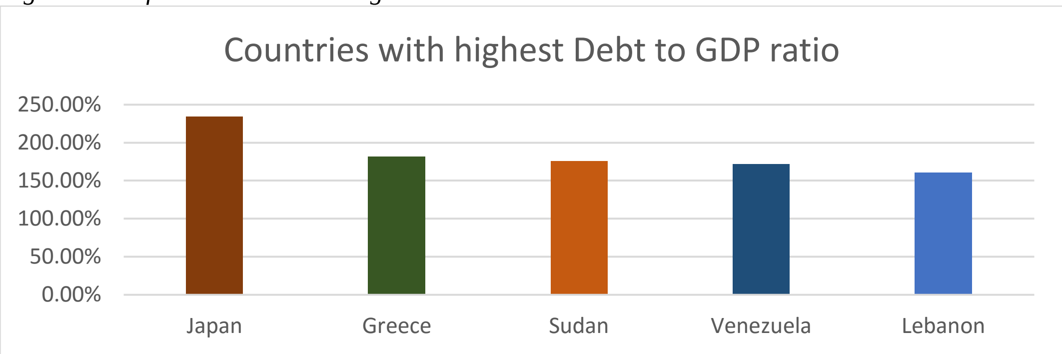
3.2 Economic factors

As concluded by Levi (2005), a balance in currency inflows and outflows is a must to manage economic risk. This is taking into consideration that exchange rate unexpected fluctuation will have higher impacts on economics with imbalance in foreign exchange currencies flows.
We will now analyze three factors that affected flow of money in Lebanon, and so its financial situation and economy: debt ratio, trade imbalance, and inflation rate.

3.2.1 Debt ratio

Being among the highest indebted country in the World, as shown in the image below, Lebanon's debt service is a high burden to people's wealth. As a consequence, interest payments consumed 48% of domestic government revenues in 2016 (IMF, 2019). The burden has increased as the debt to GDP ratio had too.

Figure 4 The five countries with highest Debt to GDP ratios

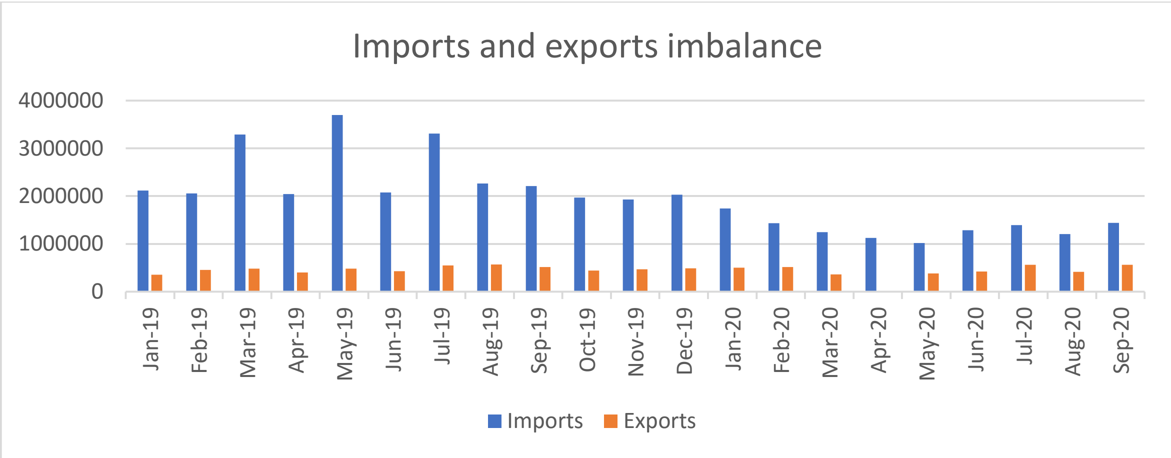


Source: Chapkanovska, 2021), adapted by the author.

The international loans, which were taken from Paris I, Paris II, and Paris III conferences, were corrupted by politicians, without any construction project seeing the light. As no foreign entity was willing to lend Lebanon, the only source the government found to cover its deficit was internal, as mentioned previously in the Financial Engineering .
The loan is getting bigger day by day and the due payment of March 9th, 2020, of about 1.2 billion USD matured Eurobonds was not paid.

3.2.3Trade imbalance

Figure 5:Import and export amount from January 2019 till September 2020



Source: BDL (www.bdl.gov.lb) adapted by author.

The graph above shows the great trade imbalance between imports and exports executed in Lebanon in millions of LBP during the last two years (1USD= 1507.5 LBP). The Lebanese market is import oriented, with trade deficit, implying a large amount of foreign currencies outflow from the local economy. Besides other disadvantage like the negative effect on domestic industries, local economy erosion, and raise in unemployment rate.

3.2.3 Inflation Rate

The inflation crisis started after the late bank crisis, but it is also forcing back an impact in the banking sector. Depositors rush for cash not only for the lack of trust in the financial and economic system, but also because the purchasing power decreased considerably within the last two years.
According to Central Administration of Statistics (CAS), with the country's ongoing political, economic crisis and the intensifying depreciation of the Lebanese Pound's value on the black market, Lebanon's inflation rate in June 2020 stood at 89.74%. It the highest monthly rate since CAS began releasing this data in December 2008. It kept increasing dramatically to 133.5% in November (Blominvest Bank, 2020).
According to Prof. Steve Hanke's calculation, Lebanon is hyperinflated with an annual rate of 462 percent. His calculations are based on studies showing positive correlation between currency exchange rate and inflation (Hanke S., 2020). The rate is still getting higher.

3.3 Political issues and Compliance

In 2017, Lebanon was placed among one of the 50 countries with highest corruption, according to Transparency International's Corruption Perception Index (CPI)2. In

2019, Lebanon was ranked 137 out of 180 countries worldwide, indicating the case of corruption in the country's public sector (Courson, 2020).
Other than corruption and dishonest Governments, Politicians and Lebanese banks are under threat of United States (US) sanctions and private civil litigation because of their claimed involvement in Hezbollah's global money laundering network, commonly referred to as 'The System.' The reason is designated as non-compliance with US regulations, relationship and laundering money for terrorist organizations (US Department of the Treasure, 2011).
The consequences are many. The collapse of the Lebanese Canadian Bank (LCB) was announced by The US Department of the Treasury in 2011. Again in 2019, Jammal Trust Bank was sanctioned and liquidated the following month (Zagari, 2019). These and other sanction (on entities and individuals) has vibrated the whole banking industry in the country, where its validity and trustworthy has been affected.
The impact and ramifications of US sanctions is hard in such a dollarized country as Lebanon. Lebanese banks can't function properly without the support of their correspondent banks, as it affects the trade chains in import and export payments, inflows of deposits, in addition to the higher compliance expenses for commercial and central banks (Mikhael, 2017).
Another critical political issue with great impact on the Lebanese economy is the peace agreement between Israel and some Arab countries. Lebanon will be in disadvantage against Israel as the peace will be driving trading, tourism, as well as investments from the deteriorating Lebanese economy (Rabah, 2020).

3.4 Crisis and "Black swans"

As said by Nassim Taleb (2008) in his book "The Black Swan", there are assumptions based upon historic data, or confirmations learned from observation that we must not build upon. There are times when something used to work in the past, and unexpectedly it no longer does. Those may become even misleading specially in the appearance of the unexpected, the so-called "Black swans".
Among many wars and problems, the main latest two unexpected incidents still affecting the system are:
Beirut Port explosion on August 4, 2020: it was one of the biggest ports in the Eastern Mediterranean. As such, the blast wiped out many lives, houses, and a trade main point vital to the import-dependent country, as well as surrounding countries that used this port. The collective economic losses could mount to direct loss of $15 billion (Gifford C., 2020). But worse is the impact on the commerce, tourism, growth, economy and finances of the country (World Bank data, 2020).
Surrounding countries will substitute the facilities of Beirut port, maybe use Port of Dubai or Haifa instead (considering the peace deals taking place between Israel and some Arab countries). This will decrease government inflow even further. By December 2020, the revenues of The Port of Beirut showed a decrease of 44.37% (Blominvest, 2021). Unemployment and poverty also tend to raise.

Covid 19 pandemic and lockdowns had a great impact in economics worldwide, and for an economy in such a bad shape the impact will be exacerbating in unemployment, business closures, and poverty.
Banks will have to deal with COVID-19 economic driven crisis. The fall in some productions internationally, and so of oil prices, is also causing a reduction in foreign remittances which the dollarized country depends on (Itani, 2020).
Other impacts will be defined and analyzed later, as the unknowns are dominant till this point in time. Risk management shows its effectiveness and efficiency in these cases.

4. Discussion and Evaluation

The factors explored in this paper, in addition to several other shocks Lebanon experienced, have all operated against its financial stability. The operations undertaken by BDL since 1990's, (after the civil war) and specially after 2016, just postponed the financial collapse without being able to avoid it. This illustrates the limits of Central banks to operate effectively amid corruption, macroeconomics and geopolitical difficulties.
"A common shock to bank liquidity, leading to a demand for foreign currency, could result in a drop in international reserves (1 percent of deposits are equivalent to 3.7 percent of reserves)." (IMF, 2019). Although the specific calculation of the Lebanese case was not disclosed yet, the liquidity issue and reserves remaining appear concerning. With the lack of confidence in the country in general (including Government and political issues, economy instability, and trust in the banking sector), a bank panic took place, a catastrophic liquidity crises.
The liquidity position of Lebanese banks started to deteriorate in October 2019. Many indicators had given rise to worries about the financial soundness of the banks, but no measures were taken. Starting from the inefficient governing sector the Ponzio "Financial engineering" among BDL, MOF, and commercial banks was the factor that had the highest impact on the financial as well as economic instability.
In terms of capitalization, according to BDL, "banks in Lebanon reached a capital adequacy atio of 16%, exceeding the requirements of Basel III and complying with the International Financial Reporting Standards (IFRS9)." (BDL, 2020). And so considering the Lebanese banking sector's regulatory and supervisory frameworks being in line with international standards, preserving its resilience and ability to survive impacts. But as the financial engineering was indirectly sending the reserves to be spent by the states, the assets of commercial banks were indeed illiquid.
Another indicator is the high dollarization rate. All over these years this reflected the lack of confidence in the local currency and made it more dependent on capital inflows of foreign currencies. Although the exchange rate was pegged, and the interest rates yielded on dollars saving accounts were considerably lower, the majority of about 70% as mentioned before preferred to keep their deposits in dollars.
While till this date, August 2021, the BDL official price of USD is 1507.5 LBP, in the market the currency exchange rate reached about 25000 LBP, and banks are paying 3900 LBP per USD for foreign deposit accounts. This means a loss of about 80% of deposits upon cashing it.

The factors elaborated in this study imply Lebanese financial markets are more affected by domestic financial and economic factors, regional geopolitical instabilities, than to international ones. Although the economy and financial sector is highly affected by international impacts, its vulnerability is based on domestic problems and inefficiencies.No proper strategy was being taken into consideration to improve the economy and have a complete self-resilient economic cycle. Recommendations comes in the last section.

5. Conclusion

This research explores the factors that led to the current catastrophic condition of the banks in Lebanon and it can serve as a caution for Central banks, policymakers, and governments of other developing countries as well.

While monetary policy was dominated by fiscal deficits, by decreasing financial resources, public debt caused severe problems to the economy. The high capital inflows combined with inefficient public and financial management, meant this large debt was a burden instead of being used to fund strategic investments or a social safety net. In 2019, fears of a threatening crisis accelerated capital flight and tightened the bank liquidity.

For every system to survive, it should be built on an economic and monetary model that sustains it. The after-war model built in Lebanon relied on de-industrialization and on its service and banking sector, with the primary function to ensure a constant inflow of US dollar remittances and to stabilise a weak local currency. With the sudden decrease in capital inflow, the system simply broke and crisis took place.

The situation is hazardous considering all its consequences on the economy and life of its society, requiring measures to be taken fast in order to restore the confidence and mechanism of the financial sector.

Official hair cut was not yet applied by authorities, but the procedures of cashing accounts in foreign currencies by a rate of 3900 LBP in the commercial banks, or checks at 15% in the market, means the largest percentage the savings and deposits are un-cashable and deducted.

Although financial stabilization and structural adjustment is a challenging process with the requirement of strategically solving complex intertwined problems, taking actions is an urgency for banks and policymakers to fight the market changes. Strategic management is required to follow with upmost effort and combination of assets.

5.1 Recommendations

Restructure of commercial banks has started and must proceed. There are 64 banks in Lebanon (full list available at www.bdl.gov.lb), and recapitalization as requested in Circular 154 from BDL, imposed those banks to constitute a “free of obligations” account at correspondent banks representing a minimum of 3% of its foreign currency accounts as of July 31st, 2020. This was to be done by February 28, 2021 (BDL, 2019). For the banks that can’t comply with circular, merger and acquisitions is advised, so giving chance to banks that can provide capital inflows to reach potential. The results of the banks achievements were not disclosed.

Some recovery plans suggestions would include:

- Monetary policies, either expansionary or contractionary, are mainly actions to be taken by central banks to control money supply, reserve ratio, and interest rates to achieve macroeconomic targets that promote economic growth.
- Stop the peg on the exchange rate, to improve competitiveness and decrease the gap of balance of payments. Consider applying currency board.
- Provide deposit insurance for the bank accounts in order to regain trust and confidence in the financial system and attract new deposits.
- Monetary policies to support SMEs of different industries. With the growth of those enterprises, decrease in unemployment and healthier economy independent on imports is reached.
- Improving revenues specially from a strategic change in management of infrastructure sources, like EDL which currently costs the government instead of providing support for its expenses. This both aims to shrink public deficit and aiming to reach surplus to be invested in local development plans.
- Stock market development: even though is brings some risk, the benefits must be taken into consideration.

Different researches show positive correlation between financial openness and GDP expansion as well as banking sector growth (Mishkin, 2007; Popov, 2017). In addition, liberation of financial markets proved positive results in many areas as Africa, some Arab countries, Latin America, and Asian emerging countries (Loots, 2002).

The financial situation has a great impact on different sectors, either direct or indirect. By financing companies and facilitating exchange of funds, the banks and financial system would be supporting productivity. An effective and efficient system would then increase investment in social and environmental issues, be more CRS integrated, and help achieve the SDGs. Policymakers should focus on attempting to find indicators of financial stress, try to avoid it rather than reacting after stress level increase. This would provide valuable time to select, fine-tune, and implement the most appropriate tools.
Till now Lebanese case seem unfavorable in all terms, but the country history has proven that it can overpass the worst crises and step back to its feet. There is still hope that the system will be saved from total collapse if restructures start begin applied. Future researches should be constantly conducted in order to detect those indicators and take necessary precautions.

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