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IS THE BANKING SECTOR IN LEBANON SALVAGEABLE?

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EXECUTIVE SUMMARY

The financial crisis in Lebanon was the result of deep-rooted structural problems that had been identified for many years. The government default—combined with an insolvent central bank—resulted in the commercial banking sector having a massive $72 billion hole because of its large exposure to these two entities. Reaching an agreement on bank restructuring and loss allocation is crucial for laying the foundations for sustainable growth and it is a condition for a much-needed IMF program. The political impasse has centered on this very issue, with competing proposals from multiple policymakers, stakeholders and independent bodies.

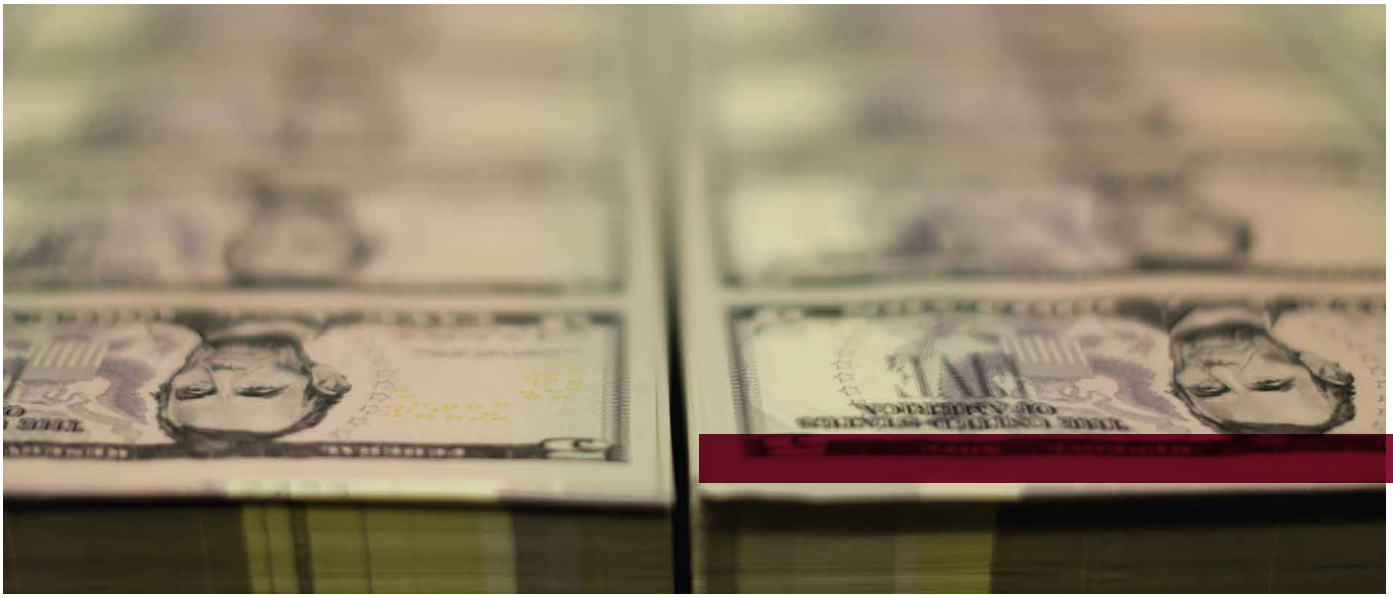
This paper looks at possibilities for bank restructuring in Lebanon, drawing upon the standards set by the Financial Stability Board (FSB) and the Basel Committee on Bank Supervision (BCBS), particularly the Total Loss Absorption Capacity (TLAC) and Basel III requirements. It finds that under realistic market conditions, only a few banks would be financially viable without a massive injection of capital or a sharp reduction in liabilities. This conclusion is based on a bank-by-bank solvency assessment for 21 representative banks. A bail-in involving the conversion of deposits into equity could be part of the solution for restructuring banks. Encouragingly, a recovery of up to $100,000 per depositor appears feasible.

The paper is organized as follows: The first section explains the peculiarity of the Lebanese banking crisis vis-à-vis other historical crises; the second section surveys the regulatory toolkit typically used in bank restructuring; and the third section reviews the numerous recovery plans that have been proposed for Lebanon, with particular emphasis on bank restructuring. The fourth section assesses the viability of each bank under multiple restructuring scenarios and quantifying the fiscal cost of a deposit recovery fund should banks not manage to meet their obligations.

LEBANON'S PECULIAR BANKING CRISIS

Systemic banking crises have occurred with regularity over the past five decades and across the globe (Laeven and Valencia, 2014; 2020). Systemic banking failures often coincide with currency crises resulting in "twin" crises (Claessens and Kose, 2014; Kaminsky and Reinhart, 1999). Triple crises consisting of currency, sovereign debt, and banking crises – as in the case of Lebanon – are rarer (Laeven and Valencia, 2014, 2020; Claessens and Kose, 2014).

Prior to the 2008 financial crisis, bailouts of large, systemically important financial institutions (i.e., "too-big-to-fail"), were the norm. Bailouts were premised on the need to protect financial stability, the functioning of financial markets and institutions, and restoring financial market intermediation should it come to a halt. Of course, bailouts were possible only when the sovereign was endowed with sufficient financial resources to rescue failing banks. This was not the case for many countries such as Chile and Venezuela, which experienced banking crises in the early 1980s that led to depositors incurring losses (World Bank, 2021; Laeven and Valencia, 2014). For example, in Argentina, the government announced the conversion of time deposits into government bonds on January 1, 1990. Depositors also suffered severe losses in Côte D'Ivoire (1988), Estonia (1992), Ecuador (1998) whereas they faced moderate losses in Russia (1998), and Venezuela (1994).



Governments have typically preferred bailouts as they are more politically palatable. Moreover, bailouts are quicker and easier to implement given that they do not require cooperation with – or the involvement of – the private sector. Nonetheless, bailouts have a significant fiscal cost (i.e., they are expensive), increase moral hazard, provide banks that are deemed too-big-to-fail (TBTF), too-interconnected-to-fail (TITF) or too-many-to-fail (TMTF) with an implicit protection, which would likely lead to competitive distortions and reduce bank efficiency (Berger and Roman, 2020). Moreover, bailouts could hinder market discipline and favor politically-connected banks. Policymakers have also traditionally relied on regulatory forbearance, capital controls, bank holidays, deposit freezes, liquidity support, deposit guarantees, as well as decreasing required reserves to confront banking crises.

In the wake of the subprime mortgage crisis of 2008 and the European sovereign debt crisis of 2009, policymakers developed a toolkit to address systemic banking crises, resolve insolvent banks, and redress viable banks. Private sector involvement, as opposed to public financing of failing banks, became more practiced. Moreover, countries enacted legislation, established resolution authorities, and introduced changes to macroprudential policies to enhance their operational preparedness for future systemic crises. A commonly used instrument to resolve unviable banks in the post-2008 period was the bail-in. Berger and Roman (2020) offer an expansive definition of a bail-in: "Bank bail-ins often take the form of converting one or more different debt instruments to equity. These instruments included, but are not limited to subordinated debt, senior unsecured debt, contingent convertible bonds (CoCos), and uninsured deposits. Other forms of bail-ins included requiring equity holders to provide extra capital (e.g., double liability), whole or partial sale of a distressed or about-to-fail bank to another institution to provide capital and capital provision by other non-government organizations. Bail-ins may also include good bank/bad bank separations. These can involve the formation of a bridge institution that holds the "good" or relatively safe assets of a distressed organization temporarily until sale to recover value, while "bad" or relatively risky assets are isolated or transferred to an asset management vehicle for orderly winding down". While bail-ins promote market discipline, reduce moral hazard and the cost to taxpayers, they could be slow to implement and the confidence in bailed-in institutions is likely to be regained only slowly. Moreover, bail-ins may not be completely effective in a systemic banking crisis.

A review of cross-country experiences suggests that systemic banking crises have traditionally been easier to navigate when some of the banks would be viable post-intervention or support. When all banks required rehabilitation, support or guarantees, there was recourse to public financing, which posed significant risks to taxpayers and a potentially significant fiscal cost. For instance, the sovereign-bank doom loop in Greece rendered all banks effectively insolvent by 2012 following the debt restructuring. Similarly, all the banks became insolvent during the Irish and Icelandic banking crises. As a result, the fiscal outlays for the Greek, Irish, and Icelandic crises were 27.3, 40.7, and 44.2 percent of GDP, respectively. In contrast, despite the entirety of the banking sector coming under stress, conditions differed among the banks in the Italian, Portuguese, Spanish, and Cypriot crises. Heterogeneity in bank distress in these latter episodes, which we review in Section 2, was identifiable, and the rehabilitation mechanism involved intervening the troubled banks with limited recourse to public funds. The fiscal cost in the Italian, Spanish, and Portuguese banking crises was thereby remarkably lower and stood at 0.3, 3.8, and 0 percent of GDP. The liquidity support offered to banks was also considerably lower in the Spanish and Italian crises but was on par with the Icelandic and Irish levels for Portugal.

What makes the Lebanese crisis different?

The Lebanese crisis differs from other crises in many respects.

First, the losses in the Lebanese banking sector, which were estimated at $72 billion, exceeded three times Gross Domestic Product (GDP) and were orders of magnitude larger than bank capital. These losses are significantly larger than those experienced in comparator countries (Caprio and Klingebiel, 1996; World Bank, 2023a) and are possibly the largest in the world relative to GDP. The bulk of banking sector losses are ascribable to bank placements at the Banque du Liban (BdL). Additional losses are due to bank holdings of Lebanese government Eurobonds, which are in default, as well as the private-sector lending portfolio (i.e., non-performing loans) and the effects of the severe depreciation of the Lebanese pound. More precisely, as part of the deleveraging that occurred in the post-crisis period, banks and bank regulators accepted private-sector debtors to pay back foreign-currency denominated loans in the domestic currency at the LBP 1,500 per USD, which was non-market reflective and significantly lower than the market exchange rate , thereby catalyzing a significant transfer of wealth from savers to borrowers. The IMF (2023) propounds that losses in the financial sector arise from (i) the depreciation of the exchange rate, (ii) the expected restructuring of the foreign and domestic currency debt, whose value was significantly diminished due to the depreciations (iii) losses in banks' loan book (i.e., non-performing loans) and (iv) losses incurred by BdL. The estimates provided by the IMF (2023) suggest that about 86% of the banking sector's losses are ascribable to banks' placements at BdL and that, under the assumption of a haircut on Eurobonds of 75%, BdL will end up with a negative equity of about USD 60 billion and an open foreign exchange position of the same magnitude.

Akin to many banking crises, a tight entwinement between the commercial banks and the sovereign (i.e., the government and the central bank) was at the root of Lebanon's systemic banking crisis. On the cusp of the crisis, the banking sector's deposits at BdL stood at around seven- and six-times Tier 1 capital in 2018 and 2019, respectively. The banking sector was also exposed to foreign and domestic currency denominated Lebanese government debt to the tune of about 178 and 146 percent of Tier 1 equity in 2018 and 2019, respectively. The financial engineering operations of the BdL, which it embarked upon in 2016 in defense of the currency peg, tightened the bank-sovereign nexus considerably.

Second, the institutional framework that governs bank resolution and restructuring is sorely lacking. Neither a resolution authority, akin to the orderly liquidation facility in the US, nor recovery and resolution plans exist as recommended in the "Key Attributes of Effective Resolution Regimes for Financial Institutions" of the Financial Stability Board (Dobler, Moretti and Piris, 2020). The Code of Money and Credit article 110/91 and Special Banking Law no 2/67 currently govern bank insolvency in Lebanon and the Higher Banking Commission (HBC) is vested with the powers to appoint a temporary manager and place the bank in receivership, restructure, resolve or wind down the bank (IMF, 2017b). Nonetheless, these stipulations were applied only sparingly in the post-civil war period, aside from Al-Madina bank SAL, to banks that engaged in money laundering or terrorist financing activities, such as the Lebanese Canadian Bank and Jammal Trust Bank. In the post-2019 period, the HBC placed Federal Bank of Lebanon, Al Baraka Bank, and Banque de Crédit National (BCN) in receivership in 2022. Credit Bank was then placed in receivership in 2023.

Third, the political elites are reported to have deliberately forestalled or stifled crisis resolution plans, owing to the close association between them and banking elites (Chaaban, 2016; Chaaban, Cole, Ghanem, and Halabi, 2023). Moreover, many view some of the media as being captured by banks, in line with the findings of Durante et al. (2022).

Fourth, the central government and the central bank are unable to provide liquidity support to the banking sector, even if the post-2008 financial crisis consensus on limiting recourse to public funds is not adhered to. In fact, the authorities have made little progress on debt restructuring since the sovereign default of March 2020 and the central bank's net negative foreign reserve position was estimated to exceed $60 billion at end-2023. While the Lebanese pound lost more than 98 percent of its value since the onset of the crisis, central government revenues collapsed from 20.8 percent of GDP in 2019 to about 6.1 percent in 2022, one of the lowest rates globally (World Bank, 2023b). In nominal $US, total government revenues were about $US 1.3 billion in 2022 whereas liquid central bank reserves stood at about $US 8.5 billion, excluding gold and the BdL's portfolio of Eurobonds, at end-2022. Hence, the losses in the banking sector dwarf the sovereign's financial resources. Further, it would be paradoxical for the central bank to provide liquidity support when the bulk of losses in the financial sector can be ascribed to the commercial banking sector's foreign currency deposits at the BdL.

Fifth, there has been limited progress on reforms since the authorities reached a (now outdated) Staff-Level Agreement (SLA) with the International Monetary Fund (IMF) in April 2022. Because of this lack of progress, Lebanon has not been able to access sizeable foreign financial support, and it has been excluded from the international capital markets. Other countries, for example, Greece or Cyprus benefited from significant foreign support including from the European Commission, the European Central Bank and the IMF (i.e., the "Troika") because of their willingness to reform. Indeed, for it to be successful, the bank restructuring process should be cast within an overall program of macroeconomic, exchange rate, monetary, and fiscal reforms (i.e., a comprehensive crisis resolution plan), which has, until now, been hindered by the vested interests of the elites and their capture of the state. According to the World Bank (2020, 2021), deliberate policy inaction amidst one the world's ten, and possibly three, most protracted economic crises globally has been the modus operandi of Lebanon's political elites. The lack of crisis resolution has shifted the burden of the crisis away from bank shareholders and towards depositors and the population at large. The poorest and most vulnerable segments of society, which includes pensioners and local currency wage earners, had to contend with massive erosion of their purchasing power due to the currency depreciation and triple-digit inflation. Moreover, depositors have borne the brunt of the adjustment as they have been able to access their encumbered foreign currency deposits at a significant loss (i.e., haircut) all the while the real value of their local currency deposits is massively eroded by inflation.

Lebanese banks are unable to perform their financial intermediation functions today and the economy is deprived, as a result, of the financing that is necessary for growth. Since the onset of the crisis, the authorities and banks have resorted to ad-hoc containment measures including bank holidays, deposit freezes using de-facto capital control measures, and regulatory forbearance to combat an insolvency crisis. In tandem, financial de-development (World Bank, 2024) and the emergence of a sizeable cash economy (World Bank, 2023b) are raising the money laundering and terrorist financing risks facing the country. Therefore, a swift bank restructuring process is of paramount importance for an economic recovery. The lack of progress on bank restructuring appears to be the major bottleneck for obtaining funding from the IMF. Progress on this front requires tangible steps towards an equitable banking resolution as called for by the World Bank (2022b).

A REVIEW OF EXPERIENCES IN BANK RESTRUCTURING AND THE TREATMENT OF DEPOSITS IN FINANCIAL CRISES

The tools for bank restructuring and resolution have increased substantially since the subprime mortgage crisis of 2008 and the sovereign debt crisis in Europe in 2009. Specially, the European Commission introduced the Bank Recovery and Resolution Directive (BRRD) as part of the post-global financial crisis regulatory overhaul. The BRRD was formally adopted on May 15, 2014, and came into force on July 1, 2014. The resolution and restructuring tools under the BRRD included: (i) bail-ins, (ii) bridge institutions/banks, (iii) sale of business, which permits the sale of the failing bank in full or in part by the resolution authority (Berger and Roman, 2020), and (iv) asset separations, which entails the establishment of an asset management vehicle (i.e., a "bad bank" to which toxic or impaired assets are offloaded). The asset separation tool has often been used in conjunction (or as a complement) to the bail-in or bridge institution tools.

CRISIS EPISODES IN WHICH ALL BANKS WERE AFFECTED

Greece

The Greek and Icelandic banking crises provide important parallels to Lebanon's. In Greece, the insolvencies affected the entire banking sector as all banks were insolvent. In Iceland, the outsized foreign-currency denominated liabilities and large size of the banking sector proved to be a significant obstacle to the authorities' efforts to avoid losses. Akin to many other banking sectors, the Greek banking sector faced liquidity pressures in the wake of the global (i.e., subprime mortgage) financial crisis of 2007. Following elections in October 2009, a new government announced a large revision to the fiscal deficit for that year. This revision took a heavy toll on sentiment regarding the sustainability of Greek sovereign debt, prompted several credit downgrades (and increased bond yields), and led to Greece's ultimate exclusion from international capital markets. The data revision also marked the start of the Eurozone debt crisis (Hardouvelis and Vayanos, 2023). Banks' exposure to sovereign debt and rising losses on the private-sector lending portfolio in the wake of the Greek sovereign debt restructuring of 2012 made the banking sector, in aggregate, insolvent. All the banks were also insolvent at the individual level (Hardouvelis and Vayanos, 2023). As a result, the four largest banks (Alpha Bank, Eurobank, National Bank of Greece, and Piraeus Bank) were recapitalized using public and private sector funds and the remaining banks, except Attica Bank, were resolved. Most of the banks were wound down prior to the implementation of the BRRD using two bridge banks, controlled by the Hellenic Financial Stability Fund. In all the resolved banks, shareholders were entirely written off (World Bank, 2017b) and in two cases subordinated debt was also wiped out. However, depositors (insured and uninsured) did not experience losses. Two banks, the Cooperative Bank of Peloponnese and Panellinia Bank, were wound down after the BRRD became effective. Selected assets and liabilities from Panellinia Bank were moved to Piraeus Bank via a tender process whereas the Cooperative Bank of Peloponnese deposits was put in resolution and its deposits were transferred to the National Bank of Greece also via a tender process (Berger and Roman, 2020). Despite this, no losses were imposed on depositors due to three successful recapitalization efforts between July 2013 and November 2015 as well as liquidity support from European Financial Stability Facility (later known as the European Stability Mechanism or ESM), and the European Central Bank. Regulators allowed the four large banks to create in-house workouts, which acted as de-facto bad banks, to address NPLs and non-performing exposures, more generally, and government guarantees were instrumental for decreasing exposure to decreasing NPLs. The three waves of recapitalization implied a change in the ownership structures of the four large banks, which became privately held. Notwithstanding the recapitalizations of National Bank of Greece and Piraeus Bank bondholders and shareholders were bailed-in and incurred losses.

Iceland

Banks in Iceland grew precipitously in the 1990s and particularly following the country's accession into the European Single Market in 1994. The three largest Icelandic banks began expanding their international operations in the 2000 (Flannery, 2010). Iceland's largest three banks faced significant difficulties in the aftermath of the global financial crisis of 2008, in part due to a high proportion of their assets and liabilities being denominated in foreign currency. Other problems facing the banking industry in the run-up to the crisis included the quality of collateral used against central bank borrowing and connected lending (i.e., lending to related parties such as large shareholders). The difficulties of Glitnir Bank quickly engulfed the other two large banks (Kaupthing and Landsbanki), and the authorities provided liquidity support to the troubled banks via Emergency Liquidity Assistance. The Icelandic banking crisis, however, proved to be a solvency rather than a liquidity crisis and was ultimately marked by the collapse of the country's three largest banks, making the crisis systemic and all-encompassing. In fact, liquidity support by the Central Bank of Iceland (CBI) to the sizeable Icelandic banking sector was dwarfed by the losses in the three largest banks. Moreover, the CBI could not act as a lender of last resort to the banks whose outsized liabilities were denominated in foreign currency. Baudino, Sturluson, and Svoronos (2023) write: "the crisis was truly systemic, and this required an all-encompassing approach that differs in both scope and substance from the management of individual bank failures". Moreover, much like Lebanon, the Icelandic banking sector was very large relative to GDP.

The authorities' response consisted of splitting banks into "old" and "new" banks within each of the three troubled banks. The objective of carving out 'new' banks, as part of a resolution mechanism, was to preserve banking services. The 'new' bank held primarily domestic assets and liabilities, whereas the "old" bank held impaired assets. That is, customer deposits in Iceland were transferred to the new banks while deposits with foreign branches stayed with the old banks. The new banks were recapitalized following a valuation of their assets. The old banks were managed with the objective of maximizing recovery value. According to Baudino, Sturluson, and Svoronos (2023), aggregate recovery against the old banks slightly exceeded 58%, whereas recovery against general claims (against the old banks) was significantly lower and stood at 29%. In a bid to stem a bank run, the authorities announced a blanket guarantee on deposits in domestic banks. The latter guarantee would not extend to the foreign subsidiaries of the Icelandic banks, which led to the Icesave - a branch of Landsbanki - dispute among Iceland, the United Kingdom and the Netherlands. Indeed, most of the foreign currency deposits in the foreign branches of the Icelandic banks were Dutch and UK deposits (Benediktsdóttir et al., 2017) and the lack of a deposit guarantee for these funds triggered a dispute among the three countries. The guaranteed deposits in the domestic branches that were transferred to the new banks were not affected by the crisis. In terms of the treatment of equity, shareholders of the old banks of Glitnir and Kaupthing received majority stakes in the new bank, whereas the Ministry of Finance became the majority stakeholder in the new bank for Landsbanki and the old bank received a contingent bond from the new bank. Other resolution options, which range from a good bank/bad bank split or separating banks into a foreign and domestic component, were not pursued due to the operational complexities involved in their implementation. The solution that was adopted by the authorities was a hybrid one relative to the latter two. The management of the new banks objected to the option of creating an asset management company owing to concerns that a single entity could become too large to manage. As part of the restructuring process, and line with some of the ideas proposed in Lebanon, the Financial Markets Authority in Iceland considered issuing fixed income instruments to make up the shortfall between assets and liabilities and enhance recovery values for depositors and general claims. Nonetheless, this was not pursued. In line with other crises, the resolution of the Icelandic banking crisis was underpinned by an IMF program, which, according to Sturluson, and Svoronos (2023), lent credibility to the authorities' response and stabilized markets.

Ireland

Exposure to an overheating housing market contributed to an excessive build-up of risks for Irish banks. Indeed, Irish banks were heavily exposed to the residential and commercial property sectors, and the bursting of the real estate bubble in 2008 marked the beginning of the Irish banking crisis (Ahearne, 2014). In a bid to stem the crisis, a two-year expansive guarantee, which covers nearly all assets and liabilities of banks except for perpetually subordinated debt, was announced by the Irish authorities on January 30, 2008 (Baudino, Murphy, and Svoronos, 2020). Owing to this rapid response, and despite needing capital injections, the remaining major commercial banks, Bank of Ireland (BOI), Educational Building Society (EBS), Irish Life and Permanent (IL&P), and Irish Nationwide Building Society (INBS), continued operating. The policy response to the banking crisis was underpinned by liquidity support from the ECB and the Central Bank of Ireland. Notwithstanding the authorities' response, Anglo-Irish bank continued to face difficulties and the bank's impaired assets were moved to an Asset Management Vehicle – the National Asset Management Agency (NAMA).

Despite a capital injection of €4 billion by the Irish government under the early recapitalization phase (phase 1) , the asset impairment and losses in the Anglo-Irish bank proved too large and the bank was nationalized in January 2009 (Schoenmaker, 2015; Philippon and Salord, 2017) and ultimately wound down. The initial capital injection by the Irish government proved insufficient and Allied Irish Bank continued to face difficulties and was nationalized in 2010. The looming expiration of the blanket guarantees in September 2010 forced the central bank of Ireland to provide emergency liquidity assistance (ELA) to the banking sector (Schoenmaker, 2015). This gradually shifted the responsibilities of providing financial support from the government to the central bank. The sovereign debt crisis which broke in Greece in 2010 exacerbated Irish banks' problems. A bank run, deposit outflows, rising funding costs, and ultimately loss of market access occurred in 2010 owing to spillovers (or contagion) from Greece. The loss of market access by the Irish government and growing financial burden of the banking crisis necessitated the implementation of an adjustment program with support from the IMF, the European Financial Stabilization Mechanism (EFSM), the European Financial Stability Facility (EFSF), and bilateral loans. The IMF's and Irish authorities' initial preference to bail-in senior bondholders to curb the banking crisis was superseded by the Troika's ultimate decision not to bail-in senior bondholders in order to prevent contagion to other European countries (Ahearne, 2014). As such, depositors and debtholders did not incur losses in Anglo-Irish Bank, Allied Irish Bank, and the four other domestic banks, but all of the major commercial Irish banks were either fully or partly nationalized, wound down, recapitalized, or merged as part of the banking rescue.

CRISIS EPISODES IN WHICH NOT ALL BANKS WERE AFFECTED

Italy

The bail-in tool was employed in Italy in November 2015. Indeed, Italian banks, which withstood the 2008 and 2009 subprime and European sovereign debt crises, came under pressure due to an increase in Non-Performing Loans (NPLs). Four Italian banks (Banca Marche, Cassa di Risparmio di Ferrara, Banca Etruria e CariChieti) were intervened using a two-step approach. In the first step, a bail-in of deposits was utilized. In the second step, impaired assets, and particularly NPLs, were transferred to a "bad" bank (asset management vehicle). The good assets of each of the four banks were kept in a "good" bridge bank (World Bank, 2016b). Insured deposits (up to €100,000) were fully protected and the actions of Italian authorities implied that uninsured and unprotected creditors did not have to absorb losses. In fact, the losses in the Italian banking sector were borne by shareholders, subordinated debt holders, and taxpayers (IMF, 2020). Shareholders and subordinated debt holders incurred severe losses.

Portugal

The Portuguese banking crisis of 2008–2015 had its roots in structural weaknesses that long predated the global financial crisis. In the decade leading up to 2008, Portugal experienced sluggish productivity growth, rising private sector indebtedness, and a banking sector heavily reliant on external wholesale funding to sustain credit expansion. This model made Portuguese banks particularly vulnerable to the sudden stop in global liquidity after the Lehman collapse. Unlike Spain or Ireland, Portugal did not have a dramatic housing bubble, but its banks were deeply exposed to sovereign and corporate debt, particularly in former colonies like Angola and Brazil. Weak governance, opaque accounting practices, and political interference — especially in major institutions like Banco Espírito Santo (BES) and Caixa Geral de Depósitos (CGD) — further eroded resilience. As the Eurozone debt crisis intensified in 2010–2011, investor confidence in Portuguese banks declined sharply, culminating in rising funding costs, recapitalization needs, and eventual EU-IMF financial assistance in 2011, which included a banking sector restructuring component. The crisis was thus the result of both global contagion and deep-seated domestic fragilities.

The banking crisis in Portugal required establishing a bridge bank as well as a capital injection. When BES failed in 2014, the Portuguese authorities established Novo Banco as a "good" bank to house the bank's "good" assets and liabilities and injected capital through the Portugal Resolution Fund. Whereas depositors and bondholders did not suffer losses owing to their transfer to Novo bank, equity holders and subordinated debtholders experienced severe losses. A good bank/bad bank approach was also applied to resolve Banco Internacional do Funchal, Portugal's seventh largest bank, in 2015. The good assets were sold to Santander whereas the bad assets were offloaded to a special purpose vehicle (Berger and Roman, 2020). Equity and subordinated debt holders in the two failed banks experienced losses.

Spain

Akin to Ireland, Spanish banks' exposure to an overheating real estate market led to large losses for many cajas (i.e., savings banks). In 2011 and 2012, the Spanish banking crisis took a turn to the worse with the collapse and ultimate nationalization of Bankia, formed from the merger of seven weak cajas. The collapse of Bankia precipitated European intervention and rescue. Spain's banking crisis, which spanned the period 2008-2014, provides a case in point of the importance of assessing bank-by-bank financial conditions. Spanish authorities classified banks into four groups: The first group, comprising the large banks operating internationally Banco Santander, Banco Bilbao Vizcaya Argentaria, and Caixa Bank, did not experience a capital shortfall and required no additional action, whereas the second group included banks that became owned by the Spanish bank resolution and restructuring authority, the Fund for Orderly Bank Restructuring (FROB), created in 2009. This group comprised BFA-Bankia, Catalunya Banc, NCG Banco and Banco de Valencia (Baudino, Herrara, and Restoy, 2023). The third group had capital shortfalls that cannot be met without recourse to public funds (i.e., state aid), and the fourth group had credible recapitalization plans aimed at addressing their capital shortfall without state aid (Baudino, Herrara, and Restoy, 2023). Banks with capital shortfalls that could not be reasonably met were required to transfer their "bad" assets to an asset management company before receiving a capital injection originally from the FROB and then from the ESM, through the FROB, to the tune of €41.3 billion. The weakest Spanish banks were liquidated or sold. Moreover, in line with the burden sharing requirement of the European Union and in line with the spirit of the BRRD, which was not yet effective, hybrid capital and subordinated debt holders, which were mostly retail investors, absorbed some of the losses (World Bank, 2017b). The World Bank (2017b) also indicated that shareholders were nearly wiped out (via dilution) in all the banks that were intervened.

Cyprus

Cypriot banks were heavily exposed to Greek sovereign debt and their loan book was heavily concentrated in real estate. The Greek sovereign default and the bursting of the housing bubble spelled trouble for Cypriot banks. The bail-in of uninsured deposits in Cyprus Popular (or Laiki) Bank and Bank of Cyprus in 2013 constituted possibly the first outright (and arguably harshest) application of the bail-in tool to uninsured deposits and entailed a complete loss of deposits exceeding €100,000 whereas deposits at or below the latter threshold were fully protected (Xiouros, 2016). As propounded in Xiouros (2016), Laiki's uninsured deposits (i.e., deposits exceeding €100,000) were transferred to a bad bank and wound down whereas Laiki's good assets were transferred to the Bank of Cyprus in exchange for shares. Moreover, 47.5% of the uninsured deposits of Bank of Cyprus (of about €3.8 billion) were converted into equity (Xiouros, 2016) and, hence, incurred losses (Berger and Roman, 2020) and 12.5% of the deposits were frozen. According to Xiouros (2016), the actual recovery rates for Bank of Cyprus and Laiki were, respectively, 62% and 38%. Laiki was ultimately wound down. The uninsured deposits of Laiki Bank in Greece did not, however, suffer losses, marking an asymmetrical treatment of deposits in Cyprus and Greece.

One important finding that emerges from cross-country experiences is that establishing an asset management corporation can be very useful during the bank restructuring process. Moreover, cross-country experiences with systemic banking crises suggest that the entry of foreign banks into a crisis-stricken banking sector could be advantageous in that foreign banks tend to have a lower cost of capital than crisis-hit banks as well as an ability to raise capital (Calomiris, Klingebiel, and Laeven, 2004). Moreover, the entry of foreign banks is found, in some empirical studies, to enhance the stability of the banking sector. Nonetheless, foreign banks may lack knowledge about borrowers and the local legal and institutional frameworks and, hence, are not perfect substitutes to domestic banks in the short run. Foreign banks are also more likely to exit the local market in the event of turbulence (Calomiris, Klingebiel, and Laeven, 2004).
Taking stock from the prior review of case studies, Table 1 summarizes the treatment of shareholders, creditors, including subordinated debt holders, and depositors during crises.

Table 1
Cross-country experiences in shareholder, creditor, and depositor losses from recent systemic banking crises

COUNTRY	SHAREHOLDERS	CREDITORS (BONDHOLDERS)	DEPOSITORS	RECOURSE TO TAXPAYER FUNDS?
ITALY	Wiped out	Senior bondholders were protected. Subordinated bond holders were wiped out.	No losses to insured and uninsured deposits	Yes
IRELAND	Wiped out	Significant losses for subordinated debt and almost no losses to senior bondholders.	No losses to insured and uninsured deposits	Yes
PORTUGAL	Wiped out	Senior bondholders in BES were written down. Subordinated debt holders suffered significant losses.	No losses to insured and uninsured deposits	Yes
SPAIN	Severe losses and total wipeout in Bankia	Large losses for subordinated debt holders. Minimal losses for senior debt holders.	No losses to insured and uninsured deposits	Yes
GREECE	Wiped out	Significant losses to subordinated debt holders. Minimal losses for senior bondholders.	No losses to insured and uninsured deposits	Yes
ICELAND	Wiped out	Subordinated bondholders were wiped out. Senior bondholders suffered heavy losses.	Foreign deposits in Icelandic banks experienced losses in Icesave. Domestic deposits were protected	Yes
CYPRUS	Wiped out	Subordinated debt holders were wiped out. Senior bondholders experienced some losses.	Insured deposits were protected. Uninsured deposits were bailed in. Haircut/loss Laiki Bank: ~62% Bank of Cyprus: ~47.5%	No

PROPOSALS FOR THE TREATMENT OF DEPOSITS AND BANK CAPITAL IN LEBANON

Numerous plans have been proposed to deal with the financial crisis in Lebanon. They all agree on the source of the crisis, and on the objective of having a healthy banking system to support growth, but there are large differences among plans regarding the treatment of deposits and the use of state assets to resolve the crisis. Some plans call for the use of state assets for the payment of all deposits without haircuts, whereas other plans call for the payment of deposits below a certain threshold without any resort to state assets. There are also differences related to the claw back of interest and dividends that were paid before the crisis, and whether to go after what are considered to be illicit gains.

GOVERNMENT PLANS

The two governments that were in office after the beginning of the crisis formulated comprehensive plans to address the crisis. None of these plans seem to have had sufficient political support for implementation.

Government Financial Recovery Plan (April 2020)

The plan is often referred to as the Diab plan or the Lazard plan as it was formulated by the Diab government with the assistance of consultants from Lazard. As with other plans, it recognized the massive financial gaps that resulted from the government default and from the impairment of the central bank balance sheet. The plan consisted of a comprehensive set of policies to address the crisis, covering exchange rate, monetary, financial sector, fiscal, debt restructuring, social, and structural policies.

The plan aimed to protect most depositors, as well as the Caisse Nationale de Sécurité Sociale and professional organizations. Deposits above a certain threshold would be converted into bank capital, tradable equity stakes in a newly established special Recovery Fund that would be financed by the recovery of ill-gotten assets, and into long-dated subordinated bank obligations that pay no or limited interest.

There would be a full bail-in of bank shareholders. To help increase bank resources, bank liabilities other than deposits (e.g., market instruments) would be written off, there would be a recovery of “stolen assets”, claw back of the excessive dividends and interest that were paid by banks, and real estate on bank balance sheets would be valued at market prices. Bank profits from the BdL’s financial engineering operations would be returned to the BdL.

The BdL equity position would be adjusted by the losses from lending to the government, but the BdL would be partially compensated for these losses by allocating to it the returns from state assets excluding potential oil and gas revenues. Bank deposits with the BdL would be written off. Real estate held by the BdL would be revalued at market prices.

Government agreement with IMF Staff (April 2022)

The Mikati government’s initial plan is reflected in the IMF Staff Level Agreement (SLA). The plan included a write-off of government liabilities to the central bank and a write-off of BdL liabilities to commercial banks, like the Diab plan. The use of public resources to capitalize the BdL would be limited to the government issuing a bond to the central bank by an amount that would be consistent with debt sustainability. There would be no use of state assets.

The plan aimed to protect small depositors, up to USD 100,000 for pre-March 31, 2022, balances per depositor per bank, subject to a supervisory assessment of the viability of the respective bank. There would be a bail-in of deposits that are above a protected minimum level through write-off or conversion into equity, and a lirafication of foreign currency deposits at non-market rates.

A significant recapitalization of commercial banks was envisaged to offset losses from the restructuring of sovereign debt and BdL liabilities, non-performing loans, and the impact of exchange rate unification on net foreign exchange positions. This would require writing off capital, subordinated debt instruments, and related-party deposits. An important plan of the plan is the assessment of the financial condition of individual banks. Banks that are not deemed viable would be resolved. Banks that are assessed as viable based on a forward-looking analysis of business plans and capitalization needs would be required to quickly restore minimum capital adequacy.

Modified government plan (September 2022)

The agreement with IMF staff has not been implemented. Following opposition to it by bankers and depositors, the government made modifications that aimed at lessening the impact on depositors. It proposed the establishment of a Deposit Recovery Fund (DRF) that would use proceeds from government assets to compensate depositors. The DRF would be funded through returns from state enterprises above a certain benchmark. It was estimated to yield USD 30 billion.

The revised plan also included a claw back from depositors who benefited from favorable treatment from banks. Excess interest that was paid since 2015 would be lirafied at a rate of LBP 1,500 per USD, which was estimated to yield USD 12 billion. Deposits that were converted to dollars after October 2019 would be lirafied at a rate of LBP 8,000 per USD, yielding USD 16 billion.

These measures were designed so that USD 100,000 could be guaranteed for each depositor per bank. This amount was to be paid over a period of 7 years, of which three quarters would be paid in US dollars and the remaining one quarter in LBP. Two thirds of the US dollar payments would be borne by the BdL and one third by banks.

The recent government plan (August 2024)

The plan builds on previous government proposals. It classified deposits into eligible and non-eligible categories, which was expected to result in USD 40 billion of eligible deposits and USD 46 billion of non-eligibile deposits. Steps would be taken to lower the deposits that would be returned, namely by requiring identification of the source of deposits (through enhanced KYC rules) and a claw-back of interest paid (at rates that exceeded 1 percent) from 2015-2020. The remainder would be considered as guaranteed (eligible and non-eligible) deposits and would be repaid in cash. Eligible guaranteed deposits—up to USD 100,000—would be returned in US dollars over 11 years, to be equally financed by banks and the BdL. Non-eligible guaranteed deposits up to USD 36,000 would also be returned over an 11-year period, with one quarter of these deposits to be returned in LBP at a rate of LBP 89,500 per US dollar. The remaining deposits that do not exceed USD 500,000 would be lirafied at a rate of LBP 45,000 for eligible deposits and LBP 30,000 for non-eligible deposits, to be paid over a specified period.

Large depositors would be compensated through equity shares in banks (with eligible deposits benefiting from a conversion rate that is twice as favorable as non-eligible deposits), bank-issued debt (with a maturity of 12 years and an interest rate of 0.5 percent), and Lebanese government bonds (at no interest and have a maturity of 20 years for eligible deposits and 30 years for non-eligible deposits), and through the returns of a DRF.

Insolvent banks would be liquidated, while solvent banks would have the opportunity to recapitalize after reducing the value of ordinary shares to zero. Large depositor bail-ins would be limited to 33 percent of the new capital, with the remaining 67 percent from existing shareholders. Bank forex deposits with the BdL would be compensated by a perpetual LBP bond (at the market exchange rate) at the Lebanese government treasury bill rate minus 2 percentage points and paid after a 5-year period.

BANK PLANS

These plans generally advocate for a significant use of government assets—including potential oil and gas receipts—to compensate banks for the losses related to their foreign currency placements with the BdL and their holdings of government securities. The plans also generally called for lower (or no) haircuts on deposits compared with government proposals.

Association of Banks in Lebanon

Contribution to the Lebanese Government's Recovery Plan (May 2020)

The plan called for the use of public assets to settle the government's obligations to the BdL. It proposed the creation of a fund that would be financed by USD 40 billion of state assets, which would issue long dated interest-bearing certificates as settlement for government debt to the BdL. Treasury LBP bills would be restructured through a voluntary debt exchange. These transactions would be designed to enable banks to meet their obligations to depositors in full.
Following the settlement of Government debt to the BdL, banks would be restructured on a case-by-case approach. Bank recapitalizations would be funded through voluntary deposit to capital conversions, revaluation of bank assets, and capital injections. The plan makes no mention of a write-off of BdL liabilities to banks.

ABL Plan for Economic Recovery (September 2021)

A follow up paper that outlines reforms to be undertaken in the government's first 100 days in office repeated the proposal for state assets to be placed in a fund (owned by the government). However, instead of long-dated interest-bearing instruments, BdL claims on the government would be replaced by non-voting preferred stock in the fund. Although not mentioned in the paper, this transaction would essentially transfer ownership of state assets from the government to the BdL.

The paper recognizes that the value of LBP treasury bills was reduced through inflation and currency devaluation, reducing the need to restructure LBP treasury bills.

Surviving the Perfect Storm: A Virtuous Solution to the Lebanese Financial Crisis. Nicolas Chikhani (February 2020).

The plan calls for the use of state assets—including prospective hydrocarbon deposits—to reduce government debt and to compensate depositors, exchanging deposits in banks with shares in state assets. State assets would be used to buy all USD Eurobonds that are owned domestically and/or to facilitate their restructuring. The plan called for swapping LBP T-bills with lower interest certificates (at 2.25% instead of 9.9%). Public debt would be reduced to "an acceptable OECD level with almost no impact on 99% of the Lebanese depositors" according to the plan. The plan also proposed a claw back on high interest payments, with interest that was paid at a rate exceeding the Eurobond rate to be invested in a state asset fund.

The recapitalization needs of the banking system were estimated at a minimum of USD 15 billion to comply with international accounting standards (IFRS9 & Basel III).

LIBank and Nicolas Chikhani (June 2020)

This plan also aimed to minimize the financial losses in the banking system and to avoid any haircut on depositors. Government debt to the BdL would be repaid with state assets. The paper recommended that the government "recover the unfair benefits and misappropriated earned funds that were paid across all sectors to depositors and banks' shareholders. Also, those who abused the system should return the unfairly acquired funds". It called for a claw back of excessive interest payments to depositors. The paper also called for rescheduling the government's LBP debt and for commercial banks to restructure their loans.

OTHER PLANS

Several of the plans by non-bank entities also called for the use of state assets to help resolve the crisis. Some of these plans were prepared by people who may have been associated with banks.

A Proposal to help Lebanon overcome its financial crisis, Gérard Charvet and Ziad Hayek (May 2020).

The plan advocated the use of state assets to help resolve the crisis. It called for the creation of a Lebanon Asset Trust that would hold USD 25 billion of state assets, which would issue certificates to banks and to holders of 10-year government bonds. Lebanese banks would have the option to swap their Eurobonds and BdL CDs at par with these certificates. This mechanism would reduce government debt by the amount of state assets transferred to the Trust; the value of government LBP debt was reduced by currency devaluation. The plan recognizes that banks should bear some responsibility for the financial crisis and should accordingly share the burden of the financial rescue. Unlike all other plans, it advocated borrowing (USD 10 billion) against the central bank's gold reserves, which it considered preferable to borrowing from the IMF.

Deposits would be protected depending on size. Deposits in excess of USD 100,000 would be compensated by 5-year bank CDs, deposits larger than USD 300,000 would be compensated by 10-year CDs, and those exceeding USD 1 million would be given preferred convertible bonds issued by banks. There would be no restrictions on deposits smaller than USD 100,000.

Lebanon Opportunities Revival 2021: Economic Revival Plan (January 2020, updated December 2020)

The plan takes a gradual approach towards resolving the banking system difficulties, in contrast to the government plans that call for upfront recognition of financial losses. The bank restructuring would be done gradually, and banks would be given a three-to-five-year period to reach healthy balance sheets. In the interim, the plan calls for essentially having two banking systems: One with pre-October 17 (deposit and loan) balances, and another with new 'fresh' deposits and loans. Pre-crisis deposits would be released gradually, while access to 'fresh' deposits would be unrestricted, which would allow for a gradual resumption of banking activities.

Banks would benefit from the recovery of funds that were obtained by "public officials and their cronies through unlawful means or in contravention of best procurement practices"; the return of funds that were transferred abroad after October 17, 2019, a claw back of the interest earned by large depositors as a result of the BdL 'financial engineering' operations. The bank restructuring would include haircuts on large deposits or a bail-in of these deposits as equity in banks.

Government debt to the BdL would be written off; this would be the only debt that would be cancelled. The BdL would gradually release bank deposits by banks according to a timetable of many years. The plan favors the use of state assets for the recapitalization of the central bank and for government debt payments.

Adenauer Stiftung Policy Paper: Addressing the Lebanese Banking Crisis (April 2022)

The plan called for the separation of the bad part of banks from their good part, which would allow banks to continue operations. The bad bank would take the troubled assets of banks, including their claims on the BdL and the government. Small deposits (an amount to be determined) would be placed in the good bank. Large deposits would be placed in the good bank as much as financially feasible. Prior to the distribution of deposits between the bad bank and the good bank, measures to prosecute illicit enrichment and enforce the recovery of embezzled public funds and "smuggled deposits" after 2019 would be established to compensate depositors.

Shareholder capital would be distributed in the same proportion as deposits between the good bank and the bad bank. Shareholder capital would be used to absorb losses before affecting deposits. For the bad bank, shareholders would benefit from any returns only after deposits are paid in full. For the good bank, shareholders would be able to participate in recapitalizing the bank by bringing in money from abroad.

The bad bank would be a private company owned by its depositors. It would obtain revenues from recovering the sovereign and central bank-issued debts that were acquired from commercial banks. The bad bank would negotiate directly with the state to recoup losses.

Lebanese Economic Association (November 2022)

The plan called for the protection of all deposits, and for all deposits to be available for withdrawal without any restrictions. The plan considers that the re-establishment of trust in the financial system would induce depositors to keep most of their funds in banks and to re-deposit cash that is currently held in households, estimated at about USD 8 billion. Deposits in banks that are to be liquidated would be covered through the corporatization of state assets.

An important component of the plan is reforms that encourage confidence and trust and help to create liquidity. These reforms would include the unification and free floating of the exchange rate and the rescheduling of all public (Government and BdL) and private financial obligations.

Harvard Growth Lab Working Paper (November 2023)

The plan recommended that banks and the BdL be absolved of their deposit liabilities, and for depositors — above a certain threshold — to be compensated by new government debt. This proposal was based on the argument that the insolvency of the commercial banks was caused by their inability to recover their dollar deposits with the BdL, and that the BdL became insolvent because of lending to the government. Bank dollar placements with the BdL (about USD 76 billion) would be replaced by government debt certificates. Banks would use ninety percent of those certificates to pay deposits above a specific threshold, which was tentatively estimated at USD 100,000-150,000. These certificates would be restructured together with the Eurobonds and other claims on the government as part of an IMF program. The paper estimated that the haircut on the existing debt plus the interim certificates would be in the range of 82-90 percent, assuming fiscal primary surpluses of 3 percent of GDP by 2030.

The reduction in deposits would lower the need for additional bank capital. For banks that would need to be recapitalized, the paper proposes that the BdL provide capital injections in the form of subordinated debt with two-year maturities.

Don’t Let it Burn: Lebanon’s Last Chance for a Progressive Deposit Recovery Plan. D3M Policy Paper. Mohamad Farida (December 2023)

The plan is critical of other plans, including bank and government plans, because it considers that the bulk of losses in those plans would be borne by the general public. It also called for the redemption of deposits in the currency of the original deposit, ruling out the option of lirafication of dollar deposits.

Small depositors—who are most account holders—would have their savings fully restored. The amount to be restored would depend on bank liquid assets including placements with the BdL. There would be measures to reduce bank liabilities. Interest that was paid above a 3 percent rate after 2015 would be clawed back. The plan also considers that a sizeable portion of large bank deposits contain the proceeds of illicit activities. These deposits should not be eligible for restitution; however, given the effort involved in vetting them, it proposes a threshold below which accounts would be exempt from compliance measures.

The remaining deposits would be redeemed through three modes. Most deposits would be converted to bank equity at fair market value; a small amount (not exceeding 10 percent of deposits) would be discounted and financed through a claw back on the dividends commercial banks paid to shareholders since 2015; and a deposit recovery fund (DRF) would be created with the Lebanese government Eurobonds held by the commercial banks and the central bank, and with assets that the BdL acquired from past bank failures, like its shares in Middle East Airlines and the Casino. Current revenues from these assets would be earmarked for professional syndicates and the National Social Security Fund. The plan also calls for a return of funds that were illegally transferred abroad, and compensation for commercial loans above $1 million that were settled after October 2019 at a discounted rate. The Lebanese government would recapitalize the BdL by $2.5 billion.

Table 2
Proposed plans: Treatment of deposits

GOVERNMENT PLANS	DEPOSIT HAIRCUTS?	RETURN HIGH INTEREST THAT WAS PAID?	RETURN ILLICIT GAINS?	RETURN DEPOSITS CONVERTED TO USD?
DIAB PLAN	Protect small depositors and organizations	Yes	Yes	No
IMF SLA	Protect small depositors	No	No mention	No
MIKATI PLAN	Protect small depositors	Yes	No mention	After Oct 2019
RECENT PLAN (AUG 2024)	Protect small depositors	Yes	Yes	Partially

BANK PLANS	DEPOSIT HAIRCUTS?	RETURN HIGH INTEREST THAT WAS PAID?	RETURN ILLICIT GAINS?	RETURN DEPOSITS CONVERTED TO USD?
ABL	No	No	No	No
LIBANK CHIKHANI	No	Yes	Yes	Not clear

OTHER PLANS	DEPOSIT HAIRCUTS?	RETURN HIGH INTEREST THAT WAS PAID?	RETURN ILLICIT GAINS?	RETURN DEPOSITS CONVERTED TO USD?
CHAVRET AND HAYEK	On deposits exceeding $100,000	Yes	Yes	Yes
LEBANON OPPORT-UNITIES	On large deposits	Yes	Yes	No mention
A STIFTUNG	Above a threshold put in bad bank	Yes	Yes	No mention
LEBANESE ECON ASSOCIATION	No	No mention	No mention	No mention
HARVARD GROWTH LAB	Government certificates for deposits above a threshold	No mention	No mention	No mention
BADIL MOHAMAD FARIDA	Protect small depositors, haircuts for large deposits.	Yes, limit to 3% as of 2015	Yes	No mention

Table 3
Proposed plans: Treatment of bank equity

GOVERNMENT PLANS	BANK EQUITY	USE STATE ASSETS	RETURN DIVIDENDS	RETURN GAINS FROM LOANS	BANK DEPOSITS WITH BDL	GOVERNMENT DEBT TO BDL
DIAB PLAN	Full bail-in	For BdL capitalization	No mention	Yes	Write off	Write off
IMF SLA	Full bail-in	No	No mention	No mention	Write off	Write off Capitalize BdL by government bond
MIKATI PLAN	Full bail-in	Returns above an international threshold to depo	No mention	No mention	Write off	Write off. Capitalize BdL by government bond
RECENT PLAN (AUG 2024)	Full bail-in	Yes	No	Yes	Larified; low interest	Write off

BANK PLANS	BANK EQUITY	USE STATE ASSETS	RETURN DIVIDENDS	RETURN GAINS FROM LOANS	BANK DEPOSITS WITH BDL	GOVERNMENT DEBT TO BDL
ABL	Bail-in	Yes	No mention	No	Repay	Repay with state assets
LIBANK CHIKHANI	No need	To repay government debt to the BdL and depositors	No mention	Yes	Repay	Repay

OTHER PLANS	BANK EQUITY	USE STATE ASSETS	RETURN DIVIDENDS	RETURN GAINS FROM LOANS	BANK DEPOSITS WITH BDL	GOVERNMENT DEBT TO BDL
CHAVRET AND HAYEK	Bail-in	For bank deposits with BdL and 10-year govornment bonds. Use gold reserves to borrow.	No mention	No mention	Replace with claims on state assets	No mention
LEBANON OPPORT-UNITIES	First hit	For BdL capitalization	No mention	No mention	Repay gradually	Write off
A STIFTUNG	Bail-in. Good, bad bank	No mention	No mention	No mention	No mention	No mention
LEBANESE ECON ASSOCIATION	No mention	No mention	No mention	No mention	Repay	No mention
HARVARD GROWTH LAB	No mention	No mention	No mention	No mention	Write off	Write off
BADIL MOHAMAD FARIDA	Bail-in	BdL assets for syndicates and social security fund deposits	Yes. Post 2015 dividends.	Yes	No mention	Write off. Government recapitalizes BdL

EMPIRICAL ANALYSIS

The assessment of losses in the forementioned plans was based on consolidated banking system balance sheet data. This paper offers an analysis of the solvency of banks at the bank level (rather than at the consolidated banking balance sheet level). Whereas the asset quality review of the fourteen largest Lebanese banks, a prior condition under the SLA signed between the IMF and Lebanese authorities, would shed light on the position of these banks, progress on this front has been limited. Therefore, and as workable alternative to the asset quality review of the fourteen largest banks, this paper aims to shed light of the position of Lebanese banks using publicly available data. The paper investigates whether and which—and under which conditions, more specifically—Lebanese banks can regain solvency and could be salvageable.

A bank restructuring exercise should ideally lead to a fair and efficient allocation of losses that maximizes the recovery value of deposits in a financially sustainable manner, and result in a revival of banking functions in the economy, which would require viable banks. Examining the banking sector on a consolidated basis, rather than on a bank-by-bank basis, represents a major limitation in proposing a policy response as it overlooks the heterogeneity in the financial conditions of each bank. The following analysis attempts to assess losses on an individual bank basis under multiple hypothetical scenarios.

DATA COLLECTION AND DESCRIPTIVE STATISTICS

The lack of publicly available financial data for individual banks poses a significant challenge to any such bank-by-bank analysis, ours included. Most banks only have audited financial statements until 2020. Notwithstanding the caveats involved in relying on such outdated data, financial information for 21 banks was obtained from the websites of the individual banks. This information was complemented with data from Alvarez & Marsal's forensic audit report of BdL.

Table 4 presents some basic information about the banks for which data was obtained. Values were converted to USD at the exchange rate of 1515 LBP/USD, which was the official exchange rate at that time, and it was the rate that was used by banks in their financial statements. The sample is representative, as it accounts for about USD 223 billion of bank assets and USD 163 billion of deposits, which were over 90% and 87% of the total assets and total deposits of the banking system, respectively. Banks had on average a deposit dollarization rate of 76%. Notably, Alpha banks had on average a deposit dollarization rate in excess of 80%.

Table 4
Balance sheet data for banks (in USD millions)

BANK	FISCAL YEAR	ASSETS	DEPOSITS	LBP DEPOSITS	FX DEPOSITS	EQUITY
Bank 1	2020	35,621	21,527	2,809	18,717	2,979
Bank 2	2020	29,717	21,089	2,721	18,373	3,054
Bank 3	2018	25,927	18,709	5,335	13,375	1,929
Bank 4	2020	18,818	14,679	2,878	11,801	1,534
Bank 5	2020	16,649	13,584	3,699	9,885	1,800
Bank 6	2020	15,609	11,447	2,187	9,261	814
Bank 7	2018	15,160	11,371	2,743	8,629	1,322
Bank 8	2020	13,508	10,787	2,167	8,619	1,380
Bank 9	2020	9,851	7,517	2,525	4,992	869
Bank 10	2019	8,221	5,924	1,398	4,526	597
Bank 11	2018	5,609	4,278	1,255	3,023	457
Bank 12	2018	5,222	3,892	1,047	2,844	429
Bank 13	2020	4,917	4,097	1,081	3,016	430
Bank 14	2019	4,165	3,186	1,010	2,176	381
Bank 15	2020	3,994	3,089	852	2,237	553
Bank 16	2020	2,323	1,735	1367	1,598	197
Bank 17	2020	2,226	1,944	255	1,690	119
Bank 18	2018	1,970	703	106	596	356

Source: Publicly available information collected from the financial statements that are available on banks' websites.

BREAKDOWN OF BANK ASSETS

At the heart of the banking crisis lies the massive exposure of banks to domestic sovereign debt, namely the BdL and the Government of Lebanon (GoL). These exposures take the form of Treasury Bonds, Eurobonds, and placements with BdL (both in LBP and USD), with varying degrees across banks. Exposures in either currency come with comparable losses. For USD exposures, the average market value of the Eurobonds suggests a 93% loss in value. However, the bulk of USD exposures is to the BdL. For LBP exposures, the devaluation of the currency suggests a 98% loss in value. To get a sense of the magnitude of the problem at a bank-by-bank level, Figure 1 presents estimates of the percentage sovereign exposures to total assets for the latest reported fiscal year.

Figure 1:
Sovereign Exposures of Individual Banks (percent of bank assets)

Source: Authors' computations based on publicly available information collected from the financial statements that are available on banks' websites.

Exposures to GoL is the ratio of the face value of Eurobond holdings plus Treasury bonds to total assets. These exposures were relatively modest with banks having an average exposure of 14%. However, the bulk of the sovereign exposure was to the BdL, with banks having an average exposure of 62%. Thus, the key challenge for banks stems from exposure to BdL, rather than GoL. Looking at them together, banks had an average exposure of 76%. Given these exposures, viability of the least-exposed banks may be challenging.

SCENARIO ANALYSIS

The bank balance sheets—as reported on bank websites—were formulated based on the official exchange rate and had Eurobond and claims on the BdL at book value. To gauge the effect of the proposed plans and current market conditions on bank equity, the equity of each bank was estimated under assumptions regarding the exchange rate, the likely haircut on sovereign exposures, and the need for nonperforming loan provisions under two illustrative scenarios. We consider two scenarios, which are defined below:

In the first scenario (Scenario 1), it is assumed that bank USD exposures to the BdL are lirafied at the exchange rate of LBP 45,000, which would be an effective haircut of 50%. The haircut on Eurobonds was assumed at 60%, which is significantly lower than implied by current Eurobond values. Non-performing loans (NPLs) were assumed at 15%. Under this scenario, losses for the 21 banks amount to USD 73.2 billion, equivalent to 60% of deposits with them. All banks end up with negative equity (Table 5).

A second scenario (Scenario 2) used a more realistic 80% haircut on Eurobonds, a lirafication of BdL exposures at the LBP 15,000 per USD and an NPL rate of 30%. Aggregate losses would be USD 105.6 billion, equivalent to 84% of deposits. All banks emerge with higher negative equity under this scenario (Table 6).

Table 5
Bank-by-bank losses under Scenario 1

BANK	ASSETS			ADJ EQUITY (USD MILLION)	LOSSES/DEPOSITS (PERCENT)
	ADJUSTED (USD MILLION)	CHANGE (USD MILLION)	CHANGE (PERCENT)		
Bank 1	19334	-16,287	-46	-10,546	-56
Bank 2	12132	-17,585	-59	-11,860	-64
Bank 3	12005	-13,922	-54	-6,749	-50
Bank 4	5969	-12,849	-68	-8,486	-72
Bank 5	7150	-9,498	-57	-4,062	-41
Bank 6	5434	-10,175	-65	-7,211	-78
Bank 7	6950	-8,210	-54	-4,193	-48
Bank 8	5990	-7,518	-56	-4,008	-46
Bank 9	3297	-6,554	-67	-3,203	-64
Bank 10	3289	-4,932	-60	-2,961	-65
Bank 11	2627	-2,983	-53	-1,292	-42
Bank 12	2736	-2,486	-48	-1,026	-36
Bank 13	1611	-3,306	-67	-1,814	-60
Bank 14	2006	-2,159	-52	-785	-36
Bank 15	1704	-2,290	-57	-899	-40
Bank 16	1010	-1,312	-56	-981	-61
Bank 17	637	-1,589	-71	-1,220	-72
Bank 18	703	-1,267	-64	-806	-135
Bank 19	456	-1,064	-70	-435	-48
Bank 20	544	-927	-63	-448	-52
Bank 21	634	-812	-56	-269	-41
TOTAL LOSSES	**-73,253**				**-60**

Notes: Scenario 1 assumes that USD exposures to the BdL are lirafied at the exchange rate of LBP 45,000, which would be an effective haircut of 50%.
The haircut on Eurobonds is assumed to be 60%, which is significantly lower than implied by current Eurobond values.
Non-performing loans (NPLs) were assumed at 15%.

Table 6
Bank-by-bank losses under Scenario 2

BANK	ASSETS			ADJ EQUITY (USD MILLION)	LOSSES/DEPOSITS (PERCENT)
	ADJUSTED (USD MILLION)	CHANGE (USD MILLION)	CHANGE (PERCENT)		
Bank 1	15,473	-20,149	-57	-14,408	-77
Bank 2	7,198	-22,519	-76	-16,795	-91
Bank 3	9,225	-16,702	-64	-9,529	-71
Bank 4	2,302	-16,516	-88	-12,153	-103
Bank 5	4,712	-11,937	-72	-6,500	-65
Bank 6	3,411	-12,197	-78	-9,234	-99
Bank 7	4,475	-10,685	-70	-6,667	-77
Bank 8	3,894	-9,614	-71	-6,103	-71
Bank 9	1,603	-8,248	-84	-4,897	-97
Bank 10	2,178	-6,043	-74	-4,071	-89
Bank 11	1,877	-3,731	-67	-2,041	-67
Bank 12	2,170	-3,052	-58	-1,593	-56
Bank 13	764	-4,154	-84	-2,662	-88
Bank 14	1,471	-2,694	-65	-1,320	-60
Bank 15	1,027	-2,967	-74	-1,577	-70
Bank 16	480	-1,843	-79	-1,512	-94
Bank 17	218	-2,008	-90	-1,639	-97
Bank 18	453	-1,517	-77	-1,056	-177
Bank 19	131	-1,389	-91	-760	-83
Bank 20	294	-1,177	-80	-697	-81
Bank 21	452	-995	-69	-450	-69
TOTAL LOSSES	**-105,662**				**-86**

Notes: Under this scenario, a lirafication of banks' exposure to BdL at the rate of LBP 15,000 per USD is assumed. Further, it is assumed that the haircut on Eurobonds is 80% and that NPLs stand at 30%.

It would therefore not be possible to envisage viable banks without sizeable capital injections and/or depositor bail-ins. A related question is the extent to which small and medium deposits (lower than USD 100,000) can be preserved under a bail-in and the costs associated with preserving them. Addressing this question requires information on the distribution of deposits by size, which is not publicly available. According to Banking Control Commission data (March 2021), USD deposits that were USD 100,000 or lower comprised 17% of deposits. Given the lack of public availability of this information on a bank-by-bank level, it was assumed that 17% of USD deposits of each bank fall within this category. The equity capital of each bank was recalculated assuming that deposits that exceed USD100,000 are removed from their balance sheets.

Table 7 presents the results assuming a bail-in of 83% of USD deposits. All banks remain viable under a bail-in scenario in the first scenario, with the exception of one bank. For most of these banks, the deposit recovery value would be well above 17%. On a bank-by-bank level, there would be a need for varying levels of bail-ins depending on their current capitalization and how much shareholders contribute. In the second scenario, 10 out of 21 the banks become insolvent.

Table 7
Equity Capital Estimates Assuming a Deposit Bail-in of 83%

BANK	SCENARIO 1	SCENARIO 2
Bank 1	5,037	1,175
Bank 2	3,435	-1,499
Bank 3	4,443	1,662
Bank 4	1,358	-2,310
Bank 5	4,205	1,767
Bank 6	512	-1,510
Bank 7	3,016	541
Bank 8	3,183	1,087
Bank 9	983	-711
Bank 10	820	-291
Bank 11	1,238	489
Bank 12	1,352	785
Bank 13	708	-139
Bank 14	1,039	503
Bank 15	972	295
Bank 16	347	-183
Bank 17	188	-232
Bank 18	-309	-559
Bank 19	322	-3
Bank 20	264	15
Bank 21	276	94

Notes: This table provides estimates of equity capital in USD million under the assumption of a deposit bail-in of 83%.

These estimates were based on a uniform distribution of deposits, which is obviously not realistic. Nonetheless, they provide a rough estimate of the cost of guaranteeing deposits up to USD 100,000. The cost was substantially larger under the second scenario and estimated at USD 7.4 billion. These estimates suggest that the costs of a guaranteeing deposits up to USD 100,000 under current market conditions would be substantially large.

SOME FINAL THOUGHTS

There has been a variety of approaches to resolving banking crises. There have also been common elements among these approaches. Perhaps most prominent among them is the importance of having a bank restructuring strategy that is part of a comprehensive recovery plan. This aspect is especially important for Lebanon as a root cause of the crisis were unsustainable macroeconomic policies.

The various proposals to resolve the banking crisis in Lebanon seems to be the uniform treatment of deposits irrespective of the condition of banks. Perhaps this approach was unavoidable as individual bank data was not publicly available. This approach departs from other countries' way of dealing with banking crises. If this approach were to be followed, an argument would need to be made to justify why all depositors should receive the same haircut, even if they were placed in solvent institutions including the branches of foreign banks. In any event, the restructuring strategy would need to be based on individual bank data and on depositor information, which will require the lifting of bank secrecy. Most of the proposed restructuring plans call for a detailed review of the financial condition of individual banks.

A major difficulty in dealing with the Lebanese crisis is that all banks are insolvent and there are no public funds to help finance the restructuring like other countries that faced similar situations (Greece, Iceland and Ireland). Another consideration is that some of the damage to bank balance sheets was the result of government policies, namely the practice of allowing borrowers to settle their USD obligations in LBP at the official (non-market) exchange rate. It was not just banks taking advantage of high BdL interest rates, although that was the main reason for the impairment of bank balance sheets. Consideration should be given to the following:

- Establishing a resolution authority with operational independence. In our view, this authority must have very limited representation from BdL and the BCC, with no representation from banks. The resolution authority should have the general resolution powers stated in the FSB's Key Attributes.

- In line with international best practices (McNamara et al, 2024), it is recommended that a clear separation is made between regulatory oversight and resolution or restructuring decisions. That is, once the central bank deems an institution as failing or likely to fail, oversight is moved to the resolution authority. A swift, yet accurate, bank-by-bank valuation exercise – as called for in the 2022 Staff-Level Agreement with the IMF, is essential to resolve uncertainty concerning the viability of the banks. The exercise must be carried out by independent firms in cooperation with the banking control commission and the resolution/restructuring authority.

- The authorities should consider setting up a Special Purpose Vehicle to deal with NPLs and possibly leverage economies of scale. This would be pivotal if the heterogeneity in NPLs is not pronounced.

- The bank restructuring and resolution process is more likely to succeed when cast within the umbrella of comprehensive crisis resolution plan which comprises ambitious macro-fiscal reforms.

- In an empirical examination, Claessens, Klingebiel, and Laeven (2004) provide evidence that stronger institutions are associated with lower fiscal costs and swifter recoveries from systemic financial crises. Hence, the authorities should strive, along with deep macro-fiscal reforms, to enhance the quality of institutions, via combating corruption, improving law and order, legal system, and enhancing the effectiveness of bureaucracy, which are the dimensions examined Claessens, Klingebiel, and Laeven (2004), and the business enabling environment, more generally, to accelerate the recovery from the crisis.

- The bank restructuring process should involve reducing equity and claims of debt holders (other than depositors, like subordinated and senior) to zero. There is a need to respect the hierarchy of claims on banks, to pay off depositors before shareholders can salvage any equity. Several of the proposed plans also suggested a clawback of dividends. It is not clear whether this proposal is meaningful if the hierarchy of claims is to be observed, whereby bank equity will be drawn down until all deposits are freed.

- Another part of the solution would be to try to reduce bank liabilities, along the lines that were suggested by several proposed plans including through a clawback of past excessive interest payments and to investigate whether deposits were financed by illicit activities

SOME FINAL THOUGHTS

Bailing-in deposits exceeding USD 100,000 is essential for regaining bank solvency and viability. The use of the bail-in would leave depositors no worse off than under liquidation, as necessitated under the FSB's Key Attributes.

Even if a bail-in is applied, the financing required to pay back deposits of USD 100,000 for all depositor tranches (i.e., for deposits of USD 100,000 and less and USD 100,000 and more) are massive. Estimates by the IMF (2023), which are based on balance sheet information as of December 31, 2022, suggest that a USD 100,000 deposit payback (page 49) for all depositor tranches would require financing of USD 33.136 billion. Meeting this enormous financing need will prove to be a challenging endeavor for Lebanese authorities. Further, the recovery value for deposits is likely to decrease should the delay in restructuring the banking sector persist.

The concentration of deposits suggests that the authorities should consider a phased approach, under which the 88% of accounts of USD 100,000 or less, which constitute 18% of total deposits, are honored first. Recovering only the latter deposits would cost, according to IMF (2023) estimates (page 49), USD 16.761 billion, which is sizeable.

Any form of deposit recovery which extends the payback period over several years would imply significant losses on a net present value basis, even if the deposits of USD 100,000 or less are paid back in full. That is, in terms of time value of money, a speedy recovery is preferred to one that extends over several years.

There is a need to enhance corporate governance practices in the banking sector, particularly in terms board compositions, the powers vested in board chairpersons, increased reliance on independent board members, as well as restrictions on transactions by related parties and politically exposed persons.

It is essential to have a functioning banking system to underpin an economic recovery. Part of the solution could be the establishment of new banks.

Any solution to dealing with banks and depositors needs to consider political and social considerations. However, it also needs to be recognized that any solution will face significant opposition from politicians, bankers, depositors, and other vested interests. While a solution that satisfies everybody will not be feasible, it is important to proceed with the restructuring urgently given the wider economic implications.

References

- Ahearne, A. (2014). Making the best of it: Lessons from Ireland's experience in an EU/IMF program, The Cyprus bail-in: Policy lessons from the Cyprus economic crisis, 273-280.
- Baldwin, R., & Giavazzi, F., (2015). The Euro crisis: A consensus view of the causes and a few possible solutions. Centre for Economic Policy Research, CEPR Press.
- Baudino, P., Herrera, M., & Restoy, F., (2023) The 2008–14 banking crisis in Spain. Financial Stability Institute, Bank of International Settlements.
- Baudino, P., Murphy, D., & Svoronos, J. P. (2020). The banking crisis in Ireland. FSI Crisis Management Series No 2, Financial Stability Institute, Bank of International Settlements.
- Baudino, P., Sturluson, J. T., & Svoronos, J. P. (2020). The banking crisis in Iceland. FSI Crisis Management Series No 1, Financial Stability Institute, Bank of International Settlements.
- Benediktsdóttir, S., Eggertsson, G. B., & Þórarinsson, E. (2017). The rise, the fall, and the resurrection of Iceland, Working paper No. w24005, National Bureau of Economic Research.
- Berger, A., & Roman, R. (2020). TARP and other bank bailouts and bail-ins around the world: Connecting Wall Street, Main Street, and the financial system. Academic Press.
- Brown, S., Demetriou, D., & Theodossiou, P. (2018). Banking crisis in Cyprus: Causes, consequences and recent developments. Multinational Finance Journal, 22(1/2), 63-118.
- Calomiris, C. W., Klingebiel, D., Laeven, L., (2004). A taxonomy of financial crisis resolution mechanisms: Cross-country experience. World Bank Policy Research Working Paper 3379, World Bank, Washington DC.
- Chaaban, J. (2016). I've got the power: mapping connections between Lebanon's banking sector and the ruling class, Working Paper 1059, Economic Research Forum.
- Chaaban, J., Cole, J., Ghanem, N., & Halabi, S., (2023). They still got the power: The enduring connections between Lebanon's banking sector and the ruling class, Working Paper No. 1678, Economic Research Forum.
- Claessens, M. S., & Kose, M. A. (2013). Financial crises: Explanations, types, and implications. In Financial Crises: Causes, Consequences and Policy Responses, International Monetary Fund, Washington DC.
- Claessens, S., Klingebiel, D., & Laeven, L. (2004). Resolving systemic financial crises: policies and institutions. Available at SSRN 625254.
- Dobler, M., Moretti, & Piris, A. (2020). Managing systemic banking crises: New Lessons and Lessons Relearned. International Monetary Fund.
- Durante, R., Fabiani, A., Laeven, L., & Peydro, J. L. (2022). Media capture by banks, working paper No. 15214. Institute of Labor Economics (IZA).
- Flannery, M. J. (2010). Iceland's failed banks: A post-mortem. Prepared for the Icelandic Special Investigation Commission.
- Gaspard, T., (2019). Lebanon: Anatomy of a Currency Crisis, policy paper No. 24, Maison du Futur.
- Gaspard, T., (2020), Lebanon's Financial Collapse: A Post-Mortem, Policy Paper No. 25, Maison du Futur.
- Hardouvelis, G., & Vayanos, D., (2023). The Greek economic crisis and the banks, GreeSE Paper No. 180, Hellenic Observatory Papers on Greece and Southeast Europe, The London School of Economics and Political Science.
- Kaminsky, G. L., & Reinhart, C. M. (1999). The twin crises: the causes of banking and balance-of-payments problems. American economic review, 89(3), 473-500.
- International Monetary Fund (2017a), Lebanon: 2016 Article IV Consultation, IMF Country Report No. 17/19, Washington DC.
- International Monetary Fund (2017b), Lebanon: Financial System Stability Assessment, IMF Country Report No. 17/21, Washington DC.
- International Monetary Fund (2019), Lebanon: 2019 Article IV Consultation, IMF Country Report No. 19/312, Washington DC.
- International Monetary Fund (2020), Italy: Financial System Stability Assessment, Technical Note: Financial Safety Net and Crisis Management Arrangements, IMF Country Report No. 20/235, Washington DC.
- International Monetary Fund (2023), Lebanon: 2023 Article IV Consultation, IMF Country Report No. 23/237, Washington DC.
- Jónsson, Á., & Sigurgeirsson, H. (2016). The Icelandic financial crisis. Palgrave Macmillan Studies in Banking and Financial Institutions.
- Laeven, L., & Valencia, F., (2013) Systemic banking crises database, IMF Economic Review, 61, 225-270.
- Laeven, L., & Valencia, F. (2014). Systemic banking crises. In Financial Crises: Causes, Consequences and Policy Responses, International Monetary Fund, Washington DC.
- Laeven, L., & Valencia, F. (2020). Systemic banking crises database II. IMF Economic Review, 68, 307-361.
- McNamara, C. M., Mott, C. K., Gupta, S., Feldberg, G., & Metrick, A. (2024). Survey of resolution and restructuring in Europe: pre-and post-BRRD. Journal of Financial Crises, 6(1), 1-34.
- Michaelides, A. (2014). Cyprus: from boom to bail-in. The Cyprus bail-in: Policy lessons from the Cyprus economic crisis, 33-102.
- Roubini, N., & Sester, B., (2004). Bailouts or bail-ins? Responding to financial crises in emerging market economies. Institute of International Economics, Peterson Institute of International Economics, Washington DC.
- Schoenmaker, D. (2015). Stabilising and healing the Irish banking system: Policy lessons. Paper prepared for the CBI-CEPR-IMF Conference Ireland—Lessons from its Recovery from the Bank-Sovereign Loop.
- Philippon, T., & Salord, A. (2017). Bail-ins and bank resolution in Europe, A Progress Report, Geneva reports on the world economy.
- World Bank (2016). Lebanon: A systematic country diagnostic, Washington DC.
- World Bank (2017a). Understanding bank recovery and resolution in the EU: A guidebook to the BRRD. Washington DC.
- World Bank (2017b). Bank resolution and bail-in in the EU: Selected case studies pre-and post-BRRD. Washington DC.
- World Bank (2020). Lebanon Economic Monitor (Fall 2020): The deliberate depression, Washington DC.
- World Bank (2021). Lebanon Economic Monitor (Fall 2021): Lebanon sinking (to the top 3), Washington DC.
- World Bank (2022a). Lebanon Public Finance Review: Ponzi Finance?, Washington DC
- World Bank (2022b). Lebanon Economic Monitor (Fall 2022): Time for an equitable banking resolution, Washington DC.
- World Bank (2023a). Lebanon Economic Monitor (Fall 2023): In the grip of a new crisis, Washington DC.
- World Bank (2023b). Lebanon Economic Monitor (Spring 2023): Normalization of crisis is no road to stabilization. Washington DC.
- Xiouros, C. (2016). Handling of the Laiki Bank ELA and the Cyprus bail-in package. The Cyprus bail-in: Policy lessons from the Cyprus economic crisis, 33-102.
- Zettelmeyer, J., Trebesch, C., & Gulati, M. (2013). The Greek debt restructuring: An autopsy. Economic Policy, 28(75), 513-563.