



# LEBANON

## FINANCIAL SYSTEM STABILITY ASSESSMENT

January 2017

This Financial System Stability Assessment paper on Lebanon was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on November 23, 2016.

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## FINANCIAL SYSTEM STABILITY ASSESSMENT

November 23, 2016

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Prepared By  
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This report is based on the work of the Financial Sector Assessment Program (FSAP) mission that visited Lebanon in February and April 2016. The FSAP findings were discussed with the authorities during the Article IV Consultation mission that took place in October 2016. More information on the FSAP may be found at

<https://www.imf.org/external/np/exr/facts/fsap.htm>

- The IMF-World Bank FSAP team was led by Alvaro Piris (IMF) and Loic Chiquier (World Bank—WB), and included Constant Verkoren (IMF deputy mission chief), Ruchir Agarwal, Johannes Forss Sandahl, Etibar Jafarov, Alessandro Gullo, Nadine Schwarz (all IMF staff); Keith Bell and David Hoelscher (IMF external experts); as well as Laurent Gonnet (WB deputy mission chief), Simon Bell, Ana Carvajal, Emile van der Does de Willebois, Lars Jessen, Marc Schrijver (all WB staff); and Ibrahim Jamali, Laurent Lhériaux, and Claude Taffin (WB external experts). The mission met with Governor Salamé of the Banque du Liban (BdL); senior BdL staff; Mr. Hammoud (Chairman of the Banking Control Commission, BCC) and senior BCC staff; Mr. Fakih (Vice Chairman of the Capital Markets Authority); Ms. El Habbal (Acting Head of the Insurance Control Commission); Secretary Mansour of the Special Investigation Commission; Mr. Bifani (Director General of the Ministry of Finance); and private sector representatives.
- FSAPs assess the stability of the financial system as a whole and not that of individual institutions. They are intended to help countries identify key sources of systemic risk in the financial sector and implement policies to enhance its resilience to shocks and contagion. Certain categories of risk affecting financial institutions, such as operational or legal risk, or risk related to fraud, are not covered in FSAPs.
- This report was prepared by Alvaro Piris and Constant Verkoren, with contributions from other IMF team members. It draws on a number of technical notes and a Detailed Assessment Report on compliance with the Basel Core Principles for Effective Banking Supervision (BCP).

# CONTENTS

<b>GLOSSARY</b>	<b>3</b>
<b>EXECUTIVE SUMMARY</b>	<b>4</b>
<b>RISKS AND RESILIENCE</b>	<b>8</b>
A. Key Risks Facing the Financial System	9
B. Financial System Resilience	15
<b>SUPERVISORY OVERSIGHT AND RISK MITIGATION</b>	<b>19</b>
A. Microprudential Oversight	20
B. Financial Integrity	24
C. Macroprudential Policy Framework	25
<b>FINANCIAL SECTOR SAFETY NET</b>	<b>27</b>
<b>ACCESS TO FINANCE AND FINANCIAL INCLUSION</b>	<b>29</b>
<b>BOXES</b>	
1. Recommendations of the 2016 Article IV Consultation	9
2. Deposit Growth	12
3. Treatment of Restructured Loans	22
<b>FIGURES</b>	
1. Vulnerable Macroeconomic Fundamentals	8
2. Foreign Assets and the Banque du Liban’s Balance Sheet	13
3. Solvency Stress Testing Results	16
4. Bank Solvency Sensitivity Analyses	17
5. Deposit Concentration in Lebanese Banks	17
<b>TABLES</b>	
1. Key Recommendations of the FSAP	7
2. Risk Assessment Matrix	14
<b>APPENDICES</b>	
I. Tables and Figures	31
II. Stress Testing Parameters	39
III. Banking Sector Stress Testing Matrices	40
IV. Report on the Observance of Standards and Codes—Basel Core Principles for Effective Banking Supervision	53

## Glossary

AML/CFT	Anti-Money Laundering and Countering Financing of Terrorism
BC	Basic Circular of the Banque du Liban
BCBS	Basel Committee on Banking Supervision
BCC	Banking Control Commission
BCP	Basel Core Principles
BdL	Banque du Liban
CAR	Capital Adequacy Ratio
CD	Certificate of deposit
CMA	Capital Markets Authority
FSAP	Financial Sector Assessment Program
FSC	Financial Stability Committee
FSU	Financial Stability Unit
FSSA	Financial System Stability Assessment
HBC	Higher Banking Council
ICC	Insurance Control Commission
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
IOSCO	International Organization of Securities Commissions
LBP	Lebanese Pound
LCR	Liquidity coverage ratio
ML	Money laundering
NIB	National Insurance Board
NIGD	National Institute for the Guarantee of Deposits
NSFR	Net stable funding ratio
RWA	Risk Weighted Assets
SIC	Special Investigation Commission
TD	Term Deposit
TF	Terrorist Financing
WB	World Bank

## EXECUTIVE SUMMARY

**Lebanon has maintained financial stability for the last quarter century during repeated shocks and challenges.** A stable exchange rate pegged to the dollar, remittances and deposit inflows from nonresidents and Lebanese abroad, and adroit crisis management have helped preserve confidence through regional and domestic economic and political shocks.

**Over time, macroeconomic and financial vulnerabilities have accumulated.** Public debt is lower than peaks reached in the past, but is high at a projected 144 percent of GDP in 2016, and fiscal and external deficits are large. Financing needs require a continued inflow of remittances and nonresident deposits, but deposit growth has slowed. With assets close to four times GDP, the financial sector is very large, with banks accounting for 97 percent of the total. Government securities and deposits at the Banque du Liban (BdL) account for more than half of aggregate bank assets (more than six times Tier 1 capital). Economic growth, projected at 1 percent in 2016, has been weak due to the Syrian conflict and a domestic political impasse that left the country without a president and fully functioning executive and legislature for over two years. The election of a new president in October 2016 and appointment of a new prime minister offer an opportunity to reinvigorate economic policymaking and initiate long-postponed reforms.

**While central bank policies have helped to maintain confidence, fiscal adjustment is needed to reduce risks to financial stability.** The BdL maintains the fixed exchange rate, purchases government debt, keeps interest rates steady at moderate levels, maintains high gross international reserves, provides economic stimulus, and addresses weak banks. While these policies have helped to contain systemic risks, they result in the creation of new reserve money; stepping back from quasi-fiscal operations and strengthening the BdL's balance sheet would reduce risks that excess pound liquidity could result in exchange rate pressures. Fiscal adjustment and a return to a declining public debt ratio are needed to reduce the burden borne by the BdL, and the reliance on deposit inflows to cover financing needs.

**The banking system has thus far proven resilient to domestic shocks and regional turmoil, but the materialization of severe shocks could expose vulnerabilities.** Confidence in the banking sector has been sustained despite economic and political shocks, and the banks have grown and remained profitable. The banks have broadly similar business models, with long-term exposures to the government and the BdL as well as the private sector, and their financial structure leaves them exposed to sovereign, interest rate, and real estate risks. Stress tests modeling severe scenarios such as a protracted period of low growth, rises in interest rates, and real estate price falls suggest that capital restoration following such shocks could take significant resources, a reflection of the size of the banking sector as well as the difficult baseline environment. Bank deposits—although historically stable—are highly concentrated and dollarized. Secondary markets in government debt and BdL certificates of deposit are illiquid, and banks have reduced foreign asset positions in recent years. Liquidity stress in banks could quickly lead to a need for the BdL to provide funding.

**Effective oversight and crisis management have contributed to stability.** An assessment of compliance with the Basel Core Principles found banking supervision to be effective. Work already underway to ensure a better match between the risk profile of individual banks and their capital levels is a key reform to strengthening the oversight framework, and further developing stress testing capabilities would provide an important complement. Steps to bolster supervisory autonomy and capacity, in combination with targeted improvements of banking sector regulation, would further align the supervisory framework with international best practice. Broadening and formalizing the role of the macroprudential policy committee, building on current arrangements and including outside points of view, could strengthen the link between systemic risk monitoring and policy determination. Introducing a framework for recovery planning is also a priority to bolster banks' own capacity to respond to shocks. Weak small and medium-sized institutions have been promptly handled, mainly through mergers, without jeopardizing financial stability. The crisis management framework could be strengthened by considering arrangements for dealing with distress in systemically important institutions with a view to minimizing public support and, as part of long-term reforms, to better align the bank resolution regime and deposit insurance scheme with international best practice.

**Significant progress has been made to further strengthen Lebanon's financial integrity framework, with some scope for improvement remaining.** Money laundering (ML) and terrorist financing (TF) risks are recognized as a primary concern by the authorities and the banks, with robust anti-money laundering/combating the financing of terrorism (AML/CFT) controls supported as essential to maintain confidence in the banking system. The adoption of key legislative initiatives in 2015 was an important milestone, and steps have been taken to implement TF-related targeted financial sanctions. Some gaps remain, for example in the scope of the ML and TF offenses, and in the implementation of risk-based supervision. Banking secrecy does not appear to be a significant immediate source of risk for financial stability. Nonetheless, it is doubtful whether it serves Lebanon's long-term interests as a modern, internationally active financial center, as it may limit supervisory analysis of bank exposures to particular counterparties, poses challenges for the effective implementation of the AML/CFT framework, and risks attracting clients that may compromise financial integrity.

**The authorities are encouraged to gather data and analyze the implications of withdrawal of financial services on Lebanese banks and financial services users, and to take mitigating action as needed.** While the withdrawal of correspondent banking relationships does not appear significant in macroeconomic or financial stability terms, there are indications that some global banks are reducing the provision of financial services to Lebanese banks and remittance companies. The collection and analysis of data on the withdrawal of financial services would allow the authorities to gauge the impact of "derisking" on the Lebanese financial sector as well as end-users, and develop remedial actions to the extent that the drivers are under their control.

**Legal and regulatory improvements could underpin safe development of the nonbank sectors.** Nonbanks play a minor role in the financial system and do not pose systemic risks. Capital markets are small and contribute little to the financing of the economy, and expansion prospects for the

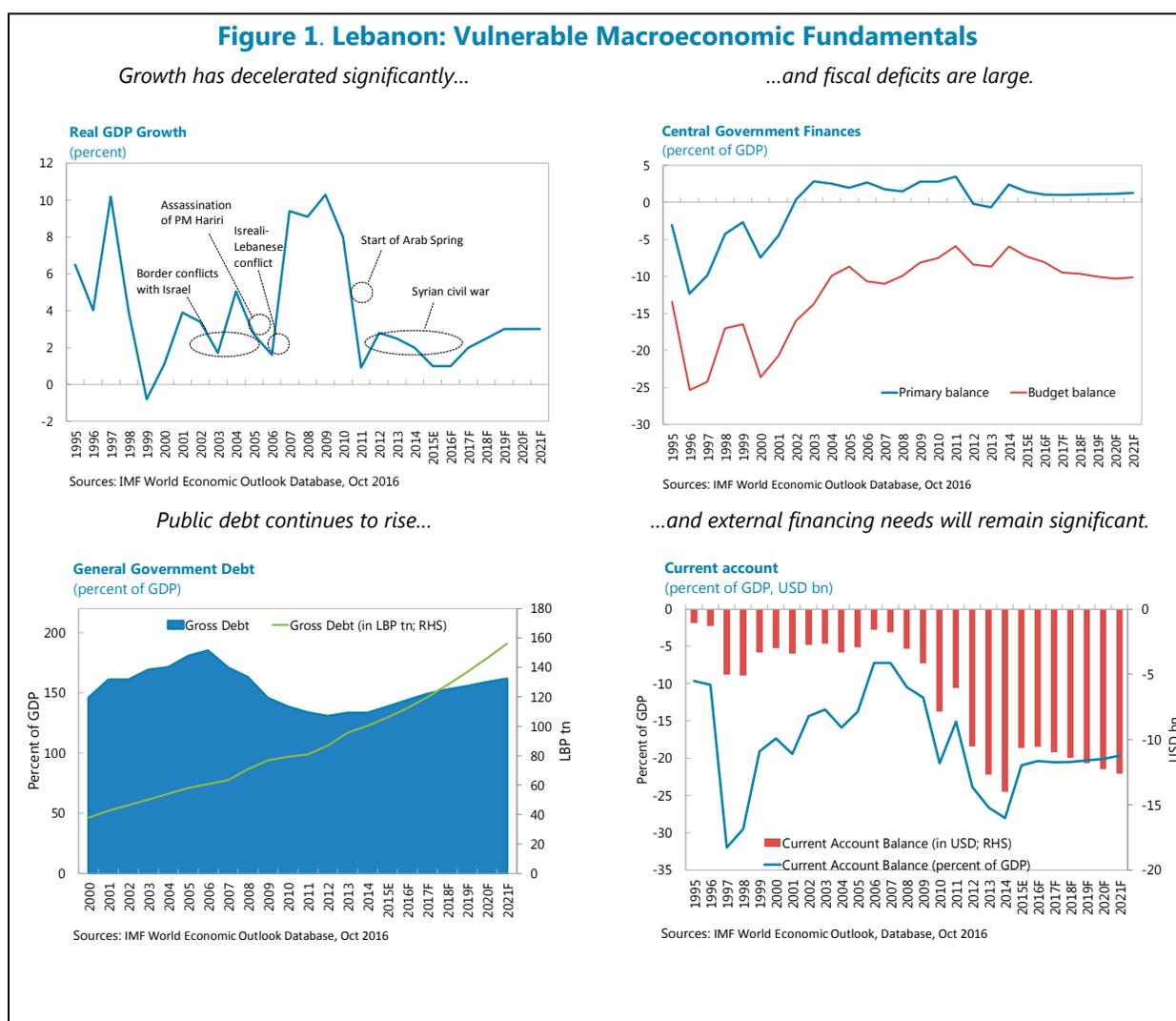
insurance sector are hindered by a relatively weak regulatory and institutional framework. The micro finance industry plays an important role in financial inclusion, but basic data is lacking and the supervisory framework is inadequate. A National Access to Finance strategy could help to build consensus on strategic priorities in safely developing financial services for underserved groups, while improvements of the insolvency framework and the regime for secured transactions could help improve access to finance for small- and medium-sized enterprises.

<b>Table 1. Lebanon: Key Recommendations of the FSAP</b>		
		Time frame <sup>1</sup>
<b>Financial Sector Supervision</b>		
1.	Develop and implement integrated risk profiles for all banks; ensure that banks' capital planning is fully aligned with their risk profile, corporate governance and risk management.	Near term
2.	Strengthen supervisory autonomy and capacity by (i) introducing legal protection for staff of supervisory authorities; (ii) reviewing the adequacy of supervisory resources; and (iii) reconsidering the practice of the Association of Banks of proposing one of the board members of the BCC and HBC.	Near term
3.	Enhance the regulatory framework for banks by (i) aligning the regulatory treatment of restructured loans with international good practice; (ii) formalizing the LCR as a mandatory standard for liquidity risk management; and (iii) adjusting the risk weight on foreign currency denominated BdL instruments in accordance with the Basel Capital Accord, as financing needs and risks abate.	Near term
4.	Develop capability for undertaking top-down stress tests and require banks to periodically submit bottom-up multi-factor stress tests.	Medium term
5.	Introduce recovery planning requirements for banks.	Medium term
6.	Improve nonbank regulation by (i) finalizing and implementing new capital market regulations; (ii) modernizing the insurance law; and (iii) developing a unified regulatory framework for the microfinance sector.	Medium term
<b>Financial integrity</b>		
7.	Ensure that the ML offense includes all elements in the international standard, including acquisition, possession or use of illicit funds.	Near term
8.	Establish a comprehensive mechanism to implement United Nations Security Council resolutions' TF-related targeted financial sanctions	Near term
9.	Adjust the allocation of AML/CFT supervisory resources and action in line with actual ML/TF risks.	Near term
<b>Macroprudential policy</b>		
10.	Create, or build on current structures to form, a financial stability advisory committee, including external members and a formal mandate and procedures.	Medium term
<b>Crisis management and preparedness</b>		
11.	Develop plans to enable the orderly resolution of systemically important banks; discontinue policy measures that support mergers between sound banks.	Medium term
12.	Consider reforms, as macro financial conditions improve, to better align the bank resolution regime and deposit insurance scheme with international best practice.	Medium term
<b>Financial development and access to finance</b>		
13.	Collect data and analyze the implications of withdrawal of correspondent banking services on Lebanese banks and end-users of financial services, and take mitigating actions as needed.	Near term
14.	Develop a National Access to Finance Strategy.	Medium term

<sup>1</sup> Near term is one year, medium term is 2-3 years

# RISKS AND RESILIENCE

**1. Lebanon has maintained financial stability over the past quarter century.** Despite repeated political and economic shocks and periods of low activity, growth has averaged about 5 percent since the early 1990s, and per capita income has risen to US\$11,250 in 2015. The financial sector—overwhelmingly banks—has grown rapidly over this period, as inflows of deposits from nonresidents have financed large and persistent macroeconomic imbalances. Confidence has been underpinned by the exchange rate peg in place since 1999, and adroit crisis management. Current regional turmoil and domestic political difficulties have weakened investment and growth since 2011, with large fiscal deficits and rising public debt (Figure 1). A slowdown in deposit inflows raises the urgency of macroeconomic reforms that would help reduce financing pressures and bolster investor confidence. Recommendations from the 2016 Article IV consultation, in line with past advice, focus on front-loaded fiscal adjustment, which would reduce financing needs, structural reforms to promote sustainable growth, and mitigating risks in the banking sector (Box 1).



### Box 1. Recommendations of the 2016 Article IV Consultation

The Staff Report for the 2016 Article IV Consultation notes that the Syrian crisis continues to dominate the economic outlook, with the influx of refugees now reaching about a quarter of the population. GDP growth remains subdued and public debt is rising, despite modest primary fiscal surpluses. Macroeconomic stability depends in large part on the banks' continued ability to attract foreign deposits and, in this context, the economy remains vulnerable to shifts in deposit inflows. The report also notes that, after a 29-month vacancy, the election of a president presents a potential opportunity to correct policy course.

The recommendations of the report focus on three key areas:

- Halting the growth of public debt and placing public finances on a more sustainable path. Front-loaded fiscal adjustment is essential, accompanied by the passage of a budget.
- Retaining the exchange rate peg as the prime focus of monetary policy, sterilizing excess liquidity created by a recent operation to accumulate international reserves (see below). Should the need arise, the authorities should rely on more direct interest rate tools and not expand the operation further. The BdL should gradually withdraw from quasi-fiscal economic stimulus measures.
- Structural reforms to promote sustainable growth by addressing the economy's most pressing bottlenecks, starting with the electricity sector.

To make the financial sector more resilient to macro financial risks, the Article IV reflects the FSAP recommendations. These include pressing ahead with forward-looking capital planning for the banks, aligning the regulatory capital treatment of BdL foreign currency instruments with the Basel capital adequacy framework, considering interest rate risk from a capital perspective, and tightening rules on loan classification, including for restructured loans. The need for a strong AML/CFT regime and deepening understanding of the sources of deposits is also emphasized.

## A. Key Risks Facing the Financial System

**2. The Lebanese financial system is dominated by banks.** Sixty-six banks account for 97 percent of financial system assets, which, at 397 percent of GDP (as of December 2015), are large for a middle-income country (Appendix I, Table 3 and Figure 1). Nonbanks play a correspondingly minor role and do not give rise to systemic risks.

**3. Foreign deposit inflows underpin reserves and finance external deficits.** Deposit inflows, attracted by high interest rates, exchange rate stability, and remittances of the large Lebanese diaspora, sustain macroeconomic and financial stability. Current account deficits are forecast to remain above 15 percent of GDP over the next five years; total external debt (including nonresident deposits) stood at 175 percent of GDP in 2015. With FDI having decreased in recent years, continued deposit inflows are the only significant source of capital inflows. The current slowdown in nonresident deposit growth led to declines in international reserves of just over 10 percent in the year up to May 2016, the first drop in 11 years. Following an operation initiated in June 2016 to acquire reserves from the banks in return for purchasing holdings of Lebanese pound (LBP)

denominated debt at prices, including large capital gains for the banks (known as the “financial engineering,” see Box 4 of the 2016 Article IV Staff Report), international reserves reached almost US\$41 billion. This covers just under 100 percent of the IMF reserves adequacy metric. Banks have been asked to retain part of the profits from this transaction to meet capital requirements stemming from the adoption of IFRS 9, planned for 2018.

**4. Banks sovereign exposures are high.** Public debt was equivalent to 138 percent of GDP at end-2015, and medium-term fiscal deficits are forecast at 9–10 percent of GDP. Banks are the key source of financing. As of June 2016, holdings of government debt securities account for about 28 percent of assets, while deposits and excess reserves at the BdL account for another 40 percent. Summing up the two, total exposure to the sovereign is more than six times Tier 1 capital, absorbing an increasing share of asset growth as the economy and deposit inflows have slowed (Appendix I, Figure 3). Sovereign spreads are tight compared to countries at similar ratings (despite rising about 100 bps since the financial engineering operation), partly due to BdL intervention in the Eurobond and T-bill markets. With ratings at B- (S&P and Fitch) and B2 (Moody’s), banks are exposed to a downgrade.

**5. The banks are deposit-funded, and secondary debt markets are not well developed.** Banks have minimal reliance on wholesale funding, while deposits have short maturities and are concentrated (Box 2). Data on the geographical origin of nonresident deposits is not available. Deposits have been stable historically, with growth recovering quickly from shocks. The system-wide loan-to-deposit ratio (all currencies) is low at 38 percent due to the large holdings of sovereign and BdL debt and subdued demand for credit. Secondary markets for this debt are illiquid (97 percent of banks’ securities portfolios are held to maturity). In order to benefit from the term premium and higher interest margins, banks have gradually invested in longer-term BdL instruments (LBP instruments are issued in tenors up to 30 years, versus up to 15 years for government debt in pounds), including nonmarketable term deposits (TD), increasing maturity mismatches, and they carry interest rate risk accordingly. Use of deposits at the BdL as surety for a loan from the BdL, or use of government and BdL securities as collateral for repo operations could underpin individual banks’ liquidity positions in Lebanese pounds. A widespread 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).

**6. The BdL plays a critical role in sustaining confidence, although, without sustained fiscal adjustment, there are limits to these policies.** The BdL maintains interest rates steady and low through buying government debt (both local and foreign currency), which is not absorbed by the banks. In parallel, the BdL issues long maturity certificates of deposit (CDs) and TDs, incurring a carry cost. The BdL maintains the exchange rate peg through intervention and holds high international reserves by accumulating deposits from the banks, incurring further carry costs in the process. By reducing reserve requirements and supporting lending to certain sectors, the BdL is loosening monetary conditions and providing countercyclical economic stimulus, particularly to the real estate sector. The BdL also provides financial assistance to ensure that weak banks can be absorbed by stronger ones while protecting deposits. These policies have so far been successful in

managing systemic risks, but they have limits. Carry costs, intervention in foreign exchange and debt markets and stimulus measures have an impact on the BdL's balance sheet and imply the creation of new reserve money. Without fiscal adjustment and a reduction in the financing needs of the economy, the BdL's ability to function as "policymaker of last resort"—and, in doing so, expanding its balance sheet, maintaining interest rates, reserves, and the peg, and actively managing the economy—will become increasingly stretched.

**7. Bank lending to the Lebanese private sector accounts for only a quarter of banks' assets, but is equal to 94 percent of GDP in 2015, which is high for a middle-income country.**

After growing at double digit rates during 2008–13, credit growth slowed to 7.3 percent in 2015, and the credit-to-GDP ratio is close to its long-run trend, suggesting that risks from this source are currently relatively limited. Real-estate-related sectors (housing loans, and loans to construction and real estate services firms) accounted for 37 percent of loans as of June 2016, followed by lending to trade and services companies (33 percent). About 72 percent of loans are dollar-denominated. While lending growth in dollars has slowed, lending in Lebanese pounds has been sustained by BdL policies incentivizing lending, including through interest subsidies for housing loans, among others.

**8. Nonperforming loans (NPLs) rose to 10.4 percent in June 2016, and the slowing real estate sector poses risks to banks.**

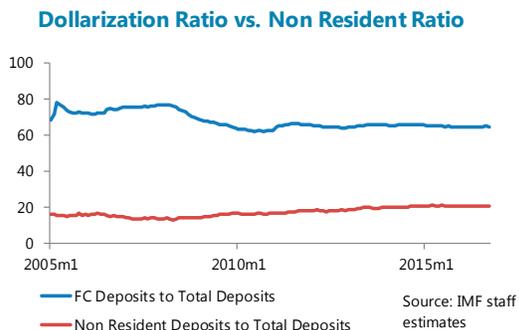
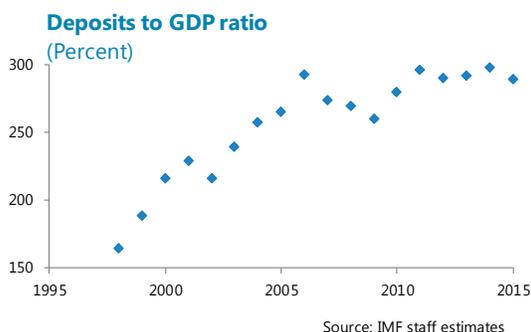
About 90 percent of the banking sector's loan portfolio is exposed to real estate, directly via housing loans and lending to real estate developers, and indirectly through collateral. After strong growth through 2011, the sector has entered a period of stagnation, with construction activity down and survey reports showing moderate price falls for high-end apartments and commercial real estate. Reported NPL ratios for housing loans are low at 1.6 percent, due in part to lending rate subsidies provided by the BdL's economic stimulus program. However, loans to real estate developers show signs of more distress (driven by increasing stocks of unsold real estate and price declines in high-end apartments). While NPLs are well provisioned overall (loan-loss reserves covered 86 percent in June 2016), tighter loan classification and provisioning rules with respect to restructured loans, in line with best practice, could raise reported NPLs and lower coverage ratios. Nonetheless, prudent loan-to-value (LTV) ratios (housing and car loans, and commercial real estate) and debt-to-income requirements (households) and restrictions on overdraft facilities (firms) limit the scope for excessive private indebtedness. Average household debt-to-income ratios have been stable at around 45 percent.

**9. Money laundering and terrorist financing (ML/TF) risks represent a challenge.**

Proceeds of crime including corruption expose the banking sector to potential misuse. Several Lebanese individuals, organizations, and financial institutions (FI) are subject to measures by foreign governments due to ML/TF concerns, and some foreign banks have severed business relationships with Lebanese institutions. The authorities and banks emphasize their awareness of the need to maintain confidence in the strength and integrity of the banking system. Significant progress has been made since the last full assessment of Lebanon's AML/CFT framework in 2009, for example, through legislative steps taken in November 2015. Some gaps remain, e.g., in the coverage of ML/TF offenses and scope for some preventive measures.

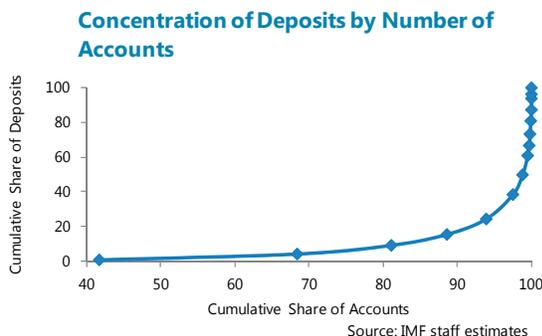
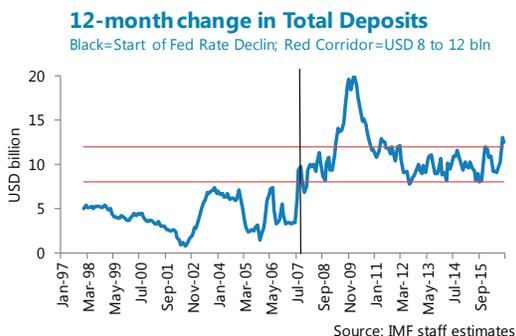
### Box 2. Deposit Growth

**Deposits at Lebanese banks equal about 280 percent of GDP (about US\$150 billion) and are highly dollarized.** Total deposits relative to GDP grew at a steady pace since the mid-1990s, but this growth has slowed since 2011. A large and steadily rising share of deposits are held by nonresidents, while official statistics puts the share at about 25 percent in 2015; this figure may be an underestimate, as Lebanese living abroad for a period of less than one year are classified as residents. Deposit dollarization has been roughly steady at 60 percent since 2011, declining from 70 percent in prior years.



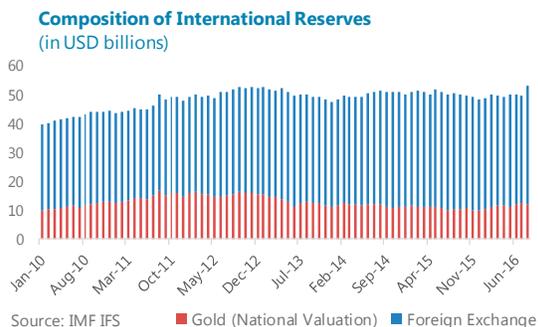
**Deposit growth has slowed in absolute terms since 2011.** Deposits have risen by US\$8–12 billion annually since 2011, with a modest downward trend since 2015. After peaking at a 12-month increase of US\$11.8 billion in January 2010, much of the decline in the growth of total deposits has been in foreign currency (FC) denominated deposits. Since 2006, the annual change in LBP deposits has been between US\$0–5 billion, with the exception of the period 2008 to 2010, during which there were very large increases, peaking at US\$11.9 billion in January 2010.

**Deposit growth may decline further.** Deposit rose by US\$5 billion up to August 2016, equivalent to about 5 percent growth on an annualized basis. Expectations of rising Fed Funds rates, the elevated risk environment in the region, and concerns about potentially tighter AML/CFT controls raise opportunity costs for depositors. Weak oil prices and slowing Gulf economies may also impact flows by reducing earnings of Lebanese living overseas and other investment from the region. Significant concentration in the deposit stock—a back-of-the-envelope calculation suggests that about 1 percent of all deposit accounts hold about half of total deposits in the system—exacerbates the system’s vulnerability toward large depositor withdrawals.

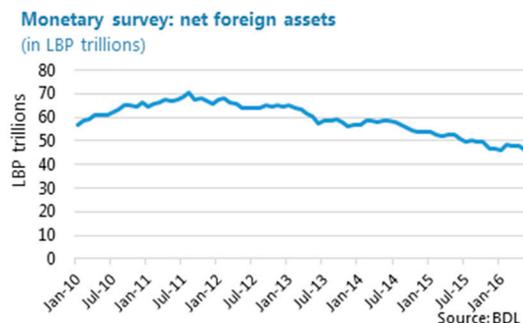


**Figure 2. Lebanon: Foreign Assets and the Banque du Liban's Balance Sheet**

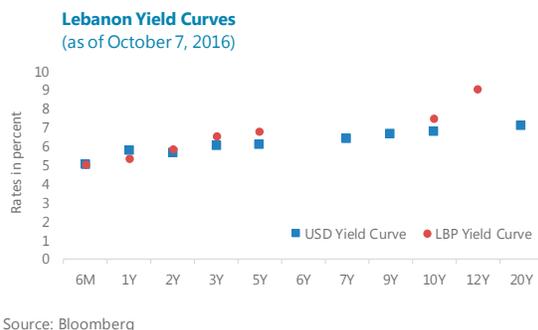
*The recent BdL financial engineering operation has helped buttress gross international reserves...*



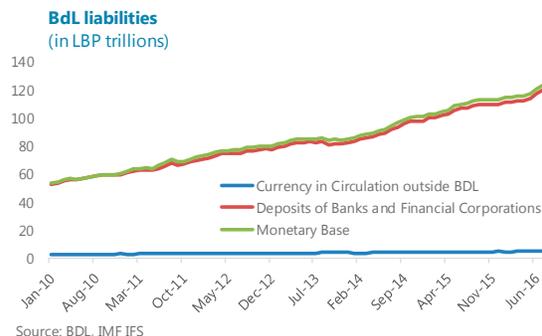
*...though total foreign assets of the financial system have fallen in recent years.*



*BdL's stabilizing role as an intermediary generates negative carry...*



*...and reserve money has increased as banks' holdings of BdL deposits have risen.*



<b>Table 2. Lebanon: Risk Assessment Matrix</b>		
<b>Source of risk</b>	<b>Likelihood</b>	<b>Impact on financial stability</b>
<p><b>Protracted period of slower growth</b></p> <ul style="list-style-type: none"> <li>Intensification of the Syrian crisis leads to continuing refugee flows and political tensions.</li> <li>Protracted political tensions discourage investment and stall structural reforms.</li> </ul>	<b>High</b>	<p style="text-align: center;"><b>High</b></p> <ul style="list-style-type: none"> <li>Asset quality and bank profitability deteriorate through credit losses and provisioning needs.</li> <li>Fiscal pressures could raise debt sustainability and sovereign credit quality concerns.</li> </ul>
<p><b>Surge in financial market volatility</b></p> <ul style="list-style-type: none"> <li>Financial market volatility driven by geopolitical tensions, a reevaluation of emerging market fundamentals or revised market expectations about the exit from unconventional monetary policies.</li> </ul>	<b>High</b>	<p style="text-align: center;"><b>Medium</b></p> <ul style="list-style-type: none"> <li>Lebanon has historically been able to attract funding at stable, affordable rates. An event that reverses this trend would challenge banks' capacity to continue to attract foreign deposits and finance the economy at sustainable rates.</li> </ul>
<p><b>Real estate price collapse 1/</b></p> <ul style="list-style-type: none"> <li>Correction of possible real estate price overvaluation.</li> </ul>	<b>Medium</b>	<p style="text-align: center;"><b>High</b></p> <ul style="list-style-type: none"> <li>An increase in expected credit losses and declining collateral values leading to higher provisioning needs.</li> <li>Decline in activity from (i) the construction sector; and (ii) consumption due to wealth effects.</li> </ul>
<p><b>Reassessment of Lebanon risk</b></p> <ul style="list-style-type: none"> <li>A sovereign ratings downgrade.</li> <li>A reduction in foreign deposit inflows stemming from reduced appetite for exposure to Lebanese banks.</li> </ul>	<b>Medium</b>	<p style="text-align: center;"><b>High</b></p> <ul style="list-style-type: none"> <li>Increases in sovereign yields, borrowing costs for banks and lending rates.</li> <li>Increase in risk weights on foreign currency denominated debt raises regulatory capital requirements.</li> <li>Pressures on sovereign and bank financing and the exchange rate peg.</li> </ul>
<p><b>Fiscal deterioration</b></p> <ul style="list-style-type: none"> <li>Political tensions delay fiscal adjustment.</li> <li>Efforts to address increased social tensions lead to additional current spending, weaker revenue collection, or new tax cuts.</li> </ul>	<b>Medium</b>	<p style="text-align: center;"><b>Medium</b></p> <ul style="list-style-type: none"> <li>Intensification of bank-sovereign links.</li> <li>Crowding out of private sector lending.</li> <li>Financing pressures leading to interest rate rises or erosion of international reserves.</li> </ul>
1/ A fall in real estate prices of -23.5 percent over two years.		

## B. Financial System Resilience

**10. The banking sector’s resilience to shocks was assessed through stress tests and sensitivity analyses conducted by the FSAP team and the BdL.** Top-down solvency stress tests conducted by the authorities and the FSAP team covered 43 banking groups, accounting for almost 100 percent of system assets, while a parallel bottom-up exercise using the same assumptions was undertaken by six large banking groups and covered 65 percent of system assets. Long- and short-term liquidity stress tests used data for 69 and 32 domestically incorporated, unconsolidated, banks covering almost 100 percent and 95 percent system assets, respectively. Bank-by-bank data from June 2015 was used. The tests focused on domestically driven risks, including from sovereign exposures, credit risks in the loan book, interest rate risk, and funding risks.

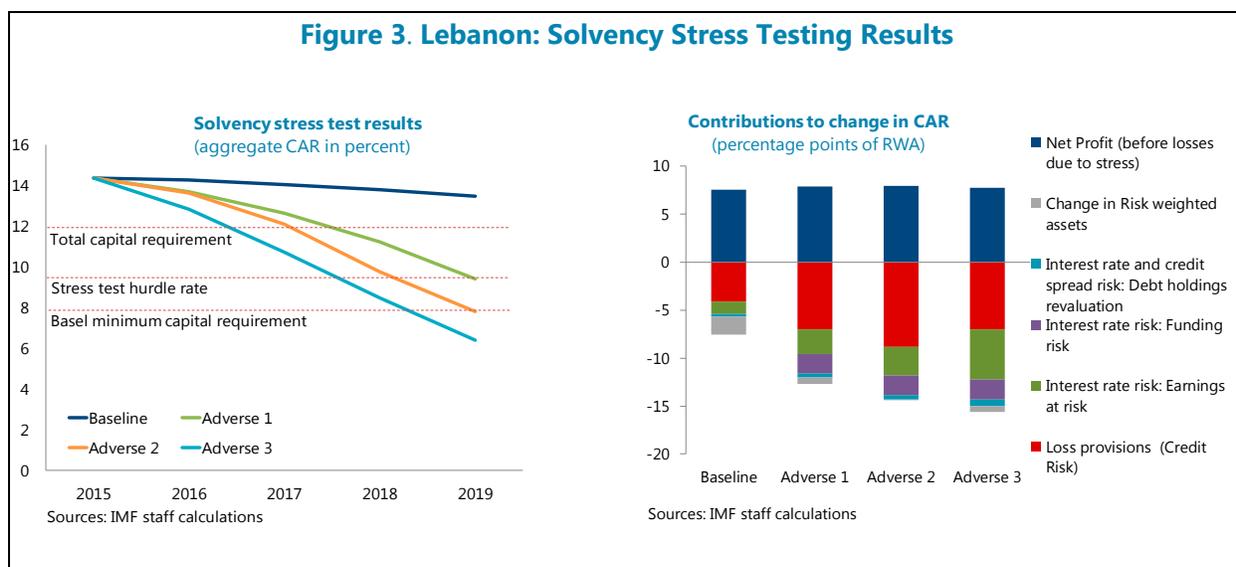
### Solvency stress test

**11. Solvency tests were designed to estimate the impact of severe shocks on the banks.** The baseline scenario reflects IMF projections as of March 2016, with a weak economic environment, GDP growth of 1 percent in 2016 that increases modestly to 3 percent in 2019. No fiscal or macroeconomic policy changes are assumed. Adverse scenario 1 assumes that the Syrian war and domestic political difficulties further undermine investment and confidence, with growth falling further and staying low—a severe scenario by historical standards considering the already depressed baseline. Adverse scenario 2 compounds scenario 1 with a fall in real estate prices of -23.5 percent over two years (comparable to busts in other countries), leading to an additional impact on growth from lower construction activity and consumption, and lower values of loan collateral. Adverse scenario 3 starts from the baseline and assumes a stronger than expected rise in USD interest rates, and an increase in risk aversion among global emerging market investors, leading to a rise in the country risk spread over one year across the yield curve (Appendices III and IV).

**12. The results show capital needs emerging under the adverse scenarios.** Consistent with Basel standards, the stress tests assume the banks use their capital conservation buffers, reducing the capital adequacy ratio (CAR) hurdle rate from 12 percent to 9.5 percent (which includes the additional capital buffer of 1.5 percent against Lebanon-specific risk, prescribed by the BdL). Under the baseline scenario, bank resilience is confirmed, with an aggregate CAR of 13.8 percent and modest capital needs of 0.9 percent of 2015 GDP. Capital needs would increase if the more stressed conditions of the adverse scenarios materialized. Under the most severe scenario, the aggregate CAR may decline to 7.3 percent at the end of the forecast horizon, with capital needs reaching 9.4 percent of GDP (7.4 percent if a hurdle rate of 8 percent would be applied).

**13. Capital needs in the adverse scenarios are driven by credit and interest rate risks, as well as real estate prices.** Lower growth in the scenarios leads to loan losses that would require additional provisions, with the real estate price shock in adverse scenario 2 having additional effects on growth through construction sector output and consumption, as well as lowering collateral values. Maturity mismatches stemming from large holdings of long-term securities imply repricing effects are material in adverse scenario 3. The adverse scenarios assume that banks would face some

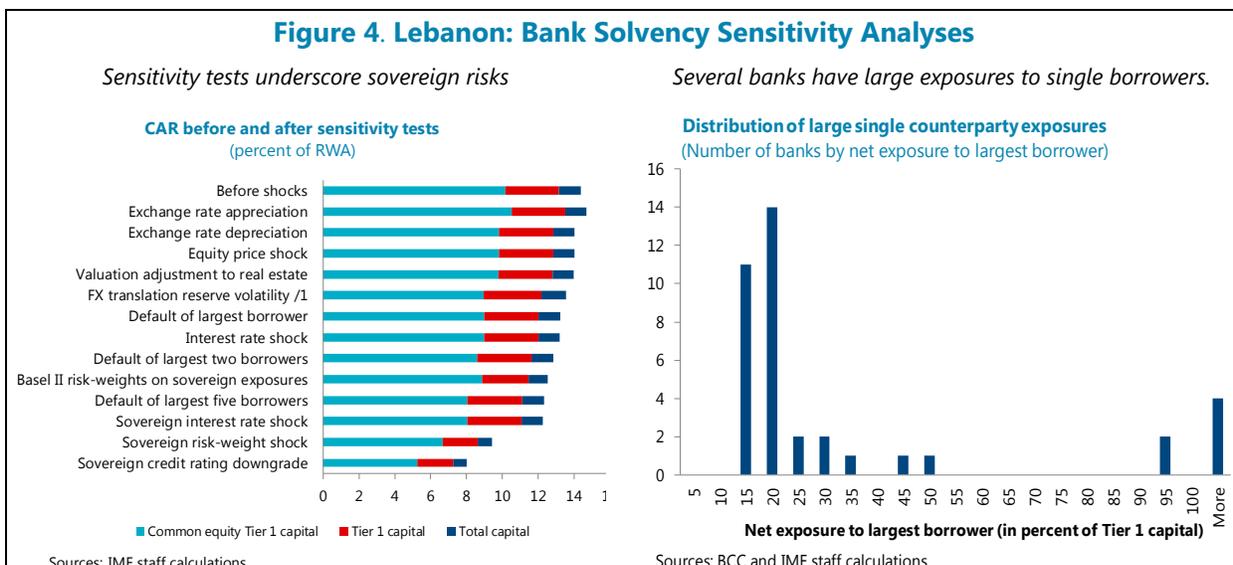
funding stress, increasing deposit interest rates by 50 basis points as the regional macroeconomic environment deteriorates and depositor confidence decreases; this shock contributes 2 percentage points to the decline in the banking system average CAR in the adverse scenarios.



## Sensitivity analyses of bank solvency

**14. Single-factor sensitivity tests show sovereign and credit concentration risks are potential vulnerabilities.** A sovereign downgrade, leading to risk-weight adjustments, would have a material impact on banks' capital. Risk weights are currently set at zero for government and BdL debt in local currency, and at 100 percent and 50 percent, respectively, for foreign currency denominated government and BdL debts. Following the Basel II standardized approach, a change of the risk weights for foreign currency denominated BdL CDs to 100 percent would lower aggregate CAR to 12.5 percent, while a ratings downgrade, leading to an upward shift in risk weights on foreign currency government and BdL debt to 150 percent, could lower the aggregate CAR from 14.4 percent to 8 percent. Analysis of credit concentration risks shows that a default of the largest borrower in all banks would lead to a decline of system-wide CAR by 110 basis points to 13.3 percent; and a default of the five largest borrowers of each bank to 12.4 percent. Sensitivity tests capturing the impact of changes in equity prices and real estate owned directly by the banks indicate limited vulnerabilities.

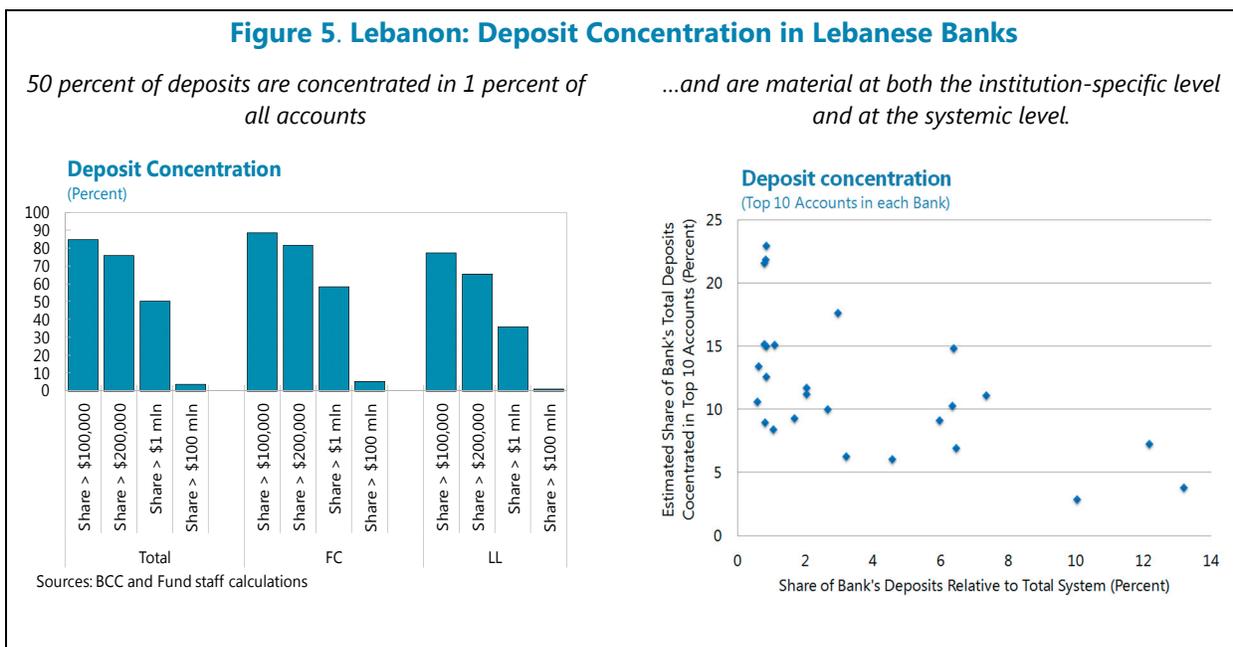
**Figure 4. Lebanon: Bank Solvency Sensitivity Analyses**



**Bank liquidity**

**15. Bank deposits are highly concentrated and have a short maturity structure.** It is estimated that, as of end-2015, the largest 1 percent of deposit accounts hold 50 percent of total deposits, while the largest 0.1 percent of accounts hold 20 percent of total deposits. Alternatively, about 85 percent of total deposits are in accounts with balances greater than US\$100,000 and 50 percent in accounts with balances greater than US\$1 million (Figure 5 below). About 60 percent of total deposits by value are either demand deposits or mature in less than 30 days. Large accounts have historically been stable and deposit flows have recovered quickly from shocks in the past.

**Figure 5. Lebanon: Deposit Concentration in Lebanese Banks**



**16. Short-term and long-term liquidity stress tests were conducted by the FSAP team and the authorities using haircuts and run-off rates informed by Basel III standards.** Measures of the Basel III Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR) were approximated and used to assess banks' vulnerability to outflows of deposits. For the purposes of the stress test, run-off rates of 5 percent were assumed for deposits with balances under US\$100,000, while run-off rates of 10, 20, and 30 percent were assumed under different scenarios for larger accounts that were classified as less stable deposits (these assumptions stem from guidance of the Basel Committee on Banking Supervision (BCBS) on the LCR and NSFR). Historically, there have not been sustained deposit outflows of this magnitude in Lebanon.

**17. Exposures to the sovereign and the BdL lack liquidity in private markets.** To qualify as high-quality liquid assets (HQLA)—the assets that would be drawn upon to meet liquidity needs for computation of the LCR and the NSFR—Basel III requires that the assets be both eligible as collateral for central bank refinancing and readily convertible into cash in private markets during stressed periods. The securities and investments of the banks are predominantly government and BdL debt that do not meet the latter condition. Therefore, haircuts of 20 percent and 50 percent were applied to the value of these instruments under different scenarios in the stress tests as per BCBS guidance, while non-marketable TDs at the BdL were excluded from the HQLA. It should be noted, however, that the BdL considers that TDs can be discounted or drawn down in times of stress, and that discounting CDs has proven an effective liquidity measure in the past.

**18. The stress tests indicate that widespread foreign currency liquidity pressures could generate challenges.** The NSFR-based test suggests that the banking system's liquidity risk profile is resilient over longer horizons, at 107 percent for all currencies (102 percent in local currency and 108 percent in foreign currency (based on a 20 percent discount to banks' available stable funding)). The LCR for all currencies is estimated to stand at 163 percent for the system, consistent with banks also having a high degree of short-term liquidity. Most banks, however, do not meet the LCR threshold of 100 percent in foreign currency, with the exclusion of long-term TDs at the BdL from the HQLA being the main factor driving the shortfall. In practice, the BdL could make TDs available to draw for banks facing liquidity pressures. While this would buttress bank liquidity, if such pressures were widespread, it would also put pressure on international reserves.

### **Cross-country and interbank spillover risks**

**19. Cross-country exposures through foreign subsidiaries and branches are important for several large banks.** These exposures are concentrated regionally and in some advanced economy trade or financial partners of Lebanon. The majority of asset exposures are interbank claims, client loans and financial instruments, and the main counterparty countries are Egypt, France, Jordan, and Turkey. Exposures are closely monitored by the BCC and subject to regulatory limits. On the liability side, overseas subsidiaries are mainly financed by client deposits. The largest subsidiary exposures account for 20 percent of consolidated total assets. At mid-June 2015, four of the subsidiaries had CARs below 12 percent.

**20. Some banks have large interbank exposures in relation to regulatory capital.** Only 1.7 percent of total system assets are financed by interbank liabilities, reflecting limited activity in the interbank market. Aggregate interbank asset-side exposure nonetheless amounts to 40 percent of regulatory capital. The largest interbank exposures in the system, exceeding 50 percent of regulatory capital are concentrated in small- and medium-sized banks.

## SUPERVISORY OVERSIGHT AND RISK MITIGATION

**21. Several agencies have financial sector oversight responsibilities, with the BdL and its governor playing a key role in the institutional framework underpinning financial stability.**

The BdL's mandate covers (i) maintaining economic stability; (ii) safeguarding the structure of, and regulating and supervising the banking system (later devolved to the BCC); and (iii) developing the monetary and financial market.

- **The Banking Control Commission (BCC)** supervises banks and banking groups, and some nonbank financial institutions. It is an administratively independent body of the BdL, is funded by the BdL, and works in close coordination with the governor (who has the prerogative to ask for reports prepared by the BCC). The BCC can request all information deemed necessary for the discharge of its functions from the BdL. The BCC's Board of five is chaired by a specialist in banking or finance and includes a member each proposed by the Association of Banks and the National Deposit Guarantee Institution (NDGI).
- **The Higher Banking Commission (HBC)** is a quasi-judicial body forming part of the BdL. The HBC can impose administrative sanctions (ranging from a warning to the revocation of a bank's license), should it determine—based on reports presented by the BCC to the governor—that a bank has violated provisions of the Code of Money and Credit, regulations or measures prescribed by the BdL, or has submitted incomplete or inaccurate information to the BCC. The HBC's decisions are not subject to appeal. It is chaired by the governor and consists of a vice-governor selected by the Central Council of the BdL, a director general of the Ministry of Finance (MoF), a high-ranking judge, the member of the BCC proposed by the Association of Banks, and the chairman of the NDGI.
- **The Capital Markets Authority (CMA)**, established in 2011, is responsible for the supervision of individuals and institutions that deal with securities. It is managed by a Board comprising four *ex officio* members (i.e., the governor of the BdL, the chairman of the BCC, the MoF DG, and the MoE DG) and three full-time experts.
- **The Insurance Control Commission (ICC)** is a regulatory body in the Ministry of Economy and Trade that monitors and regulates the insurance sector, with the aim to protect the interests of policy holders and to promote the maintenance of an efficient, safe, and stable insurance sector.

- **The Special Investigation Committee (SIC)** was established in 2001 as an independent legal entity with judicial status at the BdL. The SIC is Lebanon's Financial Intelligence Unit and supervisory agency for AML/CFT. The SIC is chaired by the governor and comprises the chairman of the BCC, the judge appointed to the HBC, and a professional appointed by the Council of Ministers.
- **The NDGI** operates the Lebanese deposit insurance scheme. Founded in 1967, it is co-owned by the banking industry and the government, with the former having a predominant role via the appointment of four out of the its seven directors (including the chairman and deputy chairman).

## A. Microprudential Oversight

### Banking

**22. The framework for banking supervision is generally in alignment with international standards.** The financial system has survived repeated domestic shocks, regional turmoil, and the global financial crisis, in part due to conservative regulatory practices and assertive supervision. An assessment of the Basel Core Principles of Effective Supervision (BCP), undertaken as part of the FSAP, found that supervisory and regulatory responsibilities are clearly defined and the BCC's mission is adequately anchored in primary legislation. The BCC employs high-caliber staff, onsite inspections are comprehensive, and the onsite and offsite teams coordinate and communicate on a continuous basis. Supervisory powers are adequate, with the BCC taking steps to improve the timeliness of corrective action. The BCP found some areas for improvement (see Appendix IV, Report on the Observance of Standards and Codes on the BCP).

- **Operational independence and accountability.** To reduce the scope for possible industry and political influence over supervisory decisions, the BCC staff should be provided with legal protection against lawsuits for actions taken or omissions made while discharging their duties in good faith. The banking association and Ministry of Finance (in the case of the HBC) should not have powers to nominate a member to the Boards of the BCC and HBC. The reasons for removal from office of either the chairman or any executive director of the BCC should be publicly disclosed, and the BCC could publish annual objectives and prepare an annual report on the delivery of its mandate.
- **Access to information.** Banking secrecy precludes the BCC (though not the SIC with respect to AML/CFT) from obtaining information on individual depositors, impeding some analyses (for example of the distribution of deposits from specific high net worth individuals across the banking system), and is not in line with international best practices.
- **Supervisory resources.** Increased complexity of financial services, more demanding international standards for supervisory effectiveness, and a broadening of the BCC's responsibilities to include some nonbank financial institutions and some aspects of consumer

protection will test the BCC's capacity. In this context, the authorities should review the adequacy of supervisory resources as a first step toward further capacity building.

- **Regulatory framework.** Primary legislation governing banking has not been updated for many years, leading to an extensive and complex set of regulations issued by the BCC and the BdL. In the medium term, primary legislation could be comprehensively updated, and regulation subsequently streamlined.

**23. The ongoing development of integrated risk profiles and stronger risk orientation in capital planning are significant steps forward.** The development of an integrated risk matrix combining the indicators for capital adequacy, asset quality, market risks, profitability, and funding and liquidity with qualitative findings on a bank's business model, internal controls, organization, and management strength, will complement strong onsite inspections and offsite analysis.

**24. Supervisory review of banks' internal capital plans is the next step in deepening the BCC's assessment of banks' vulnerabilities.** Capital requirements exceed minimum requirements set under Basel III (and the minimum is in the process of being raised further, from 12 percent to 15 percent of risk-weighted assets). Regulatory standards for capital adequacy are generally appropriate—with the 50 percent risk weight on foreign-currency-denominated securities, issued by the BdL, being the only notable deviation from international standards. Nonetheless, capital buffers appear modest, considering the sovereign and interest rate risks carried by the banks, in addition to the impact of slow growth on asset quality. Annual reviews of banks' internal capital plans—based on a framework that considers the sustainability of their business models, the quality of their internal governance and risk control arrangements, as well as financial risk factors, will shed greater light on the resilience of individual banks. Adding forward-looking analyses, for example, through comprehensive multi-factor stress tests, would complement these efforts.

**25. Recovery planning is at an initial stage and should be advanced.** At present, the BdL relies on the review of banks' capital planning and business plans to gauge banks' resilience to shocks. While this approach provides insight into bank vulnerabilities, it does not specify concrete, credible actions and timelines to be implemented by the bank in case of a shock weakening its financial condition. Recovery plans developed by the bank, and approved by its Board of Directors as well as the authorities, would ensure bank ownership and foster accountability for timely implementation of recovery actions. Plans should be updated regularly, or when market or the bank's own conditions require it, with supervisors closely reviewing and providing feedback to senior management on their adequacy. Supervisory requirements for recovery planning should be issued building on guidance prepared by international standard setters.

**26. The current framework governing problem assets, provisions, and reserves requires strengthening.** The BCC has limited information on renewed, refinanced, and restructured loans, and classification rules fall short of international good practice in some areas (Box 3). Moreover, rules for collateral valuation should be tightened, as banks are not subject to mandatory standards for appraisals—although, in practice, banks typically use court-certified appraisers on the BCC's roster—and oversight over the appraiser profession is weak. Going forward, intrusive review of asset

quality remains essential, also in view of banks' significant real estate exposures. Finally, the authorities could consider introducing regulatory measures that would limit lending in foreign currency to borrowers without foreign currency earnings (e.g., by increasing risk weights), with the aim to mitigate currency-induced credit risks.

### Box 3. Treatment of Restructured Loans

**Measures introduced by the BdL in October 2015 can help to resolve distressed credits.** Basic Circular (BC) 135 provides guidelines for out-of-court restructuring, which broadly reflect the International Association of Restructuring, Insolvency & Bankruptcy Professionals (INSOL) Principles for Multi-Creditor Workouts. Among others, the Basic Circular envisages coordination among creditors, with the bank that holds the largest portion of the outstanding debt (the "Manager") being responsible for the development of a preliminary plan (including a new repayment schedule) for dealing with the debtor's financial difficulties. The BC provides for a stand-still period of three months (renewable by another three months), with approval of the restructuring plan requiring approval of at least two-thirds of the banks and financial institutions, representing at least 60 percent of the total outstanding debt, with the caveat that the restructuring is not binding on non-consenting creditors.

**However, certain incentives—introduced to encourage timely restructuring of distressed credits—are not fully aligned with international best practices.**

- **Classification.** BC 135 does not prescribe that restructured loans are classified as "substandard" (or at least no better than their category prior to restructuring) and that reclassification can only be considered after a reasonable "probation period" (e.g., 12 months) during which timely payments are made by the borrower—which is generally considered good practice.
- **Prior approval.** Requiring that banks seek prior approval from the BCC for reclassifications of restructured loans, as per BC 135, can help ensure the scope to reclassify is used appropriately. However, it also blurs banks' accountability for maintaining conservative classifications standards and risks ambiguity as approval criteria are not spelled out.
- **Assets received in lieu of repayment.** By law, banks are required to sell real estate properties acquired as part of the settlement of NPLs within two years, and otherwise establish a reserve over a five-year period (20 percent per year) for the full amount of the properties. This provides proper incentives to banks to divest such properties as soon as practicable and as is considered good practice. However, this period has been lengthened to 20 years for NPLs settled since October 2015. A return to past practices is advisable.

**Supervisory oversight remains essential to prevent evergreening and underreporting of NPLs.** The introduction of more granular reporting requirements in February 2016—providing the BCC with more information on restructuring modalities and the post-restructuring performance of restructured debts—is a welcome initiative. Enhanced supervisory scrutiny of banks' submissions and restructuring practices more broadly can help to deter "cosmetic" restructurings.

**27. Interagency and cross-border cooperation need to be enhanced.** Interagency coordination is primarily achieved through the governor's office and cross-membership in regulatory bodies. A small number of people have multiple roles in the oversight architecture, with the governor at the nodal point, fulfilling multiple roles and holding wide powers. This "governor-centric" model ensures information exchange and enables effective coordination. However, further development of institutional coordination arrangements at the technical as well as senior managerial levels would reduce the risk that decisions may be delayed, or would have to be taken

with inadequate information, in the absence of key staff. Moreover, the expansion of Lebanese banks in the region has made strengthening cross-border coordination an urgent task. The BCC, as home supervisor, has yet to finalize the establishment of two supervisory colleges.

## Capital markets

### 28. **Capital markets make a marginal contribution to financing the Lebanese economy.**

Lebanon has only 10 listed companies (with a market capitalization of about 24 percent of GDP, versus 40 percent for a peer group of middle-income countries), while total assets under the management of mutual funds amount to US\$1.7 billion (3.3 percent of GDP). The size of private bond markets is also insignificant.

29. **Over the past five years, the CMA has built capacity and is now well established as an independent regulatory authority.** The CMA's responsibilities range from product approval to supervision, investigation, and audits. It has prepared regulations in line with international best practices covering licensing and registration, market conduct, business conduct, securities offerings, listing rules, and collective investment schemes, and has put in place a supervisory program focused initially on the authorization of securities and products and inspections of securities intermediaries.

30. **Additional steps should be taken to ensure a robust regulatory and institutional framework.** Establishing a Sanctioning Committee with strong investigative powers and a Capital Markets Court are a priority, and adequate legal protection should be provided to the CMA and its staff. Full implementation of the new regulations and enhancements to the CMA's supervisory program are important as markets expand, including (i) monitoring of market participants; (ii) applying a risk-based approach to the supervision of intermediaries; and (iii) automating market surveillance. More formal arrangements for coordination with the BCC and the ICC should be developed to minimize overlaps, avoid gaps, and ensure a level playing field.

31. **A capital markets development plan would help to achieve longer-term objectives.** This plan should provide a comprehensive analysis of the key challenges affecting both supply and demand for securities and outline measures to help realize potential in these markets. The CMA's Board will have to set the right strategic direction to ensure investor protection and financial stability, without creating undue barriers to entry or costs to innovation.

## Insurance

32. **The insurance sector faces structural challenges to its sound development.** Total assets are small compared to the banking sector (US\$4.3 billion at end-2014, or 8.6 percent of GDP). There appears to be scope for market expansion and deepening, which would help corporates and households better manage risk exposures, support investment, contribute to financial inclusion, and expand contractual savings that could contribute to capital market development. Recent market growth has been driven by medical insurance, life (protection) and motor insurance (in tandem with growth in mortgage and car-loan markets). There is a large number of unspecialized companies, including many small, family owned and managed companies, resulting in intense price competition.

Many of these firms have made limited investments in risk management and pricing techniques, and the ICC considers some do not have adequate professional capacity, resulting in operational risks and mispricing.

**33. The ICC is instrumental in maintaining the industry in a generally sound condition.** The ICC has developed supervisory and analytical tools (e.g., modeling earthquake insurance), strengthened disclosure requirements, and developed new guidelines on product development. Guidelines raising the level of technical provisions incentivize the professionalization, sale, or merger of smaller players. Consolidation would help create larger pools of resources to support growth, with adequate risk management, and could contribute to attracting international groups.

**34. Modernization of the insurance law is a precondition for strengthening the ICC's effectiveness and supporting sound growth of the sector.** The reporting line to the Ministry of Economy and Trade and decision making at the ministerial level hamper the ICC's independence. The practice of having decrees or license-related decisions reviewed by a National Insurance Board (NIB), comprised of five representatives of the insurance industry, exposes the ICC to industry pressure. Legal changes should secure operational independence for the ICC, replace the NIB with a consultation process with industry associations and other stakeholders, update the scope of the ICC's activities, and better align prudential requirements with international benchmarks.

### Financial market infrastructure

**35. The National Payment System (NPS) has been improved over recent years.** The core NPS infrastructure is composed of a large value payments system (BdL-RTGS), a low value bulk retail payments system (BdL-CLEAR), both hosted by the BdL, and a custodian and clearing center for financial instruments (Midclear, for 99 percent owned by the BdL). This robust infrastructure has allowed a steady development of payment and settlement system activities.

**36. The legal and regulatory framework is outdated, and governance of Midclear and supervision could be strengthened.** Legal measures to adequately protect critical payment system operations like finality, netting, collateral rights, and validity of electronic instructions have been pending in parliament for several years. The creation of an Audit Committee and the establishment of documented procedures for measuring, monitoring, and mitigating risks would strengthen the governance of Midclear, while a system of dual supervision (by the BdL and the CMA) would allow for more effective oversight. Additional resources and training for the BdL's Payment System Department is needed to support effective onsite inspections and offsite monitoring.

## B. Financial Integrity

**37. Significant progress was made since the 2009 assessment of Lebanon's AML/CFT framework.** The authorities and the banks emphasize their awareness of the need to maintain confidence in the integrity of the banking system in order to preserve macro financial stability. A new, more comprehensive AML/CFT law was adopted in 2015, AML/CFT supervision of the banking sector is increasingly risk-based, and some steps were taken to implement TF-related targeted

financial sanctions (TFS). The authorities conducted a National Risk Assessment (NRA) in 2013/2014 of the risks of money laundering (ML) and TF. The new AML/CFT law also enables the Special Investigation Commission (SIC) to lift the banking secrecy for AML/CFT purposes.

**38. Some gaps nevertheless remain.** While some mitigating actions were taken in response to the NRA, it is not clear that the assessment included all relevant risks (such as corruption). Also, the NRA appears to have had limited impact on the SIC's approach for risk-based supervision, as the allocation of supervisory resources across financial institutions does not appear to be fully commensurate with risks identified (e.g., for some nonbank money remitters). In addition, the legal framework has some residual gaps, e.g., regarding the criminalization of ML and TF, and the AML/CFT law is not yet enforceable in respect of lawyers (as the required implementing regulations have not been issued). Banking secrecy requirements could be an impediment for frontline and compliance staff of banks to conduct customer-due-diligence measures with respect to holders of numbered accounts and safe deposits. Furthermore, in practice, banking secrecy appears to have been lifted for the purposes of information exchange with other competent authorities in relatively few cases.

**39. Measures should be taken to further enhance the AML/CFT framework and its effectiveness.** A more comprehensive assessment of all threats, vulnerabilities, and consequences associated with ML and TF should be undertaken, its results shared with all stakeholders (including private sector participants), and appropriate mitigating actions taken. The SIC should continue its efforts to strengthen its risk-based supervisory approach, ensuring that the allocation of resources is fully commensurate with actual ML and TF risks. The authorities should fully align the ML and TF offenses with international standards; define beneficial ownership in line with the FATF glossary; enhance the framework for TF-related targeted financial sanctions; ensure that regulations extending enforceability of the AML/CFT law to lawyers are issued; and ensure that banking secrecy is not an obstacle to the sound and effective implementation of the AML/CFT framework.

**40. Some foreign banks have curtailed the provision of financial services to Lebanese banks and remittance companies.** This development may, at least in part, reflect concerns about elevated ML and TF risks and/or perceived weaknesses in the AML/CFT regime. While the withdrawal of correspondent banking relationships does not appear significant in macroeconomic or financial stability terms, no data has been collected and a quantification of its impact in volumes and prices of transactions, or in driving higher risk transactions to less transparent channels, has not yet been undertaken. The authorities are encouraged to collect and analyze data on the extent of withdrawal of financial services and its impact on Lebanese banks and financial services users, including on financial inclusion, and to take appropriate mitigating action on the basis of their analysis.

## C. Macprudential Policy Framework

**41. The authorities have been proactive in adopting macroprudential measures to contain risks.** During the past years, the BdL tightened the maximum debt service-to-income ratio and loan-to-value requirements for retail and housing loans, and increased collective provisioning on

performing loans. While all of these measures had a micro- as well as macroprudential rationale, they have served to strengthen the financial system's overall resilience in the context of weak economic growth and the BdL economic stimulus program supporting housing loans and the real estate market.

**42. Responsibility for macroprudential policy and systemic risk monitoring is shared between the BdL and the BCC.** The BdL's Financial Stability Unit (FSU) has developed an early warning system and provides internal reports on the financial stability outlook for the governor, while the BCC has analyzed banks' susceptibility to interest rate risks and risks related to their foreign operations. Aspects of macro financial risk and possible policy responses are discussed in BdL committees covering related issues (such as the Open Market Committee), while the BCC considers macroeconomic risks for supervisory purposes. The Financial Stability Committee (FSC), which includes representatives of the two agencies and meets monthly, also has a coordinating role, but does not provide formal recommendations to the Governor or Central Council of the BdL.

**43. While the institutional framework has advantages, there is scope for improvement.** The Governor's coordinating role across the macroprudential, microprudential, and monetary policy objectives and the strong operational independence of the BdL and the BCC reduce the risk of inaction or failure to detect problems. A drawback is that there are few institutional mechanisms to bring outside viewpoints to bear or to challenge the prevailing views formed within the institutions. The links between systemic risk monitoring and policy determination could be made more comprehensive and formalized through an advisory committee on financial stability issues, which would provide recommendations to the governor and the Central Council. Such an approach could build on existing structures (for example, the FSC and the FSU), and reflect the following features.

- **Broad composition.** A group, comprised of representatives of all supervisory agencies and external members, would provide a comprehensive view of financial developments and offer more diverse views and expertise (external members should have knowledge of the financial sector, be independent—e.g., academics or retired financial professionals—and agree to confidentiality requirements as needed).
- **Formal procedures.** The committee could meet regularly on a predefined schedule, which could be announced, and have a secretariat (e.g., the FSU). The committee should discuss key developments and risks in the financial system and both macro- and microprudential policies.
- **Mandate.** The committee would not have decision-making power but provide recommendations to the governor or the Central Council after each meeting. Biannual (confidential) reports to the Central Council and other key principals could provide more detailed analysis of relevant trends and emerging risks.
- **Accountability.** To maximize effectiveness, clear communication of macroprudential policy decisions is needed. This includes explanation of objectives, the reasoning underpinning policy decisions, and assessment of their effectiveness. Publication of financial stability analysis and/or

summary reports of committee meetings could be considered, unless there are risks to financial stability in doing so.

**44. Timely identification and assessment of systemic risks may require additional efforts to close data and information gaps.** Gaps in data coverage exist with regard to household and corporate sector indebtedness, as well as real estate price data—although the BdL has recently initiated the development of a price index. To the extent that improvements to national accounts or complementary data will take time, the BdL could build aggregated data on corporate and household finances using information from the credit bureau. Surveys of senior loan officers can provide information on credit conditions, while property developers can provide insight into supply conditions in the real estate market. Over the medium term, the BdL’s FSU could build its own macro stress testing capacity, focused on the identification of systemic (rather than bank-specific) risks.

## FINANCIAL SECTOR SAFETY NET

**45. The framework for dealing with vulnerable banks has helped maintain financial stability.** High external and fiscal funding needs and dependence on inflows of nonresident deposits underscore the importance of maintaining confidence, and, in managing weak banks the authorities have ensured that depositors and other creditors were fully protected. In the current economic context, the FSAP mission focused on enhancements to the authorities’ approach that could increase efficiency without compromising financial stability objectives.

**46. The authorities have strong enforcement powers and could take a more structured approach in identifying and dealing with weak banks.** The BCC can require banks to remedy breaches, correct deficiencies in internal governance, control, audit or risk management, and address any risk that could affect the bank’s safety and soundness. If there is a failure to comply, the case is transferred to the HBC, which can impose remedial actions and whose decisions are not subject to review. While the authorities have a track record of intervening in weak banks, no uniform and clearly documented processes are in place to guide the authorities’ and ensure timely action, including with respect to resolution measures.

**47. Banks can be resolved through a number of different proceedings.** Merging weak banks with sound banks is the authorities’ preferred option. The HBC can also appoint a temporary manager with a full range of powers (including shareholder powers) to restructure, resolve, or wind down the bank. Other proceedings include putting a bank under an expedited court-based proceeding (“suspension of payments”) or under the supervision of a special bankruptcy court. These have not been used in recent practice, but they serve as a credible threat, particularly as they permit the temporary seizure of all assets of the bank’s directors, senior management, and auditors.

**48. Financial distress in small- and medium-sized banks has been handled through mergers.** The BdL has used mergers as a resolution tool, and has also assisted mergers of sound, small banks with larger institutions in order to encourage consolidation in the financial system. In both cases, BdL assistance for absorbing banks may be provided via subsidized loans to cover costs

borne by the acquiring institution. In addition, the legal framework allows for various forms of regulatory forbearance such as grace periods for complying with capital requirements. The merger law does not provide for the partial transfer of assets and liabilities. In practice, the BdL can impose losses on shareholders and sell distressed assets before a merger with shareholder agreement (which is achieved under the threat of liquidation).

**49. When circumstances permit, the authorities should develop resolution options leading to closures of failed firms while protecting depositors.** The financing needs of the economy and financial stability considerations currently support the approach of protecting creditors. While this approach has been effective in reducing financial stability risks from weak banks, forced or assisted mergers impede market discipline and do not allow for a segregation and liquidation of bad assets in a receivership, burdening the acquiring bank with recovery efforts. In the short term, the authorities could develop resolution strategies that shift the focus from protecting all institutions to protecting all creditors in the interest of financial stability. In the longer term, assuming reforms have lowered reliance on deposit inflows to finance macroeconomic imbalances, alternative resolution approaches that enable the removal of marginal banks from the banking system should be considered. The legal reforms necessary to achieve this aim should ensure that (i) insured deposits remain fully protected; (ii) losses are allocated to shareholders and, as needed, creditors (in accordance with the creditor hierarchy); and (iii) public support to failing banks is minimized.

**50. In due course, reforms are needed to better align the deposit insurance scheme with international good practices.** As the need to protect all creditors is eased and bank resolution options are revisited, an effective deposit insurance scheme will be needed. In the long term, the National Institute for the Guarantee of Deposits (NIGD) should be reformed and made an operationally independent public sector agency, governed by a Board composed of public sector representatives and nonbank private experts, and fully funded on an *ex ante* basis via industry premiums. Government contributions should be halted and coverage levels increased. Enabling the NIGD to provide financing to asset and liability transfers, up to the “least cost test” (i.e., the equivalent amount that would be made available in a straight payout of insured deposits) would support resolution, minimize disruption and delays faced by depositors and reduce resolution costs. If paid out, depositors should ideally recover their funds within seven business days.

**51. Emergency liquidity assistance is primarily provided through the BdL’s repo facility under flexible conditions.** Liquidity support would typically be made available for up to 21 days, denominated in either US dollars or Lebanese Pounds. To participate, banks need to be solvent and able to provide acceptable collateral (treasury bills or BdL CDs). If a bank requests liquidity too frequently, however, or is in weak financial condition, the BdL refers it to the BCC for review. In extreme cases, the BdL can ease collateral requirements. If monetary conditions were to deteriorate because of excessive emergency liquidity, the BdL also has a range of open market instruments to absorb market liquidity. While this system has been effective, the BdL should develop rules differentiating exceptional from ordinary (monetary policy) liquidity operations, and formalizing criteria for access to emergency liquidity facilities, including consideration to haircuts on non-standard collateral, if required, and terms and conditions for such lending.

**52. Crisis preparedness should be strengthened.** In a systemic crisis, coordinated policy development and prompt decisions are key. This calls for adequate preparation through a dedicated committee with high-level participation of senior officials from the BdL, supervisory agencies, and the MoF. In normal times, this committee's task is to analyze threats to financial stability, exchange information, and develop coordinated responses (including a communication policy) that could be taken if a crisis occurs. In times of crisis, the committee takes on the critical role of coordinating and implementing government policies.

**53. As part of their crisis preparation efforts, the authorities should review the tools available to cope with financial distress in systemic institutions.** Mergers of such institutions may not be feasible, risk undermining the health of the acquiring bank, and could lead to excessive concentration in the banking sector. Identification of critical functions performed by systemic institutions that need to be preserved, and development of bank-specific resolution plans should be undertaken. Policies for the establishment of bridge banks, and a roster of qualified and experienced individuals able to act as temporary managers, should be developed.

## ACCESS TO FINANCE AND FINANCIAL INCLUSION

**54. Access to finance remains a constraint to the development of small- and medium-sized enterprises (SMEs).** It is estimated that SMEs employ 50 percent of the working population and receive about one-fifth of total private sector credit. Structural constraints to SME lending include the weak investment climate (Lebanon ranked 123 out of 189 countries on the WB's Doing Business index in 2016), residual gaps in financial infrastructure and political instability. The insolvency regime adopts a punitive approach toward debtors and lacks pre-insolvency procedures that support the rehabilitation of distressed but viable entities. This, combined with procedural delays in bankruptcy, gives rise to a strong preference for fixed assets as collateral for bank loans—which many SMEs and start-ups lack. A more efficient secured transactions regime could help support access to finance by allowing the use of movable assets (both tangible and intangible) as collateral. Draft laws on insolvency and secured transactions have been submitted to parliament, but their consideration has been held up by the political situation.

**55. The BdL and the government buttress SME credit via various support programs.** Kafalat, owned by NIGD (75 percent) and Lebanese banks (25 percent), operates a partial credit guarantee program for SMEs with guarantees ranging from 75-90 percent. Interest rates on loans provided under the program are subsidized and banks take only limited collateral on top of the guarantees. A BdL scheme allows for reduced reserve requirements in the amount equivalent to the financing provided, and, in 2013, this scheme was augmented with a direct line of credit to banks. In addition, the BdL has established a US\$400 million (0.8 percent of GDP) facility that provides interest free loans for up to seven years—guaranteed for 75 percent by the BdL—to technology start-ups, incubators, and accelerators. It is estimated that the BdL's measures represent one-third of the total loans to SMEs. The impact of these schemes on growth and employment is not clear, and a monitoring system should be put in place to determine whether the schemes are providing value for money. As the economy recovers, the BdL should reduce its credit market support. Near-term steps

could include consideration of new products for Kafalat (e.g., portfolio or microfinance guarantees) and greater private sector contributions to the BdL's support program for start-ups.

**56. A stronger regulatory framework for the microfinance sector is warranted.**

Microfinance institutions (MFIs) are not permitted to collect deposits or investment funds from the public, only from their members, and the sector is small with a total portfolio estimated at US\$230 million (0.5 percent of GDP). While data is poor, the sector has grown rapidly in recent years, while a recent study indicates that 30 percent of microfinance borrowers may have cross borrowings with another financial institution, raising concerns about over-indebtedness. Collection of standardized data and a unified regulatory framework with minimum requirements on permissible activities, capital adequacy, governance and consumer protection, among others, would underpin the safe development of the sector. MFIs that reach a certain size should be required to become regulated financial institutions under BdL supervision within a reasonable timeframe.

**57. Financial inclusion could be deepened, building on a strong base.** WB data show that 47 percent of Lebanese adults have a bank account, compared to 14 percent for the Middle East and the North Africa Region as whole, and account ownership has increased by 10 percent since 2011 (the largest rise in the region). Nonetheless, account ownership is higher in a wider sample of countries with similar levels of GDP per capita. While keeping know-your-customer requirements at a high level, the BdL should consider allowing the banking system to develop branchless-banking activities to better reach the poor, youth, and disadvantaged regions with basic financial services.

**58. A National Access to Finance Strategy could bring together these different strands in a structured approach to address the financial needs of underserved groups.** Developing a strategy that addresses the elements noted above, including eventual withdrawal of BdL's economic stimulus programs, and bringing in views from the financial industry and other stakeholders, could build consensus around reform priorities and sequencing with due regard to financial stability and integrity concerns.

## Appendix I. Tables and Figures

### Appendix I. Table 1. Lebanon: Selected Economic Indicators, 2012-2019

(Population: est. 4.5 million; 2014) (Per capita GDP: est. US\$11,112; 2014) (Quota: SDR 266 million, 0.11 percent of total) (Poverty rate: 28 percent; 2004-05) (Unemployment: 11.0 percent; 2011) 1/ (Main products and exports: services, jewelry) (Key export markets: UAE, Saudi Arabia, Switzerland)									
	2013	2014	2015	Proj.					
	Est.	Est.	Est.	2016	2017	2018	2019	2020	2021
(Annual percentage change)									
Output and prices									
Real GDP (market prices)	2.5	2.0	1.0	1.0	2.0	2.5	3.0	3.0	3.0
GDP deflator	5.3	2.8	0.9	0.9	1.0	1.6	1.8	1.7	1.9
Consumer prices (end-of-period)	1.1	-0.7	-3.4	2.0	2.0	2.0	2.0	2.0	2.0
Consumer prices (period average)	4.8	1.9	-3.7	-0.7	2.0	2.0	2.0	2.0	2.0
(In percent of GDP)									
Investment and saving									
Gross capital formation	24.2	23.9	22.0	22.4	22.6	22.7	22.8	23.1	23.1
Government	1.7	1.3	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Nongovernment	22.5	22.6	21.0	21.3	21.5	21.6	21.8	22.0	22.0
Gross national savings	-1.7	-1.5	3.8	4.9	5.2	5.6	6.2	7.2	8.0
Government	-7.0	-4.7	-6.3	-6.9	-7.4	-8.1	-8.6	-9.1	-9.5
Nongovernment	5.3	3.2	10.1	11.7	12.5	13.7	14.8	16.3	17.4
(In percent of GDP)									
Central government finances (cash basis)									
Revenue (including grants)	19.8	21.8	18.8	19.0	19.0	19.2	19.2	19.2	19.2
Expenditure	28.5	27.8	26.2	26.9	27.5	28.3	28.9	29.4	29.8
Budget balance (including grants)	-8.7	-6.0	-7.3	-7.9	-8.4	-9.1	-9.7	-10.2	-10.5
Primary balance (including grants)	-0.8	2.4	1.4	1.1	1.5	1.4	1.4	1.2	1.0
Total government debt	133	133	138	144	148	151	154	157	160
(Annual percentage change, unless otherwise indicated)									
Monetary sector									
Credit to the private sector	9.6	9.3	5.9	1.9	3.0	4.2	4.9	4.7	4.9
Reserve money	3.5	9.4	5.9	13.3	11.0	11.8	11.3	2.2	2.1
Broad money 2/	9.0	6.0	4.8	5.5	4.0	4.0	4.0	4.0	4.0
Deposit dollarization (level)	66.2	65.8	64.9	64.5	64.5	64.0	63.5	63.0	62.5
Interest rates (period average, in percent)									
Three-month treasury bill yield	4.4	4.4	4.4	...	...	...	...	...	...
Five-year treasury bill yield	6.8	6.8	6.8	...	...	...	...	...	...
(In percent of GDP, unless otherwise indicated)									
External sector									
Exports of goods and services (in US\$, percentage change)	1.3	-7.8	2.4	2.4	6.0	5.5	6.8	6.5	6.0
Imports of goods and services (in US\$, percentage change)	5.2	-2.2	-6.4	4.0	7.0	3.8	4.5	4.6	4.4
Balance of goods and services	114.1	104.2	99.0	100.5	104.0	104.3	104.8	105.4	105.5
Current account	-25.9	-25.3	-18.2	-17.5	-17.4	-17.1	-16.7	-15.9	-15.1
Foreign direct investment	-1.6	-3.5	-3.4	-4.5	-4.4	-4.7	-4.8	-4.9	-4.6
Total external debt 3/	167	170	175	179	180	179	177	176	175
Gross reserves (in billions of U.S. dollars) 4/	33.9	37.3	36.7	40.9	39.4	37.4	34.9	32.3	28.9
In months of next year imports of goods and services	12.4	14.6	13.8	14.4	13.4	12.1	10.8	9.6	9.2
In percent of short-term external debt 5/	48.8	50.0	46.8	49.4	46.1	42.2	38.0	33.7	29.0
In percent of banking system foreign currency deposits	37.6	39.3	37.3	39.8	36.9	33.8	30.6	27.5	23.8
In percent of total banking system deposits	24.9	25.8	24.2	25.6	23.8	21.6	19.4	17.3	14.9
Memorandum items:									
Nominal GDP (in billions of U.S. dollars)	47.6	49.9	50.9	51.8	53.4	55.6	58.3	61.1	64.1
Foreign-exchange-denominated bank deposits (percent change)	11.1	5.3	3.7	4.6	4.0	3.2	3.2	3.2	3.2
Commercial bank total assets (percent of GDP)	346	352	366	378	382	381	378	375	372
Net imports of petroleum products (in millions of U.S. dollars)	-5,000	-4,747	-3,320	-4,254	-4,604	-4,947	-5,225	-5,564	-5,869
Local currency per U.S. dollar (period average)	1507.5	1507.5	1507.5	...	...	...	...	...	...
Real effective exchange rate (annual average, percent change)	4.0	1.2	10.0	-1.3	-0.1	0.2	0.0	-0.2	0.6

Sources: Lebanese authorities; and IMF staff estimates.

1/ According to a labor force survey conducted by the World Bank in April 2011. The latest official unemployment rate is 9.7 percent in 2007.

2/ Defined as currency in circulation plus resident and nonresident deposits.

3/ Includes nonresident deposits.

4/ Excluding gold and encumbered assets.

5/ Short-term debt on a remaining maturity basis, including short-term nonresident deposits.

## Appendix I. Table 2. Lebanon: Financial Soundness Indicators of the Banking System

(In percent)

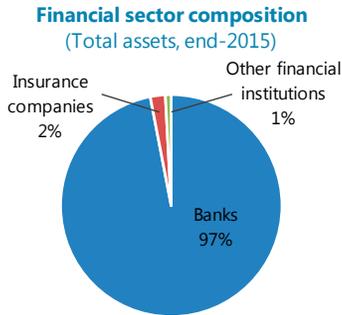
	2011	2012	2013	2014	2015	2016 (*)
<b>Asset Quality</b>						
NPLs to Total Loans /1	9.6	9.7	10.2	10.2	10.8	10.4
Loan loss reserves to NPLs	86.2	83.0	80.6	82.6	80.2	86.0
Loan loss reserves to Total Loans	8.3	8.1	8.2	8.4	8.6	9.0
Annualized Loan Growth	13.6	11.0	8.5	8.5	7.2	1.6
<b>Asset concentration</b>						
Public sector claims (excl BdL) to total assets	20.8	20.5	22.9	21.3	20.3	19.7
Placements with the BdL to total assets	33.6	34.6	33.0	36.1	37.9	39.5
Foreign assets to total assets	18.1	17.2	16.2	13.8	12.8	11.7
<b>Profitability</b>						
Interest margin to gross income	28.5	27.9	28.2	27.3	27.0	26.8
Efficiency ratio /2	52.1	57.0	56.6	57.6	57.3	59.2
ROAA	1.1	1.0	1.0	1.0	1.0	1.0
ROAE	14.5	12.8	11.7	11.3	11.4	10.9
<b>Liquidity</b>						
Net Liquid Assets to Total Assets	42.8	42.9	41.8	42.3	42.0	41.4
Net Liquid Assets to Short-term Liabilities	49.7	50.7	50.4	51.4	51.5	50.3
<b>Foreign-currency exposure</b>						
FX denominated loans to total loans	78.4	77.4	76.5	75.8	74.6	73.8
FX denominated liabilities to total liabilities	66.2	65.1	65.5	64.8	64.0	63.7
Net open FX position to regulatory capital	16.9	13.9	11.8	13.9	14.1	14.4
<b>Total capital/Total assets</b>						
CET1 Ratio	8.0	8.7	8.9	9.2	9.3	n.a.
Tier 1 Capital Ratio	8.7	9.3	10.1	10.7	10.9	n.a.
Total Capital Ratio	11.0	12.1	13.5	13.8	13.9	n.a.
Leverage (times)	11.6	13.0	14.5	14.9	15.1	n.a.
	13.9	12.7	12.6	12.0	11.9	11.5
/1 NPLs is defined as sum of loans classified as doubtful, substandard and loss as per BCC.						
/2 Non-interest expense to sum of net interest income plus non-interest income						
(*) As of June 2016						
Source: BCC						

Appendix I. Table 3. Lebanon: Structure of the Financial Systems

	2010	2011	2012	2013	2014	2015	2016 (*)
<b>Number of institutions</b>							
Banks	66	67	69	70	68	67	66
<i>of which:</i> Domestic-majority owned	40	40	42	43	43	44	43
Foreign-majority owned	26	27	27	27	25	23	23
<i>of which:</i> Subsidiaries of foreign banks	14	14	14	14	12	11	11
Branches of foreign banks	11	12	12	13	13	12	12
Insurance companies	52	52	52	51	51	51	51
<i>of which:</i> Life	5	5	5	5	5	5	5
Non-life	18	18	18	17	17	17	17
Others (please specify)	29	29	29	29	29	29	29
Other financial institutions							
<i>of which:</i> Investment funds	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Microcredit organizations	1	2	3	3	3	3	3
Brokerage Firms	11	14	12	n.a.	n.a.	n.a.	n.a.
Non Deposit Taking Financial Institutions	49	51	50	52	52	48	48
Leasing Companies	2	2	0	0	0	0	0
<b>Financial system assets</b>							
(in trillion LBP)							
Banks	209.3	225.5	241.4	261.8	281.4	296.8	302.2
<i>of which:</i> Domestic-majority owned	186.0	200.8	215.3	235.6	254.8	268.6	273.8
Foreign-majority owned	23.3	24.8	26.1	26.3	26.6	28.2	28.4
<i>of which:</i> Subsidiaries of foreign banks	18.4	18.9	20.4	21.1	21.3	22.8	23.6
Branches of foreign banks	4.6	5.4	5.2	5.2	5.3	5.3	4.9
<i>of which:</i> Five largest banks	100.2	110.9	116.2	126.3	136.3	141.6	143.2
Insurance companies	4.6	5.1	5.6	6.1	6.5	6.8	n.a.
<i>of which:</i> Life	0.4	0.5	0.5	0.6	0.7	n.a.	n.a.
Non-life	0.3	0.3	0.3	0.4	0.4	n.a.	n.a.
Others (please specify)	4.0	4.3	4.8	5.1	5.4	n.a.	n.a.
Other financial institutions	1.7	1.8	1.9	2.2	2.5	2.6	2.4
<i>of which:</i> Investment funds							
Microcredit organizations	0.0	0.0	0.1	0.1	0.1	0.1	0.1
Brokerage Firms	0.1	0.1	0.0	n.a.	n.a.	n.a.	n.a.
Non Deposit Taking Financial Institutions	1.6	1.6	1.8	2.1	2.4	2.5	2.3
Leasing Companies	0.1	0.1	0.0	0	0	0	0
<b>Total Financial system assets</b>	<b>215.6</b>	<b>232.5</b>	<b>248.9</b>	<b>270.1</b>	<b>290.4</b>	<b>306.1</b>	n.a.
(Percent of GDP)	376.3	384.8	374.4	376.4	386.0	399.3	n.a.
Memo:							
GDP	57.3	60.4	66.5	71.8	75.2	76.7	78.1
Number of Excluded Banks	2	2	2	2	2	2	2
Total Assets of Excluded Banks	0.3	0.3	0.3	0.2	0.2	0.2	0.2
(*) As of June 2016							
Source: Banking Control Commission, Insurance Control Commission							

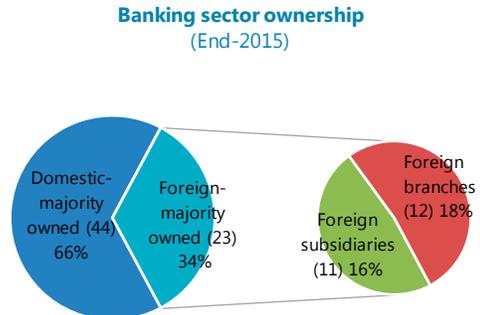
### Appendix I. Figure 1. Lebanon: Structure of the Financial System

The financial system is bank dominated



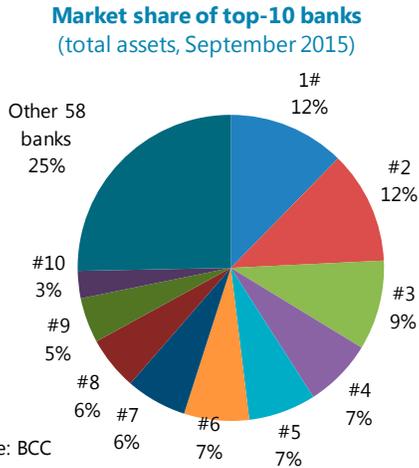
Source: BCC

Bank ownership is largely domestic



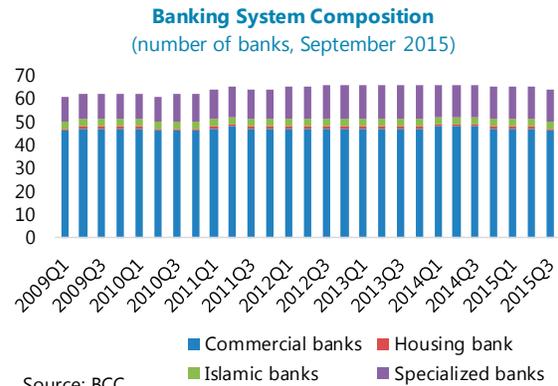
Source: BCC

The banking system is relatively concentrated



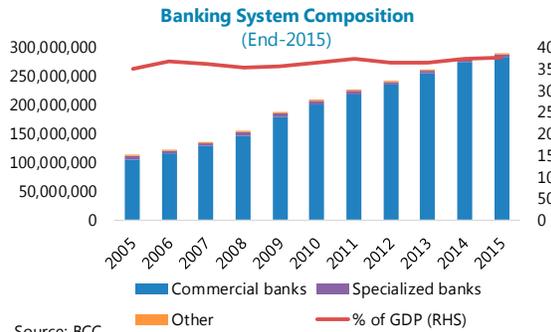
Source: BCC

Banking sector composition has been stable



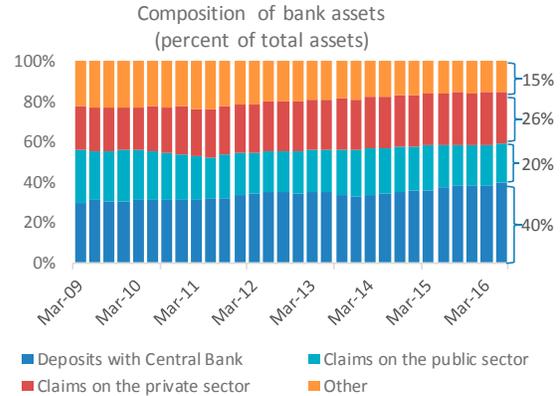
Source: BCC

The banking system is very large in relation to GDP



Source: BCC

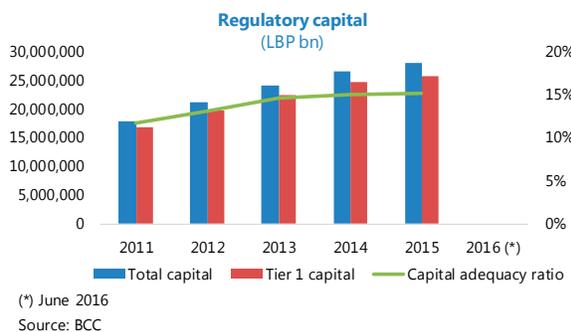
Asset structure is dominated by public sector exposures



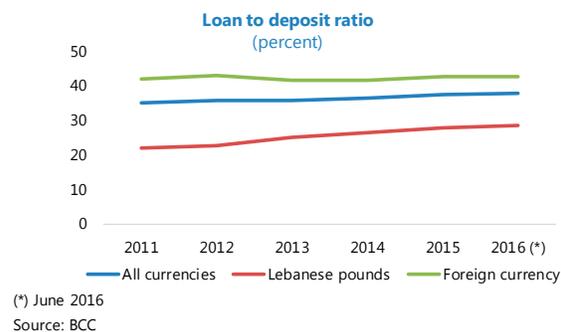
Source: BdL

### Appendix I. Figure 2. Lebanon: Main Banking Sector Indicators

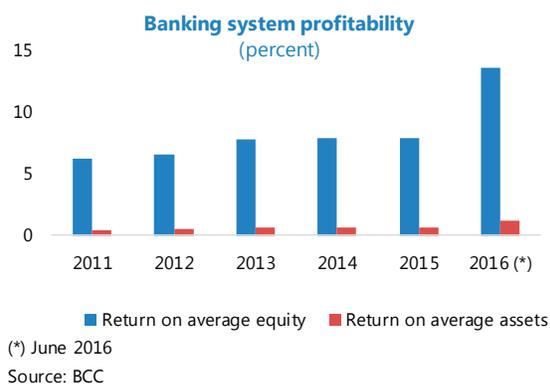
*The banking system is well capitalized...*



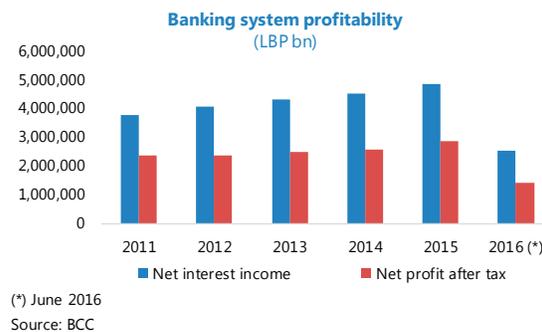
*...and loan to deposit ratios are low.*



*Profitability has been retained...*

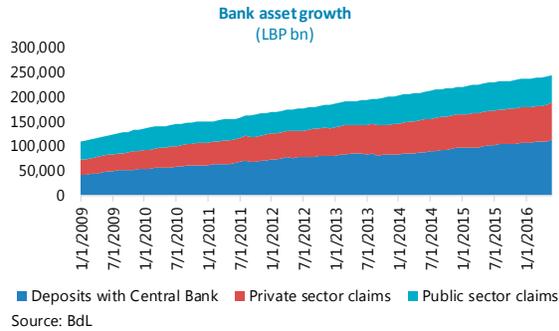


*...aided by robust interest rate margins.*

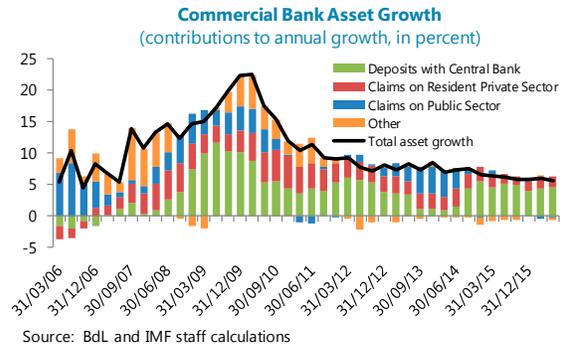


### Appendix I. Figure 3. Lebanon: Sovereign Exposures

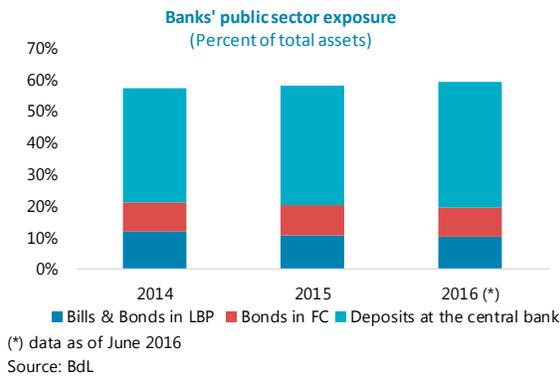
Banks' exposures to the private sector and BdL grew strongly during the past decade...



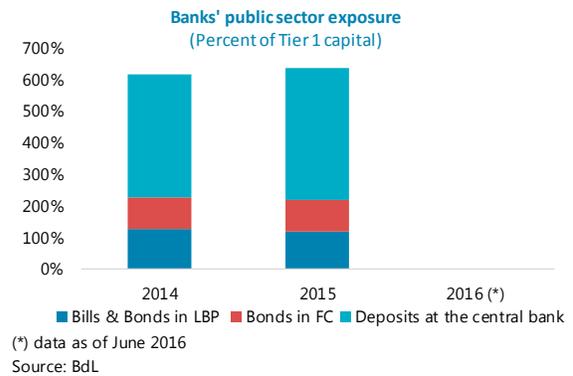
...with deposits at the BdL accounting for most of the asset growth in recent periods.



Public sector claims are the largest balance sheet item of the Lebanese banking sector...



...accounting for more than 6 times Tier 1 capital.

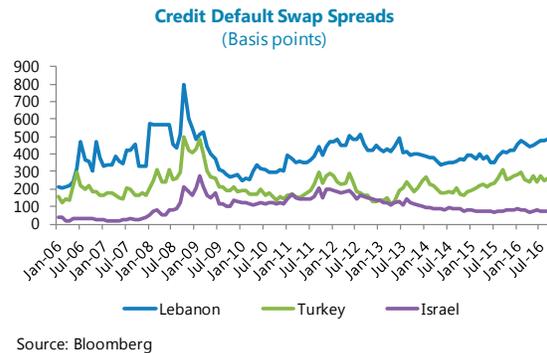


Lebanese sovereign credit ratings have been stable...

Moodys	FC Curr Issuer Rating	S&P	Foreign Currency LT Debt
B2	12/16/2014	B-	11/1/2013
B1	4/13/2010	B	12/22/2009
B2	4/1/2009	B-	8/5/2008
B3	3/24/2005	CCC+	1/31/2008
B2	11/28/2001	B-	11/26/2007
		B-	9/11/2006
		B-	7/13/2006
		B-	4/10/2002
Fitch	Foreign Currency LT Debt	S&P	Foreign Currency LT Debt
B-	7/14/2016	B	9/28/2001
B	3/31/2010		
B-	9/21/2001		
B+	2/2/2001		
BB-	6/4/1998		
BB	2/26/1997		

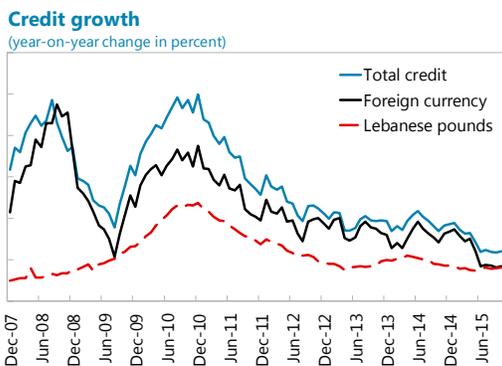
Source: Bloomberg

...but CDS spreads are increasing.

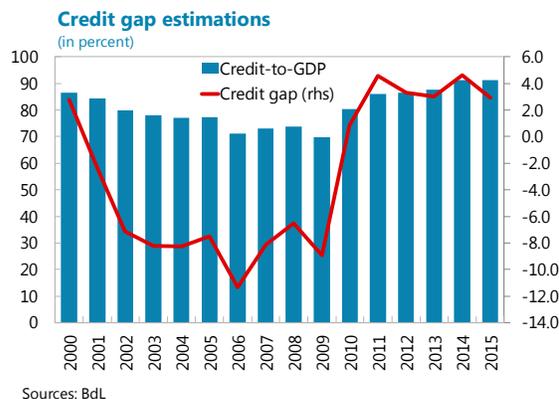


### Appendix I. Figure 4. Lebanon: Bank Asset Quality

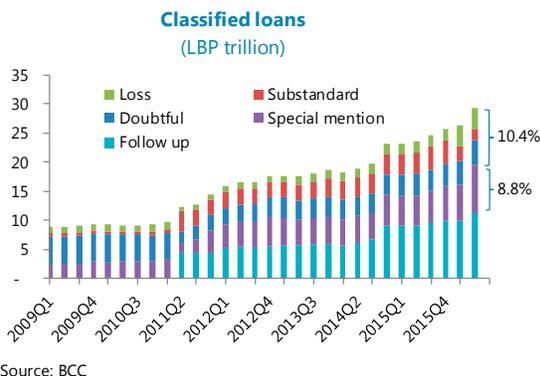
Credit growth has decelerated...



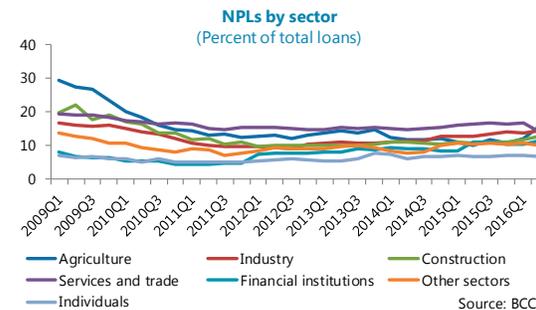
...and has remained close to its long-run trend.



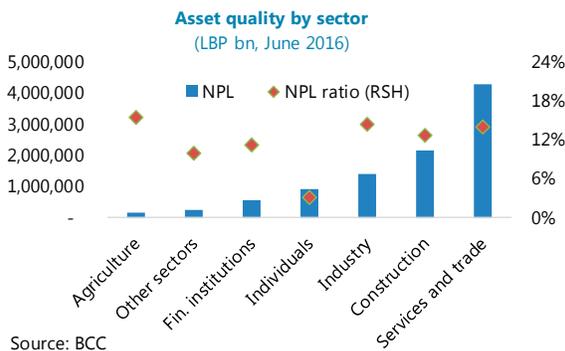
The share of distressed assets is gradually increasing...



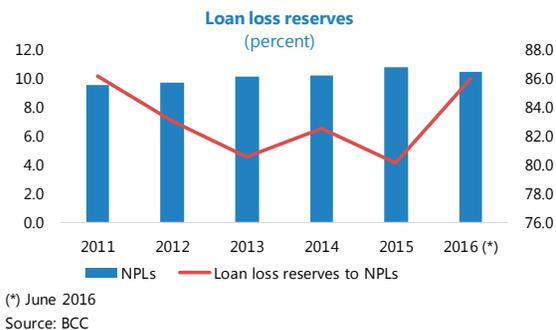
...but NPLs remain well below their observed peak.



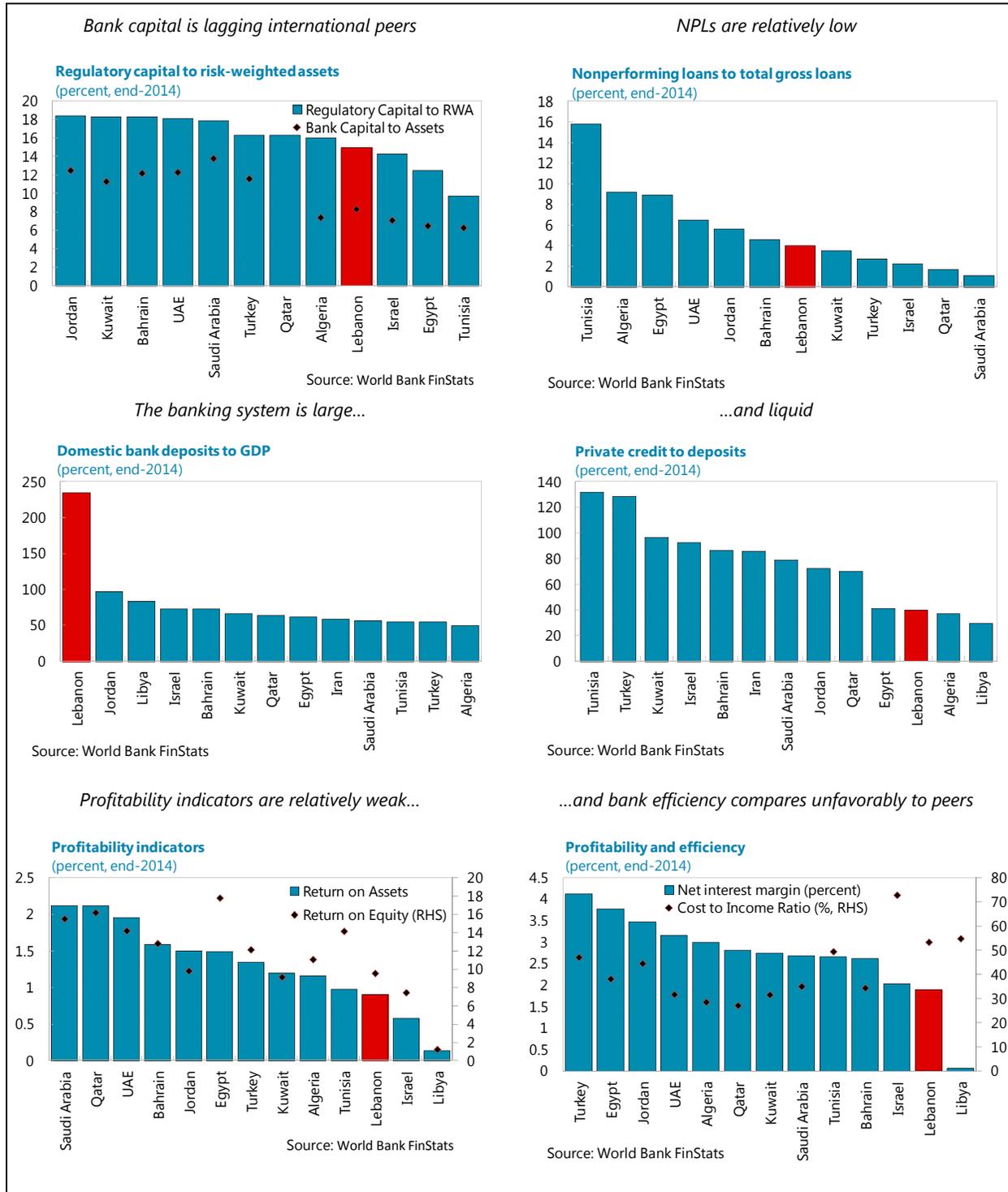
The services and trade and construction sectors have been particularly affected.



NPLs are well covered by loan-loss reserves.

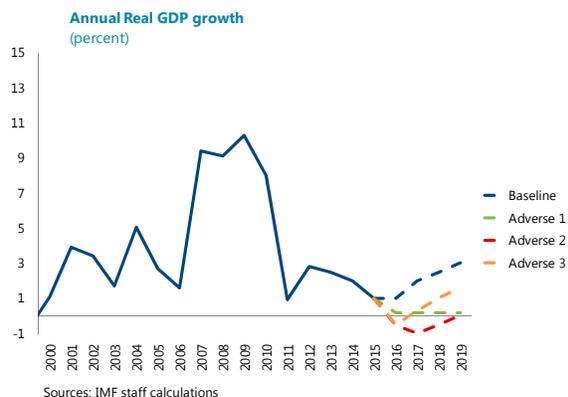


Appendix I. Figure 5. Lebanon: Cross-Country Comparisons

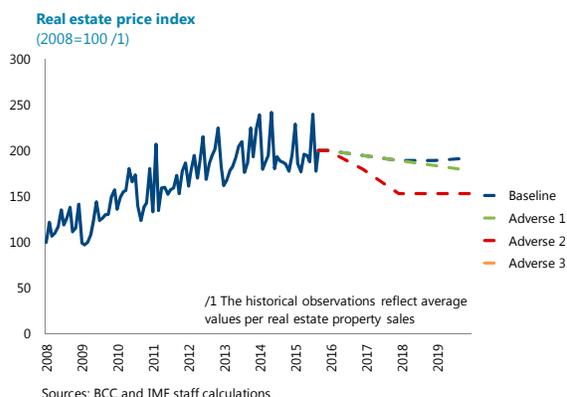


## Appendix II. Stress Testing Parameters

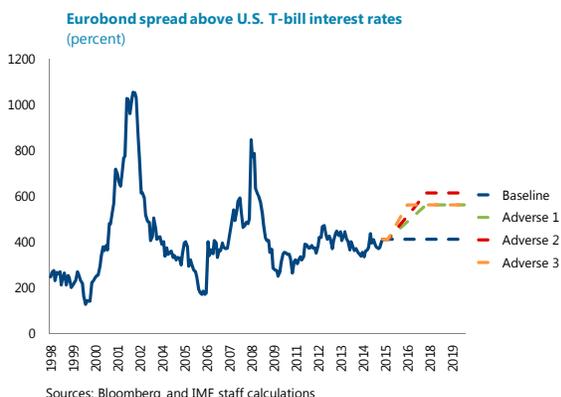
*GDP growth declines in adverse scenarios...*



*...having an adverse impact on real estate prices...*



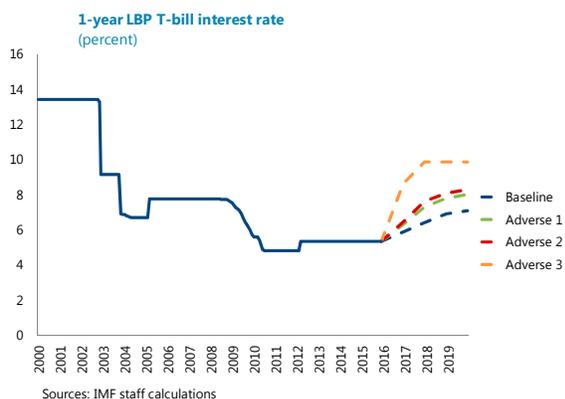
*...and leading to an increase in the country risk premium.*



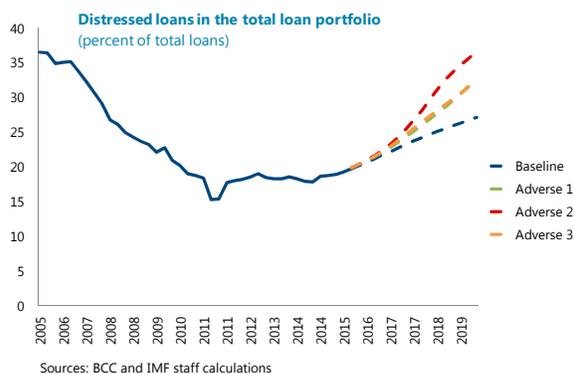
*Eurobond interest rate levels are also influenced by the increasing Fed funds rate...*



*...and feed through into increased interest rates in Lebanese pounds.*



*Asset quality is affected due to the deteriorated macroeconomic environment.*



Domain		Bottom-Up by Banks	Top-Down by FSAP Team
<b>BANKING SECTOR: SOLVENCY RISK</b>			
1. Institutional perimeter	Institutions included	<ul style="list-style-type: none"> <li>6 banks.</li> </ul>	<ul style="list-style-type: none"> <li><b>43 domestically incorporated banking groups as of end-June 2015.</b></li> </ul>
2. Channels of risk propagation	Market share	<ul style="list-style-type: none"> <li>65 percent of total banking sector assets.</li> </ul>	<ul style="list-style-type: none"> <li><b>97.94 percent of total banking sector assets by end-June 2015.</b></li> <li><b>12 banks have been excluded from the stress test:</b> <ul style="list-style-type: none"> <li>6 branches of large regional and international banks, representing (as of end-December 2015) 1.63 percent of banking system assets; the branches are exempted from capital adequacy requirements, but their parent companies are required to semi-annually disclose, on a consolidated basis, their capital adequacy ratios to the BCC;</li> <li>3 Islamic banks, representing (as of end-December 2015) 0.13 percent of banking system assets; and</li> <li>3 banks that are under liquidation.</li> </ul> </li> <li><b>3 Islamic banks representing 0.26 percent of total banking system assets are not included since they are not obliged to report data to BCC.</b></li> </ul>
	Data and baseline date	<ul style="list-style-type: none"> <li>Banks' internal databases as of end-June 2015.</li> </ul>	<ul style="list-style-type: none"> <li><b>Bank-by-bank supervisory data as of end-June 2015.</b></li> </ul>
	Consolidation	<ul style="list-style-type: none"> <li>Consolidated basis.</li> </ul>	<ul style="list-style-type: none"> <li><b>Consolidated basis.</b></li> </ul>
	Methodology	<ul style="list-style-type: none"> <li>Banks' internal balance sheet models and databases.</li> </ul>	<ul style="list-style-type: none"> <li><b>IMF solvency stress testing balance sheet framework (the "Workbox").</b></li> </ul>
	Satellite models for macro financial linkages	<ul style="list-style-type: none"> <li>Constrained approach in which banks were provided with explicit assumptions from the FSAP team, including credit loss rates by economic</li> </ul>	<ul style="list-style-type: none"> <li>Credit losses are projected as a product of the estimated net migration of performing loans to the special mention and NPL categories (risk classification categories 3-6) and estimated loan-loss provisioning ratios under the baseline</li> </ul>

Domain		Bottom-Up by Banks	Top-Down by FSAP Team
		sectors, deposit and lending rate projections, debt security interest rate projections, and funding cost shocks (see methodology for top-down stress test).	<p>and the adverse scenarios. Since data was lacking on loans that had been restructured from NPL categories to special mention, the stress test considered special mention loans as defaulted for modeling purposes. For modeling purposes, the amount of NPLs also included the stock of off-balance sheet NPLs. Using bank-by-bank quarterly data on loans by risk classification and economic sectors dating back to July 2005, estimations were initially made using regressions on panel data using fixed effects for each bank (cross-section).</p> <ul style="list-style-type: none"> <li>• While real GDP growth was found to be a significant explanatory variable, the bank-by-bank data reflected unexplained structural breaks in time series, causing estimates with a weak economic interpretation. Therefore, the estimations were instead made at the system-aggregate level by economic sectors, allowing for sensitivity of stress test outputs to bank-specific loan portfolio composition. Aside lags of the dependent variable, real GDP growth with various lags was identified as the significant explanatory variable while other variables (such as lending interest rates and CPI) were not significant. To calculate credit losses, the amount of migrated loans to the NPL and special mention categories loans were multiplied with a provisioning ratio of 53 percent under the baseline scenario, reflecting the aggregate provisioning ratio in the NPL and special mention categories. In the adverse scenarios a provisioning ratio of 65 percent was used, reflecting the aggregate provisioning ratio in the NPL categories, and the assumption that all migrated loans will eventually become NPLs under the adverse scenarios.</li> <li>• Credit losses in foreign subsidiaries of Lebanese banks were explicitly modeled using host country-specific GDP growth projections for each subsidiary host country representing 5 percent or more of any banking group's total assets. For</li> </ul>

Domain		Bottom-Up by Banks	Top-Down by FSAP Team
			<p>subsidiary host countries below 5 percent of total assets, the average GDP growth rate of explicitly modeled countries was assumed. Credit losses in subsidiaries were then estimated using credit loss sensitivities to real GDP growth given by global rules of thumb.<sup>1</sup></p>
	Stress test horizon		<ul style="list-style-type: none"> <li>• The loan-loss provisioning of NPLs collateralized by real estate were increased in the scenarios due to the projected decline in real estate prices. Additional loan-loss provisions were calculated using the local regulatory provisioning formula by adjusting aggregate provisioning ratio to reflect the lower real estate values and additional collateral liquidation costs of 10 percentage points of the collateral value.</li> <li>• The stress test modeled interest rate risk resulting from changes in interest income on interest rate-sensitive assets and liabilities that are repriced in the stress test horizon. While the projected interest rates of LBP T-bills fully feed through to domestic currency deposit and lending interest rates, the projected Eurobond interest rates feed through to foreign currency deposit and lending interest rates by an empirically estimated coefficient of 0.5. The stress test assumed a constant time-to-repricing structure meaning that assets and liabilities to be repriced in year 1 also are repriced in each of the remaining years. Assets and liabilities that are repriced in year 2 are repriced again in year 4, while assets and liabilities to be repriced in years 3 and 4 only are repriced once since their subsequent repricing dates occur past the stress test horizon. An exemption was made for holdings of debt securities, which were only allowed to be repriced once in the horizon due to the long average durations of Lebanese banks' debt holdings.</li> </ul>

<sup>1</sup> See Hardy, D. C., and Schmieder, H. (2013). *Rules of Thumb for Bank Solvency Stress Testing*. IMF Working Paper.

Domain		Bottom-Up by Banks	Top-Down by FSAP Team
			<p>Interest rate risk also realizes in the stress test through the revaluation of debt security holdings classified as HFT and AFS. The revaluation was approximated linearly by multiplying the interest rate shocks by the modified durations in each bank's portfolios of debt security holdings. The linear nature of the approximation can cause an overestimated impact of the interest rate shocks.</p> <ul style="list-style-type: none"> <li>• However, a lack of complete data on debt security holdings on a consolidated level did not allow for an approach based on full revaluation.</li> <li>• Credit impairments on HTM debt holdings were approximated using the same approach as for the revaluation of HFT and AFS holdings. Credit impairments reflected the change in net present value due to increased credit spreads on the HTM debt holdings.</li> <li>• Funding cost shocks were estimated using a sensitivity analysis of banks' profitability to funding cost changes. Expert judgment was used to determine the funding cost hike that banks could accept on top of other interest rate shocks. The funding shock was only applied to liabilities that are to be repriced in the four-year stress test horizon.</li> </ul> <p>Non-interest income was projected to follow the evolution of total assets, which is consistent with the empirically observed relation at the banking-system aggregate level.</p>
	Scenario analysis	See top-down stress test.	Four-year horizon was chosen in light of the 3-year horizon of the IMF baseline projection and the great uncertainty around macroeconomic projections in Lebanon.

Domain	Bottom-Up by Banks	Top-Down by FSAP Team
3. Tail shocks		<ul style="list-style-type: none"> <li>The baseline scenario is based on the IMF's March 2016 forecasts, and on projections made in the World Economic Outlook (WEO) of October 2015.</li> </ul> <p>Adverse scenario 1 simulates that the Syrian war deteriorates and that the political paralysis continues for a protracted period. Aggregate investment is assumed to remain depressed, and consumption growth low, while regional growth is also affected by the assumed absence of an oil price recovery. Domestic GDP growth is projected at one standard deviation below the baseline projection in 2016, and held at the same rate throughout the horizon. GDP growth in subsidiary host countries is projected at one standard deviation below the baseline forecast in the first year after which the growth path converges linearly back to the baseline projection. Due to an expected fiscal weakening, credit spreads on Lebanese government Eurobonds are expected to increase by 150 basis points over two years, reflecting about one historical standard deviation adjusted to reflect the success of the implementation of BdL interventions during the last five years. The Eurobond spread shock translates into credit spread shocks of domestic currency sovereign bonds by an empirically estimated sensitivity of 0.6. The economic deterioration is projected to cause a slowdown in prices, which is reflected in the deflator projection at the same relative deviation from the baseline as GDP growth. In contrast with the baseline scenario, adverse scenario 1 does not envisage a recovery in real estate prices; instead, it assesses the implications of a prolonged adjustment of real estate prices.</p> <p>Adverse scenario 2 compounds the first adverse scenario by an adjustment in real estate prices of -23.5 percent over two years. The magnitude of the assumed price fall is comparable to past real estate price adjustments in other countries and the assumptions used in other recent stress tests. The adjustment is assumed to be due to lower demand, in part due to lower confidence and delayed investment in real estate from the Lebanese diaspora, exacerbated by an assumed overvaluation of property in segments of the market. Economic output declines further due to a construction sector contraction eliminating about half of the output growth generated during the expansionary years of 2007-2011, and due to a private consumption decline driven by the wealth effect estimated as a 0.05 percentage point adjustment to private consumption per 1 percent decline in real estate prices. The wealth effect elasticity was estimated in an ECB</p>

Domain		Bottom-Up by Banks	Top-Down by FSAP Team
			<p>working paper based data from real estate crises in Asian countries, and is broadly in line with estimates found in literature.<sup>2,3</sup> Real GDP growth is assumed to resume at the rate of adverse scenario 1 in the fourth year, after only a partial recovery from the real estate shock in the third year. Consistent with these assumptions in parallel with a fiscal weakening, a more significant adjustment to credit spreads on Lebanese government Eurobonds of 200 basis points over two years is assumed, translating into a domestic currency spread shock at the same sensitivity as in adverse scenario 1. Rather than a full two standard deviations, the Eurobond spread shock was adjusted downward in order for scenario consistency with the assumption of sustainable sovereign finances.</p> <p>Adverse scenario 3 assumes a stronger-than-expected hike of U.S. dollar interest rates. In addition to higher baseline U.S. dollar interest rates, the scenario involves an increase in risk aversion among global emerging market investors, causing a 150 basis point increase in the Lebanese country risk spread over one year across the curve. The steeper-than-expected Fed funds rate increases are assumed to transmit perfectly into the 1-year U.S. Treasury Bill rates, which is broadly consistent with empirical findings. However, due to shifting long term expectations, 5-year and 10-year rates are assumed to increase by the average difference between the projected Fed funds rates under the baseline scenario and adverse scenario 3 in the remaining years of the stress test horizon. The baseline deflator projection for Lebanon is adjusted down by the historical sensitivity of -0.81 to the changes in the Fed funds rate. The rise in interest rates is assumed to transmit into lower GDP growth by the historical sensitivity of 0.5 estimated between Lebanese GDP growth and changes in lending interest rates.</p>

<sup>2</sup> See Peltonen, T. A., Sousa, R. M., and Vanteenkiste, I. S. (2009) "Wealth effects in emerging market economies," ECB Working Paper, January 2009. Also see Mian, A., Rao, K., and Sufi, A. (2013) "Household Balance Sheets, Consumption, and the Economic Slump." February 2013.

<sup>3</sup> The elasticity has been chosen in agreement with MCD.

Domain		Bottom-Up by Banks	Top-Down by FSAP Team
	Sensitivity analysis	<ul style="list-style-type: none"> <li>No sensitivity tests.</li> </ul>	<ul style="list-style-type: none"> <li>Single-factor solvency shocks: effect of a 2 percentage point interest rate hike on interest income and capital adequacy; effect of a 0.6 percentage point sovereign debt interest rate hike on capital adequacy, including and excluding HTM portfolio revaluation (consistent with sovereign credit rating downgrade assumptions); FX risk effect of a 30 percent appreciation/depreciation of the LBP on capital adequacy applied to regulatory net open foreign exchange exposures; effect of a 30 percent decline in equity prices on capital adequacy; effect from the revaluation of direct real estate exposures of a 30 percent decline in real estate prices; effect on capital adequacy ratios due to an increase of credit risk-weights on BdL claims in foreign currency; effect on capital adequacy ratios due to an increase of credit risk-weights on BdL claims in foreign currency, corporate loans to clients in Lebanon and resident Lebanese banks (consistent with sovereign credit rating downgrade assumptions).\</li> <li>Capital adequacy sensitivity to single borrower credit concentration risk based on local regulatory standards.</li> </ul>
4. Risks and buffers	Risks/factors assessed	<ul style="list-style-type: none"> <li>See top-down stress test.</li> <li>In contrast to the top-down stress test, the bottom-up stress test benefits from banks' internal data availability and captures interest rate risk in foreign subsidiaries.</li> </ul>	<ul style="list-style-type: none"> <li>Credit risk. Household and corporate loan exposures, as well as domestic-sovereign, foreign-sovereign, and corporate bond exposures.</li> <li>Market risk. Interest rate risk impact on net interest income due to interest rate shock; debt holdings revaluation impact due to increased interest rates; FX risk, equity risk, and real estate price risk through sensitivity tests.</li> <li>Data on the asset/liability mismatches in foreign subsidiaries is not available. Therefore, the interest rate shock impact on interest income in foreign subsidiaries is not accounted for by the top-down stress test.</li> </ul>

Domain		Bottom-Up by Banks	Top-Down by FSAP Team
			<ul style="list-style-type: none"> <li>• Funding risk. Impact on net interest income due to increased funding cost on top of the other interest rate shocks.</li> </ul>
	Behavioral adjustments	<ul style="list-style-type: none"> <li>• See top-down stress test for other assumptions.</li> </ul>	<ul style="list-style-type: none"> <li>• Balance sheet growth is projected as a function of deposit growth rate assumptions translated into asset growth rates assuming the balance sheet structure as of the reporting rate. Deposit growth rate projections reflect effects of depressed oil prices and a deteriorated regional economic outlook, leading to lower net inflows of deposits from the Lebanese diaspora under the adverse scenarios. The deposit growth projections are based on IMF staff estimates of deposit growth needed to finance the fiscal deficit and to maintain fiscal sustainability.</li> <li>• Dividends of 35 percent of net profits are assumed under the condition that (i) net profits in the current year is positive; and (ii) the capital adequacy ratio of the previous year is above the current regulatory threshold of 12 percent.</li> <li>• No management actions are considered (no dividends and no asset disposal).</li> </ul>
5. Regulatory and market-based standards and parameters	Calibration of risk parameters	<ul style="list-style-type: none"> <li>• See top-down stress test.</li> </ul>	<ul style="list-style-type: none"> <li>• No data on PDs and LGDs is available, which is why the ratio of loans in the NPL and special mention risk classification categories to total loans is used projected as a leading indicator of the probability of default.</li> </ul>

Domain		Bottom-Up by Banks	Top-Down by FSAP Team
	Regulatory/accounting and market-based standards	<ul style="list-style-type: none"> <li>• Projections of risk-weighted assets (RWA) are made under a constant balance sheet assumption, i.e., assuming fixed risk-weights. The assumption was made due to BCC's claim that banks use fixed risk-weights under the standardized approach in Lebanon. Even though risk-weights under the standardized approach are sensitive to credit ratings, most Lebanese borrowers are not rated which is why risk-weights in Lebanon are fixed in practice.</li> <li>• See top-down stress test for other determinants.</li> </ul>	<ul style="list-style-type: none"> <li>• Projections of RWA are made based on practices in Lebanon. Since the vast majority of Lebanese corporates are unrated, they are assigned risk-weights of 100 percent. Household loans are however usually assigned a risk-weight of 35 percent. In line with Basel II standards and given the current level of aggregate loan-loss provisioning on NPLs in the Lebanese banks, the risk weights of loans that migrate in to the NPL and special mention categories were adjusted to 100 percent in the scenarios, leading to an increase in RWA for household loans.</li> <li>• Basel II regulatory standard for risk-weighted assets.</li> <li>• Basel III regulatory standard for the definition of capital.</li> <li>• The main hurdle rate was defined as 9.5 percent, reflecting the current total CAR requirement of 12 percent minus the capital conservation buffer of 2.5 percent, which banks are allowed to use in times of stress. Stress test results were also generated under the hurdle rates of: (i) current total CAR requirement of 12 percent; (ii) the minimum CAR requirement of 8 percent excluding a regulatory Lebanon-specific buffer of 1.5 percent; (iii) current Tier 1 CAR requirement of 7.5 percent excluding the capital conservation buffer; (iv) Tier 1 CAR requirement of 6 percent excluding the capital conservation buffer and the Lebanon-specific capital buffer of 1.5 percent, (v) current Common Equity Tier 1 CAR requirement of 5.5 percent excluding the capital conservation buffer, (vi) Common Equity Tier 1 CAR requirement of 4.5 percent excluding the capital conservation buffer and the Lebanon-specific capital buffer of 1.5 percent.</li> </ul>

Domain		Bottom-Up by Banks	Top-Down by FSAP Team
6. Reporting format for results	Output presentation	<ul style="list-style-type: none"> <li>To be considered once the results of the bottom-up stress test are available to the FSAP team.</li> </ul>	<ul style="list-style-type: none"> <li>CAR and capital shortfall under the hurdle rates.</li> <li>System-wide sum of gross capital shortfall.</li> <li>Contribution of each source of losses to aggregate capital shortfall.</li> <li>Number of banks that become undercapitalized under each of the hurdle rates.</li> <li>Percentage share of total system assets of the banks that become undercapitalized under each of the hurdle rates.</li> </ul>
<b>BANKING SECTOR: LIQUIDITY RISK</b>			
1. Institutional perimeter	Institutions included	N/A	<ul style="list-style-type: none"> <li>37 domestically incorporated banks in the short-term liquidity stress test.</li> <li>69 domestically incorporated banks in the long-term liquidity stress test.</li> </ul>
	Market share	N/A	<ul style="list-style-type: none"> <li>95 percent of the domestically incorporated banks in the short-term liquidity stress test.</li> <li>100 percent of the domestically incorporated banks in the long-term liquidity stress test.</li> </ul>
	Data and baseline date	N/A	<ul style="list-style-type: none"> <li>Bank-by-bank supervisory data as of end-September 2015.</li> <li>Banks' reported Liquidity Coverage Ratio (LCR) and underlying data as of end-September 2015.</li> </ul>
	Consolidation	N/A	<ul style="list-style-type: none"> <li>Banks are assessed on a solo basis, as permitted by data availability.</li> <li>Foreign subsidiaries are not assessed since no data on these entities are available.</li> </ul>

Domain		Bottom-Up by Banks	Top-Down by FSAP Team
2. Channels of risk propagation	Methodology	N/A	<p>Short-term liquidity was assessed using the banks' reported LCRs and underlying data. In line with Basel standards, the stress test recognized the high concentration of deposits to depositors considered less stable due to significant deposit concentration risks. The stress test assessed liquidity resilience assuming run-off rates of 10 percent, 20 percent and 30 percent of less stable deposits. The stress test also recognized the low marketability of sovereign debt holdings (which is a crucial HQLA-criteria in the Basel framework, besides central bank eligibility). The stress test therefore assessed liquidity resilience at sovereign debt holding haircuts of 20 percent and 50 percent.</p> <ul style="list-style-type: none"> <li>• Long-term liquidity was assessed using a proxy measure of the Net Stable Funding Ratio. While banks do not report NSFR data, proxy measure was constructed using data on assets and liabilities by time-to-maturity buckets. Sovereign exposures were treated in line with the Basel standards. Similarly, to the LCR treatment, liquidity resilience to outflows of less stable deposits was assessed assuming run-off rates of 10 percent, 20 percent, and 30 percent.</li> </ul>
	3.Risks and buffers	Risks	N/A
	Buffers	N/A	<ul style="list-style-type: none"> <li>• Counterbalancing capacity (HQLA, ASF)</li> <li>• Central bank reserves</li> </ul>
4. Tail shocks	Size of the shock	N/A	<ul style="list-style-type: none"> <li>• Haircuts of 20 percent and 50 percent on sovereign debt holdings in LCR to reflect the systemic liquidity risks that could materialize in stressed scenarios.</li> <li>• Run-off rates of 10 percent, 20 percent and 30 percent of less stable deposits in LCR and NSFR.</li> </ul>

Domain		Bottom-Up by Banks	Top-Down by FSAP Team
5. Regulatory and market-based standards and parameters	Regulatory standards	N/A	<ul style="list-style-type: none"> <li>• LCR-informed should exceed 100 percent (not a legal/regulatory requirement).</li> <li>• NSFR proxy should exceed 100 percent (not a legal/regulatory requirement).</li> </ul>
6. Reporting format for results	Output presentation	N/A	<ul style="list-style-type: none"> <li>• Aggregate LCR and NSFR proxies.</li> <li>• Aggregate gross liquidity shortfalls.</li> <li>• Aggregate gross liquidity shortfalls in percent of nominal GDP and gross central bank reserves.</li> <li>• Number of banks that have liquidity shortfalls under the hurdle rates.</li> </ul>
<b>BANKING SECTOR: CONTAGION RISK</b>			
1. Institutional perimeter	Institutions included	N/A	<ul style="list-style-type: none"> <li>• 69 domestically incorporated banks.</li> <li>• 63 foreign subsidiaries of Lebanese banks.</li> </ul>
	Market share	N/A	<ul style="list-style-type: none"> <li>• 100 percent of the domestically incorporated banks.</li> <li>• 100 percent of foreign subsidiaries of Lebanese banks.</li> </ul>
	Data and baseline date	N/A	<ul style="list-style-type: none"> <li>• Bank-by-bank supervisory data as of end-September 2015.</li> </ul>
	Consolidation	N/A	<ul style="list-style-type: none"> <li>• Banks were assessed on a solo basis, as permitted by available data.</li> </ul>
2. Channels of risk propagation	Methodology	N/A	<ul style="list-style-type: none"> <li>• Asset-side cross-border exposures of Lebanese operations and foreign subsidiaries were measured in percent of regulatory capital to assess the impact of counterparty defaults on capital adequacy.</li> <li>• Liability-side cross-border exposures of Lebanese operations and foreign subsidiaries were measured in percent of total bank assets to assess the liquidity impact of an inability to roll-over existing liabilities.</li> </ul>

Domain		Bottom-Up by Banks	Top-Down by FSAP Team
			<ul style="list-style-type: none"> <li>As described in the STeM on Solvency Risk, cross-border credit risk exposures are explicitly modeled using the estimated credit loss sensitivity to GDP growth in Lebanon, and GDP growth projections for each subsidiary host country.</li> <li>Domestic interbank exposures were assessed on a bank-by-bank basis. However, since no counterparty-specific data was available, a granular analysis of exposures was not possible.</li> </ul>
3. Tail shocks	Size of the shock	N/A	<ul style="list-style-type: none"> <li>No explicit shocks were assumed.</li> </ul>
4. Reporting format for results	Output presentation	N/A	<ul style="list-style-type: none"> <li>The distribution of asset and liability-side exposures is presented as percentages of regulatory capital and total assets, respectively.</li> </ul>

Source: IMF staff.

## Appendix IV. Report on the Observance of Standards and Codes— Basel Core Principles for Effective Banking Supervision

1. **This report summarizes assessment of the current state of the implementation of the Basel Core Principles for Effective Banking Supervision (BCP) in Lebanon.** It reflects the regulatory and supervisory framework in place, as of the date of the completion of the assessment, and is not intended to represent an analysis of the state of the banking sector. The assessment was made according to the Revised BCP Methodology issued by the Basel Committee on Banking Supervision in September 2012.
2. **An assessment of the effectiveness of banking supervision requires a review of the legal framework and detailed examination of the policies and practices of the institutions responsible for banking regulation and supervision.** In line with the BCP methodology, the assessment focused on the agencies that are at the heart of the Lebanese framework for banking supervision, notably the Banque du Liban (BdL), the Banking Control Commission (BCC), and the Special Investigation Committee (SIC). The assessment considered both essential and additional criteria (with compliance measured only against the former), and whether the criteria are fulfilled in practice through effective application of laws and regulations.
3. **The assessment team<sup>1</sup> reviewed the framework of laws, rules, and guidance, and held extensive meetings with Lebanese officials as well as additional meetings with banking sector participants and other stakeholders (auditors, associations, etc.).** The authorities provided a self-assessment of the CPs as well as detailed responses to additional questionnaires and facilitated access to supervisory documents and files, staff, and systems. The team appreciated the very high quality of cooperation received from the authorities. The team extends its thanks to staff of the authorities, who provided excellent cooperation, including extensive provision of documentation and access.
4. **The standards were evaluated in the context of the Lebanese financial system's structure and complexity.** The CPs must be capable of application to a wide range of jurisdictions whose banking sectors will inevitably include a broad spectrum of banks. To accommodate this breadth of application, a proportionate approach is adopted within the CP, both in terms of the expectations imposed on supervisors for the discharge of their own functions and in terms of the standards that supervisors impose on banks. An assessment of a country against the CPs must, therefore, recognize that its supervisory practices should be commensurate with the complexity, interconnectedness, size, risk profile, and cross-border operation of the banks being supervised. In other words, the assessment must consider the context in which the supervisory practices are applied. The concept of proportionality underpins all assessment criteria. For these reasons, an assessment of one jurisdiction is not directly comparable to that of another.

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<sup>1</sup> The assessment team comprised Keith Bell (formerly Office of the Superintendent of Financial Institutions, Canada) and Marc Schrijver (WB; formerly Dutch Central Bank).

5. **An assessment of compliance with the BCPs is not, and is not intended to be, an exact science.** Reaching conclusions required judgments by the assessment team. Nevertheless, by adhering to a common agreed methodology, the assessment should provide the Lebanese authorities with an internationally consistent measure of the quality of its banking supervision in relation to the CPs, which are internationally acknowledged as minimum standards. A high degree of compliance with the BCP should foster overall financial system stability; however, this will not guarantee it, nor will it prevent the failure of banks. Banking supervision cannot, and should not, provide an assurance that banks will not fail. In a market economy, failures are part of risk taking.

### ***Preconditions for effective banking supervision***

6. **An effective system of banking supervision needs to be able to effectively develop, implement, monitor, and enforce supervisory policies under normal and stressed economic and financial conditions.** Supervisors need to be able to respond to external conditions that can negatively affect banks or the banking system. There are a number of elements or preconditions that have a direct impact on the effectiveness of supervision in practice. While these preconditions are mostly outside the direct or sole jurisdiction of banking supervisors, it is incumbent on them to make the government and relevant authorities aware of material gaps that may adversely impact the efficiency or effectiveness of regulation and supervision of banks and/or have negative repercussions for supervisory objectives.

7. **The preconditions include:**

- sound and sustainable macroeconomic policies;
- a well-established framework for financial stability policy formulation;
- a well-developed public infrastructure;
- a clear framework for crisis management, recovery, and resolution;
- an appropriate level of systemic protection (or public safety net); and
- effective market discipline.

### **Macroeconomic policies**

8. See section on Risks and Resilience in this report.

### **Financial stability**

9. See section on Supervisory Oversight and Risk Mitigation, parts A and C.

### **Public infrastructure**

10. **The insolvency regime hampers access to credit.** Lebanon's insolvency law lacks provisions that are needed for a dynamic private sector and effective debt recovery (see section on Access to Finance and Financial Inclusion). Banks tend to negotiate informally with distressed borrowers, a practice that has been encouraged recently by a BdL circular promoting out-of-court

workout resolution. However, it is recommended that the insolvency law is modernized (a new insolvency law is awaiting consideration in parliament).

11. **Lebanon has adopted International Financial Reporting Standards and International Auditing Standards.** International Financial Reporting Standards (IFRS) were introduced in 1996 over a three-year period, applying first to companies quoted on the stock exchange, and then to banks and insurance companies, followed by all others. Further, external auditors are required by the Beirut Stock Exchange and the BCC to apply the International Standards on Auditing in auditing the financial statements of all listed companies and Lebanese banks, respectively.

12. **Significant improvements are being made on the credit reporting system.** In Lebanon, the only source of information used by the lenders to assess borrowers' credit risk is a Public Credit Registry (PCR) hosted by the BdL. The PCR collects and disseminates both positive and negative information through two distinct systems, the Central Office of Credit Risk and the Central Office of Returned Checks. It is currently undergoing substantial modernization to automate systems and to eliminate the collection threshold currently set at US\$3,000 (to be completed by December 2016).

13. **The payment system has been significantly enhanced in the last few years.** Progress remains to be made concerning its legal framework and supervision (see paragraphs 36 and 37).

### Financial safety nets and crisis management

See section on the Financial Sector Safety Net.

### Market discipline

14. **Lebanon has in place a framework that promotes market discipline.** The BdL has a Corporate Governance Unit (CGU) that reports directly to the BdL's third vice governor. The CGU's mission is to raise awareness of the requirement for a thorough corporate governance culture in the financial and banking sectors and, in consequence, to promote transparency and the development of effective monitoring and controls. The CGU advocates (and follows the level of implementation of) international best practices and proposes regulations, policies, and systems aimed at developing corporate governance frameworks at banks and financial institutions. Notable is a BdL "Basic Circular"—first issued in 2006 and supplemented since—relating to the Boards of Directors and Board Committees of Lebanese Banks (BdL Circ 106 art 2 (26JUL06)).

15. **The sector remains competitive.** The sector comprises 48 commercial banks, 16 investment banks, and 5 Islamic banks. Over the past 20 years, the number of Lebanese banks (i.e., those with Lebanese shareholders and Lebanese management) has been reduced by approximately half, as a result of a consolidation process facilitated by legislation specifically drawn up to accommodate mergers (paragraph 49). The BdL's governor has, however, cautioned that mergers involving the largest 11 bank lenders will not be permitted, so as to preserve a competitive marketplace.

**Main findings**

16. **The framework for banking supervision has avoided major crises, with the BCC and BdL enjoying a strong reputation.** Roles and responsibilities are clear and the BCC has a broad set of supervisory powers at its disposal to ensure compliance with prudential rules. Still, further enhancements are necessary to buttress the supervisory architecture, as highlighted below.

**Mandate, independence and cooperation (CP 1–3)**

17. **A review of primary banking legislation is overdue, with extensive reliance on secondary legislation leading to a complex patchwork of regulation.** Acknowledging the difficulty created by the political situation, reforms (and subsequent periodic reviews) should be prepared for when opportunity arises, with the overall objective being to establish a more cohesive body of banking legislation that provides for greater precision and consistency.

18. **The BCC has unrestricted access to banks' debtor accounts, but information on the names of individual depositors is beyond its reach due to banking secrecy legislation.** While the BCC's senior management is of the view that this does not pose meaningful restrictions on prudential supervision, taking into account the ability to gather information on an aggregate basis (e.g., on deposit amounts by brackets, country of residence, maturity structure, and aggregate inflows and outflows), the lack of full access hinders prudential supervision (e.g., in-depth understanding and monitoring of funding structure) and is not in line with international best practices and, hence, should be reconsidered. It is noted though that this constraint does not apply to the AML/CFT regime, as the SIC is not bound to banking secrecy when discharging its duties.

19. **A thorough review of supervisory resources as a first step toward building further capacity appears warranted.** Increased complexity of financial services, more demanding international standards for supervisory effectiveness and a broadening of the BCC's responsibilities (now also including nonbank financial institutions and aspects pertaining to consumer protection) have stretched the BCC's capacity.

20. **There is no legal protection for BCC staff.** While BCC's senior management reports the entire absence of lawsuits against the supervisor and its staff for actions taken and/or omissions made while discharging their duties, it is not acceptable—and not in keeping with international best practice—that a supervisor have exposure to any such eventuality.

21. **Coordination and the avoidance of regulatory and supervisory gaps is facilitated through the governor presiding as chairman of the BdL's Central Council and its HBC, and as chairman for each of the SIC and the CMA.** In addition, the BCC chairman is a member of both the SIC and the CMA and formally presents the BCC's recommendation to the HBC for supervisory action on a registered bank, when judged necessary. While such a coordination mechanism appears to work in Lebanon, it may be argued that it does so overwhelmingly because the office of the governor is its nodal point.

22. **While instruments for cooperation and collaboration, such as MOUs, are in place, Lebanon’s Law of 03SEP56 “On Banking Secrecy” reduces their practical effectiveness compared to other jurisdictions.** In addition, there have occurred instances where either an MOU (or informal arrangements) has not been set in place for the advantage of BCC/BdL or where an MOU that was already in place has proved inoperative in an important particular.

#### Permissible activities, licensing, transfer of ownership, and major acquisitions (CP 4–7)

23. **The definition of a “bank” and the permissible activities of banking institutions are clearly defined and subject to supervision, while the use of the word “bank” in names is controlled.**

24. **The Central Council of the BdL is the licensing authority where the BCC, in its capacity as supervisor, advises the Central Council.** This authority includes the power to set licensing criteria and reject applications for establishments that do not meet the criteria. It should be noted that licenses to commercial banks have not been granted in Lebanon since 1992, although licenses have been issued to investment banks and Islamic banks (since the latter’s establishment was permitted in 2004).

25. **Definitions of “significant ownership and “controlling interest” should be provided in primary legislation.** This could be accomplished at the time of a thorough review and update of legislation relating to banks. Indeed, it would be constructive for there to be also clearly stated in legislation definitions of “beneficial owner” and “ultimate beneficial ownership.” The definitions appearing in the glossary to the FATF Recommendations are instructive in this regard.

26. **Banks must be required to notify the BCC immediately of any legal case against any “significant shareholder,” as defined.** While it is understood that there is a close relationship between the BCC and its banks, it would be constructive if a formal requirement was created for a bank to alert the BCC as soon as it becomes aware of any material information that may negatively affect the suitability of any significant shareholder of—or a party that has controlling interests in—the bank. Moreover, insofar as resignations of members of the BOD and senior management are events of which banks are immediately aware, there should not be a delay of up to two weeks in reporting the event; reporting should be immediate.

27. **The Central Council of the BdL has the power to approve or reject, and impose prudential conditions on, major acquisitions or investments by a bank, against prescribed criteria.** It is the BCC’s role to provide analysis of the intended investment and a recommendation to the Central Council.

#### Supervisory approach, process, and reporting (CP 8-10)

28. **While significant progress has been made in raising supervisory standards, the supervisory approach does not yet support a fully integrated view on the risk profile of individual banks.** The BCC is in the process of developing an integrated risk-based supervisory

approach, aided by IMF-supported technical assistance (TA). Onsite inspections are comprehensive and the BCC has a broad range of reports at its disposal to assess the financial soundness of individual banks. However, further efforts remain necessary to fully consolidate insights obtained via onsite and offsite supervision into an integrated risk assessment. The development of a risk matrix that combines financial indicators for capital adequacy, asset quality, market risks, profitability, and funding and liquidity, with qualitative findings on a bank's business model, its internal controls, organization, and management strength will be a significant step forward.

29. **The BCC collects, reviews, and analyzes prudential reports and statistical returns from banks on a solo and consolidated basis, and independently verifies these reports through onsite examinations.** It remains, however, that the existence of the Law on Banking Secrecy denies the BCC the power to access all records for the furtherance of supervisory work.

30. **Many supervisors have developed a practice of discussing the supervisory risk assessment with banks' Board members, and the BCC may want to consider, in due course, the introduction of a similar practice in Lebanon.** The BCC uses a range of techniques and tools to implement the supervisory approach. However, more frequent contact with executive and non-executive Board members, including at the end of onsite inspections, would also help to strengthen Board accountability and provide an important input for BCC staff's assessment of the quality and risk awareness of banks' senior management.

### Corrective and sanctioning powers (CP11)

31. **Though the Central Council of the BdL has a range of enforcement powers (e.g., take corrective action, impose sanctions, revoke license), neither the BCC nor the Central Council has the power to sanctions management and/or the Board, or individuals therein.** Only banks may be sanctioned, not individuals. However, Law 308 grants the Central Council the right to object or reject any Lebanese bank's Board member and to prevent him/her from continuing his/her mandate. Besides, Law 192 grants the BdL, only in cases of mergers, the right to sue officials of the merged banks before competent courts in case of misconduct or breaches of the law.

32. **Corrective action can be delayed because of the set-up of the supervisory processes.** Under current practices, it can take 2–3 months to address an early indicator warning raised by offsite supervision. However, the BCC is currently working on a project of receiving data online near real time, which will shorten the process. Full-scope inspections used to take several months for large banks; however, any material issues encountered during onsite missions may be raised and reported to the Board immediately. The BCC is aware of this situation and is working on improving the turnaround time of inspection reports with the help of TA.

### Consolidated and cross-border supervision (CP 12–13)

33. **The BCC exercises consolidated supervision over the banks operating in Lebanon (including subsidiaries and branches abroad).** Consideration should be given to the development

of an onsite inspection program of branches and subsidiaries of Lebanese banks abroad. Moreover, while currently of modest proportions, the insurance industry is growing.

34. **Interagency and cross-border cooperation need to be strengthened.** Coordination and avoidance of regulatory and supervisory gaps is achieved through the BdL governor, who holds key positions in the various supervisory agencies. Formal interagency coordination arrangements are lacking in some cases, with the responsibility placed on a small group of individuals. The expansion of Lebanese banks in the region has made strengthening cross-border coordination an urgent task. The BCC, as home supervisor, has yet to finalize the establishment of two supervisory colleges. Banking secrecy poses challenges in sharing confidential information with host supervisors.

#### Corporate governance (CP 14)

35. **The BCC determines that banks and banking groups have robust corporate governance policies and procedures.** This covers strategic direction, group, and organizational structure, control environment, responsibilities of the Board and senior management, and compensation. It could bring more depth to the assessment by organizing formal meetings with executive and non-executive Board members in order to discuss the strategy, risk appetite, risk policies, risk profile, and the way they oversee senior management together with on and off-site supervisors.

#### Risk-management and capital adequacy (CP 15–25)

36. **The ongoing development and implementation of the Supervisory Review Evaluation Process (SREP) will strengthen the link between banks' risk profiles, risk management and risk mitigation systems, and capital planning.** Regulatory standards for capital adequacy are generally appropriate and exceed minimum requirements set under the Third Basel Accord. As of end-2015, Lebanese banks are expected to maintain a CET1 ratio and conservation buffer of at least 8 percent, vis-à-vis 7 percent by 2019 under Basel III. The only deviation from international minimum standards relates to the risk weight assigned to foreign-currency-denominated securities issued by the BdL, which carry a 50 percent risk weight (instead of 100 percent, as per the Basel Accord). Annual submission of the Internal Capital Adequacy Assessment Processes (ICAAP) was made mandatory in 2015, and the BCC is expecting to receive banks' assessments for 2015 before end-May 2016. Comprehensive reviews thereof, via the SREP, will allow for a more risk-sensitive assessment of capital adequacy and also deepen the BCC's assessment of banks' vulnerabilities.

37. **Despite extensive onsite inspections and reviews by external auditors, the current framework governing problem assets, provisions, and reserves has a number of weaknesses.** Weaknesses mostly relate to the treatment of renewed, refinanced, and restructured loans, as the BCC has very limited information on such loans, and classification rules are not sufficiently stringent. In addition, the BCC should deepen its view on material circumvention of classification and provisioning standards. Despite the observance of significant misclassification by several banks for a number of consecutive years, the BCC was not able to address the root cause of this problem effectively.

38. **The BCC determines that banks have adequate policies and procedures to manage country risk, as well as to manage concentration risk, and monitors the prudential limits set by the BdL to restrict large exposures to single counterparties and groups of connected counterparties.** Nevertheless, it is noted that there are no explicit limits required for own sovereign concentration, although the sovereign concentration risk is high. In addition, at the time of the assessment, several banks had substantive deviations from the large exposure limits.

39. **It is possible that related parties (and, therefore, related-party transactions) are not identified.** As a result of the bank secrecy law, the BCC does not have full access to depositors' information, as numbered accounts are permitted (with beneficiaries being known only to "the manager of the bank or his deputy"). Ultimate beneficial ownership of corporate accounts may not be easily discernible. Furthermore, only credits and not all related-party transactions (e.g., deposits taken) are required to be at an arm's length basis.

40. **Many banks have a very high interest rate risk in the banking book that is not fully mitigated through risk-management practices and additional capital buffers.** The BCC is in the process of implementing the ICAAP/SREP, which would align the risk appetite, risk profile, quality of risk management, and capital strength. This covers both market risk and interest rate risk in the banking book.

41. **It is recommended that the BCC implement a liquidity ratio for LBP or the LCR.** The BCC uses a liquidity ratio in foreign currency of effectively 25 percent, but there is no liquidity ratio in the LBP. The BCC uses the LCR as a monitoring tool, but banks are not yet required to adhere to this ratio, even though available data indicates that all banks have an LCR of more than 100 percent. The introduction of a minimum liquidity ratio in LBP, in addition to existing requirements in foreign currency, would provide a further improvement of the regulatory framework and help strengthen the reputation of the Lebanese banking sector and of its regulator and supervisor.

42. **Bank secrecy hinders the BCC in developing an in-depth understanding of the funding structure of a bank and its liquidity risk profile.** As highlighted in para. 23, information on the names of individual depositors is beyond the supervisor's reach due to prevailing banking secrecy legislation. While the BCC's senior management is of the view that this does not pose meaningful restrictions on prudential supervision, the lack of full access poses limitations on prudential supervision and, in particular, may hamper in-depth analyses of the funding structure of banks.

43. **While the supervisory regime for operational risk management is largely compliant with the international standard, scope for improvement remains.** Although the requirements around business continuity seem sufficient, there appears to be a lack of evidence of adequate testing of banks' business continuity plans (BCP). For these banks, there is no clarity on whether their BCPs are adequate and whether BCP requirements have been implemented effectively. In addition, there are no requirements for banks to report to the supervisor any operational losses on a periodic basis.

### Controls, audit, accounting, disclosure (CP 26–28)

44. **The BCC determines that banks have adequate internal control frameworks, appropriate internal audit and compliance functions to test adherence to these controls, as well as applicable laws and regulations.** The BCC determines that banks maintain adequate and reliable records, prepare financial statements in accordance with the IFRS, and annually publish information that fairly reflects their financial condition and performance, and bears an independent external auditor's opinion. The BCC determines that banks regularly publish information that adequately reflects the banks' true financial condition, performance, risk exposures, risk management strategies, and corporate governance policies and processes (which is required by regulation).

### Abuse of financial services (CP 29)

45. **Joint stock companies and partnerships limited by shares are allowed to issue "bearer shares" and "to order" shares, which hinders banks' efforts to identify the (ultimate) beneficial owner in all circumstances.** While there are no official statistics on the use of bearer shares, and the SIC views the number of bank accounts operated by companies with such shares to be limited, companies using bearer shares inherently present elevated ML/TF risks. Under current legislation, banks are legally required to identify the beneficial owner for their customers, including for offshore companies and bearer shares companies, and to also classify them as high risk (prompting enhanced due-diligence measures). However, engaging in transactions of any type with companies having bearer shares (or owned by such companies) was only prohibited in 2016 via the issuance of Intermediate Circular 411 (29FEB16), disallowing new relationships with such companies and requiring banks to rectify existing violations within a maximum period of two years from the issuance of the circular.

46. **The authorities should ensure that they have a comprehensive understanding of the ML/TF risks that the banking sector faces and adapt their supervisory approach accordingly.** While the legislative underpinnings to an adequate defense system against ML/TF are in place—and have worked to protect the banking sector's access to a correspondent network predisposed to "de-risking"—the assessors' query to what extent the authorities have a comprehensive understanding of how the banking sector could be used, intentionally or unintentionally for illicit activities (e.g., corruption, tax evasion, cybercrime) and, moreover, whether supervisory procedures are sufficient for the level of risk that Lebanon faces.

47. **Given the size—and resulting vulnerability—of the financial system, there appears to be a relatively modest (albeit increasing in past years) number of suspicious transactions reported.** While the assessors found no evidence that banks do not adequately identify suspicious transactions, and the authorities deem the level of reporting to be adequate, the assessors believe that the authorities should be alert to the possibility that more transactions that are currently not reported could be suspicious.

**Summary Compliance with the Basel Core Principles**

<b>Appendix IV Table 1. Lebanon: Summary Compliance with the Basel Core Principles</b>	
<b>Core Principle</b>	<b>Comments</b>
1. Responsibilities, objectives and powers	Banking secrecy law impedes full access of the BCC to banks' records, a clear impediment to effective supervision.
2. Independence, accountability, resourcing and legal protection for supervisors	No legal protection for supervisors (a long-standing deficiency). Desirable to publish the BCC's annual objectives to be achieved in the pursuit of its mission and, moreover, to report on its achievements in the past period. Ongoing move to risk-based supervision is a priority.
3. Cooperation and collaboration	Banking secrecy reduces effectiveness in the application of MOUs. MOUs are a useful tool, but some deficiencies have emerged in practice (e.g., failure of counterparty to advise the BCC of impending sanction).
4. Permissible activities	No comments.
5. Licensing criteria	No comments.
6. Transfer of significant ownership	Definition of "controlling interest" and "significant ownership" should be in legislation, as should those of "beneficial owner" and "ultimate beneficial owner." Incorporate an "acting in concert" provision. Notification to the BCC of legal cases against major shareholders, and changes in the Board of Directors, should be immediate.
7. Major acquisitions	Develop a circular setting criteria upon which to judge proposed acquisitions, considering more overseas expansion can be expected.
8. Supervisory approach	Supervisory approach does not (yet) support a clear view on the risk profile of an individual bank. Supervision is not organized in a way that facilitates integrated evaluation of risk. Resolvability assessment and measures for dealing with stress are not identified.
9. Supervisory techniques and tools	Lacking an integrated supervisory approach (see CP 8) hinders coherent planning of supervisory activities and the appropriate use of supervisory tools and techniques. There is limited formal contact with the Board and senior management of the banks (though there is informal contact).
10. Supervisory reporting	Banking secrecy precludes the BCC from obtaining detailed information on banks' deposit books. There is no documented process for periodic review of returns collected from banks.
11. Corrective and sanctioning powers of supervisors	Corrective actions are delayed as a result of the duration of the supervisory process. Current supervisory approach makes it difficult to design and implement effective supervisory mitigation strategies. The BCC and the Central Council lack the authority to sanction individuals.
12. Consolidated supervision	There are no onsite inspection program of branches and subsidiaries of Lebanese banks abroad. No dialogue with Insurance Control Commission regarding risks posed by insurance companies owned by banking groups.
13. Home-host relationships	The BCC, in its capacity as home supervisor, has yet to finalize the establishment of two supervisory colleges. While various MOUs have been signed, activation of all provisions remains pending in many cases. Cross-border cooperation is hampered by banking secrecy legislation, and absence of legal provisions that guide information exchange.

<b>Appendix IV Table 1. Lebanon: Summary Compliance with the Basel Core Principles (concluded)</b>	
<b>Core Principle</b>	<b>Comments</b>
14. Corporate governance	No comments.
15. Risk management process	There are no requirements to prepare capital contingency plans. There are no requirements for appropriately reflecting risks in internal pricing.
16. Capital adequacy	There is no clear picture whether the capital buffer of individual banks is sufficient.
17. Credit risk	There are no requirements to have well-defined criteria for renewed and refinanced loans—no data on this category is available.
18. Problem assets, provisions, and reserves	Classification rules have several weaknesses (restructuring, collateral, connected borrowers). There is limited information on quality of the loan portfolio available on a regular basis (e.g., days past due, level of renewed, refinanced and restructured loans). The view on material circumvention of classification and provisioning standards is not convincing; a serious misclassification problem is not yet effectively addressed.
19. Concentration risk and large exposure limits	There are no limits on sovereign risk where there is a large concentration.
20. Transactions with related parties	Deposits are not covered (banking secrecy law).
21. Country and transfer risks	There are limited requirements to monitor developments.
22. Market risk	No comments.
23. Interest rate risk in the banking book	There is no determination of whether risk appetite, risk limit, risk profile, and capital strength of the bank are consistent.
24. Liquidity risk	FX liquidity threshold is low at 10 percent; there is no threshold for LBP. There is no requirement to assess sale capacity of HQLA.
25. Operational risk	Many banks don't have adequate business continuity plans. There are no requirements to report on the nature and impact of operational losses.
26. Internal control and audit	No comments.
27. Financial reporting and external audit	No comments.
28. Disclosure and transparency	No comments.
29. Abuse of financial services	Capacity to issue "bearer" or "to order" shares hinders the banks' efforts to identify a client's ultimate beneficial owner. A comprehensive understanding of AML/CFT risks facing the sector is required, and with supervisory approaches to match. Contra-indicated by the financial system's size—and vulnerability—suspicious transaction reports are relatively modest in number.

<b>Appendix IV Table 2. Lebanon: Recommended Actions to Improve Compliance with the BCP and the Effectiveness of Regulatory and Supervisory Frameworks</b>	
<b>Core Principle</b>	<b>Recommended Action</b>
1. Responsibilities, objectives and powers	<p>Enable the BCC to lift bank secrecy restrictions as needed to achieve its supervisory objectives (similar to existing authorization of the SIC).</p> <p>Develop an up-to-date, cohesive body of primary and secondary legislation for the banking industry and its supervisor. Ensure future revisions on a set timescale.</p>
2. Independence, accountability, resourcing and legal protection for supervisors	<p>Introduce legal protection for BCC staff.</p> <p>Introduce a requirement to disclose the reasons of the removal from office of BdL and BCC senior officials.</p> <p>Evaluate adequacy of the BCC's supervisory resources in light of the gradual expansion of its mandate.</p> <p>Publish on an annual basis the BCC's objectives for the delivery of its mission and render a public accounting of performance in an appropriate forum, such as before a committee of the legislature.</p> <p>Finalize implementation of risk-based supervision for banks, with a view to improving the allocation of scarce supervisory resources.</p>
3. Cooperation and collaboration	Establish links (formal or informal) for cooperation between the BCC (or the BdL) and the Insurance Control Commission.
4. Permissible activities	Not applicable.
5. Licensing criteria	Precisely define variously used terms to describe "fit and proper" attributes of shareholders and senior managers (i.e., "material capabilities and moral integrity," "material and moral competence"). (See CP1 above regarding legislative development.)
6. Transfer of significant ownership	<p>Specify definitions for "beneficial owner" and "ultimate beneficial ownership" in (secondary) legislation.</p> <p>Provide precise definitions of "significant ownership" and "controlling interest" in primary legislation. (See CP1 above regarding legislative development.)</p> <p>Strengthen requirements to promptly inform about any information that may negatively affect the suitability of significant shareholders.</p>
7. Major acquisitions	Provide supervisory guidance on the prudential assessment of foreign investments of Lebanese banks.
8. Supervisory approach	<p>Develop and implement integrated risk profile for all banks, proportionate to their systemic importance.</p> <p>Develop methodology for identifying banks that are systemically important.</p> <p>Consider the introduction of a single point of contact for the supervision on each bank.</p> <p>Introduce recovery and resolution planning requirements.</p> <p>Develop and implement a framework for handling distressed banks.</p>
9. Supervisory techniques and tools	<p>Align supervisory procedures and planning cycle with banks' integrated risk profile.</p> <p>Increase the frequency of meetings with banks' Board members.</p>

<b>Appendix IV Table 2. Lebanon: Recommended Actions to Improve Compliance with the BCP and the Effectiveness of Regulatory and Supervisory Frameworks (continued)</b>	
<b>Core Principle</b>	<b>Recommended Action</b>
10. Supervisory reporting	Establish a documented process for the periodic review of all prudential and statistical returns collected from the banks.
11. Corrective and sanctioning powers of supervisors	Shorten the lead time for onsite inspections. Extend to perimeter of supervisory sanctioning powers to cover individuals.
12. Consolidated supervision	Develop an inspection program for foreign branches and subsidiaries of Lebanese banks. Formalize coordination arrangements between the BCC and the ICC.
13. Home-host relationships	Establish supervisory colleges for Lebanese banks with material cross border operations. Remove restrictions on the BCC's ability to share supervisory information with host authorities, due to banking secrecy. Consider options for improving cross-border coordination in the area of recovery and resolution planning.
14. Corporate governance	Deepen engagement with banks' executive and non-executive Board members on (i) business strategy and risk appetite; and (ii) governance and risk oversight.
15. Risk management process	Adopt requirements for banks to prepare comprehensive recovery plans. Adopt requirements for appropriately reflecting risks in internal pricing.
16. Capital adequacy	Complete the implementation of Pillar II in order to better align banks' risk appetite, risk profile, corporate governance, and risk management with internal capital planning. Increase the risk weight of foreign-currency-denominated BdL exposures in accordance with Basel II.
17. Credit risk	Formalize the requirement for minimizing conflicts of interest in credit decisions.
18. Problem assets, provisions, and reserves	Revise loan classification rules (e.g., restructured loans, cash collateral, and connected borrowers). Revise loan-review methodology to develop a profound view on the circumvention of classification and provisioning standards; address problem of misclassification effectively. Require banks to submit on a regular basis more detailed information on the quality of the loan portfolio (e.g., days past due, level of renewed, refinanced, and restructured loans).
19. Concentration risk and large exposure limits	Not applicable.
20. Transactions with related parties	Clarify large exposure limits while providing the BCC with supervisory discretion to impose more stringent limitations.
21. Country and transfer risks	Specify supervisory expectations for managing country risk and transfer risk.

<b>Appendix IV Table 2. Lebanon: Recommended Actions to Improve Compliance with the BCP and the Effectiveness of Regulatory and Supervisory Frameworks (concluded)</b>	
<b>Core Principle</b>	<b>Recommended Action</b>
22. Market risk	Strengthen supervisory assessment of banks' models for measuring market risks.
23. Interest rate risk in the banking book	Ensure that interest rate risk management is consistent with risk appetite, risk profile, and systemic relevance of banks. Ensure that the banks implement economic value at risk measurement systems.
24. Liquidity risk	Formalize the LCR as regulatory standard for liquidity risk-management purposes. Assess banks' capacity to promptly liquidate their holdings of high-quality liquid assets at little or no loss in value. Enable the BCC to lift bank secrecy restrictions, as needed, to develop a comprehensive overview of banks' funding structures.
25. Operational risk	Conduct thematic inspection to identify and address gaps in the implementation of disaster recovery and business continuity requirements. Consider requiring banks to report their operational loss data on a monthly basis. Clarify supervisory expectations for the management of outsourcing risks pertaining to the use of third-party real estate appraisers. Step up efforts to identify, on a more frequent basis, common points of exposures to operational risks.
26. Internal control and audit	Not applicable.
27. Financial reporting and external audit	Not applicable.
28. Disclosure and transparency	Not applicable.
29. Abuse of financial services	Prohibit banks' (and other financial institutions') dealing with companies with "to order" shares. Mitigate risks of banks' currently dealing with companies that have issued "bearer" shares and/or "to order" shares (e.g., by immobilization). Ensure the authorities' comprehensive understanding of all AML/CFT risks faced by the sector and the adequacy of supervisory procedures in light of those risks. Determine the adequacy of banks' reporting of suspicious transactions. Conduct thematic inspections to ascertain compliance with new AML/CFT legislation.

### ***Authorities' response to the assessment***

48. **The Banking Control Commission (BCC) highly appreciates the technical support provided by the representatives of the IMF and World Bank in relation to the fulfillment of the BCP assessment.** In line with the BCP assessment a top-down stress test was conducted by the FSAP team in cooperation with the BCC, and complemented by a bottom-up test conducted by the six largest Lebanese banking groups with three adverse scenarios, at the time of a challenging environment due to the local instability and geopolitical risks surrounding Lebanon. It must be noted that all of the discussions, meetings, inputs, analysis, and comments made during every stage

of the process (based on the BCP detailed self-assessment of observance done by the BCC) brought forward essential added value to the effectiveness of the supervisory process.

49. **The BCC expects to utilize the assessment outcome as an opportunity to further improve and strengthen Lebanon’s banking supervisory system.** In fact, the BCC has already initiated an action plan to address most of the mission team’s recommendations under an appropriate timetable. At the same time, the BCC disagrees with many of other CP ratings in the drafted final assessment report, with the judgment that the ratings do not adequately reflect the overall strength and effectiveness of the Lebanese banking regulatory and supervisory system. The comments are going to be identified under the four main issues:

- banking secrecy (CP1, CP3 & CP13);
- supervisory approach (CP8);
- capital adequacy (CP16); and
- problem assets, provisions and reserves (CP18).

The BCC will reiterate a number of the substantive actions taken by the regulatory and supervisory bodies in Lebanon, but are not fully reflected in the report. In particular, the BCC will provide additional arguments for the aforementioned CPs in order to bring greater balance to the mission team’s assessment.

### Banking secrecy

50. **The BCC strongly disagrees that Banking Secrecy impedes prudential supervision, the existence of this law has been misconceived or overstated.** In this context, we reiterate that banking Secrecy is applied in Lebanon, and that banks, as a result, are forbidden by law to disclose even to BCC the names of deposit account holders and their respective balances. But the legal framework provides certain exemptions, allowing banks to disclose full details to the BCC of (i) accounts of debtors (e.g., overdrafts, loans, discounted bills, advances, trade finance); and (ii) depositor saving accounts (creditor accounts) in case they are pledged as collateral against credit facilities granted to a client. The legal framework allows for exchange of information between competent authorities on creditor accounts and in case of suspected transactions such exchange is done via the SIC (with notification of the BCC). Also, article 6 of the Banking Secrecy law states that banks are allowed to confidentially exchange between themselves any information related to their clients’ debit accounts. Additionally, BCC has all the information on creditor accounts on an aggregate level (e.g., deposit balances, broken down by geographical location, branches, maturity, country of residence, related parties, new deposits, withdrawals). Furthermore, the SIC and its examiners are not bound by Banking Secrecy, and they can examine any account, be it a credit or debit account, which they do on a periodic basis, and send a copy of their reports to the BCC to be incorporated in the overall risk assessment of a bank.

## Supervisory approach

51. **The BCC believes in the need to continuously improve its supervisory approach and agrees that improvements could be made to enhance the overall supervisory approach.**

Nevertheless, the BCC believes that its existent supervisory approach has allowed it to successfully identify and to deal with the risks facing banks individually and collectively, even in times of major stress. This is the result of an effective supervision that takes into consideration the systemic importance of banks, comprehensively addresses all types of risks, and hinges on the continuous and effective communication and information sharing among its different departments. Information coming from the different departments is fully integrated at the level of offsite as well as onsite supervisors, thus ensuring effective supervision. The BCC has full understanding of the risk profile of each bank, and of the banking sector as a whole, and it strongly disagrees with the assessment of this principle.

## Capital adequacy

52. **The BCC affirms that the level of capitalization of the Lebanese banking sector is sufficient and adequate.** The Capital Adequacy Ratios (CET1, Tier 1 and total capital) for the Lebanese banking sector as of end-June 2015, are 10.2 percent, 13.3 percent, and 14.4 percent respectively, well above the Basel III Capital requirements, including the Capital Conservation Buffer (7 percent, 8.5 percent, and 10.5 percent). The Lebanese banking sector maintains high quality Capital constituents, where CET1 represents 71 percent of total capital and Tier 1 capital represents 92 percent of total capital. Since 2009, the BCC complements the risk-based capital ratios with an additional measure (the leverage ratio). The leverage ratios for the Lebanese banking sector as of end-June 2015 are as follows:

CET1 leverage ratio	5.3 percent
Tier 1 leverage ratio	6.8 percent 1/
Total capital leverage ratio	7.4 percent

1/ Compared to a ratio of 3% proposed by Basel III. No bank has a Tier 1 leverage ratio below 5 percent.

53. **The BCC has implemented the ICAAP since 2010, where two ICAAPs have been submitted by Lebanese banks (for end-December 2010 and end-December 2012).** BCC circular no. 283, dated October 6, 2015, now requires banks to submit their ICAAPs on a yearly basis. Pillar 2 risks are currently reviewed and incorporated in the risk assessment report of each bank.

54. **When assessing principle 16, the following two issues were mentioned several times and the BCC believes that it should provide the following clarifications.** First, on the risk weight of 50 percent for BdL exposures in foreign currencies, the BdL places banks' foreign currency deposits with foreign central banks and prime banks whose credit assessment is BBB and above. Hence, the BdL is of the view that the risk weight of banks' exposure to the BdL with regard to placements in foreign currency should be equivalent to the risk weight applied to claims on foreign

central banks and prime banks, which ranges from 0–50 percent (depending on their rating). Second, the BCC regularly conducts scenario analyses, amongst others, to analyze the potential impact of a downgrade of Lebanon’s sovereign rating to a level below B-. Such analyses indicate that a downgrade to CCC+ would not cause all banks to breach minimum required capital ratios.

### Problem assets, provisions and reserves

55. **The BCC strongly disagrees with the assessment of problem assets, provisioning, and reserves.** The applicable regulatory framework prescribes the criteria for supervisory loan classification (divided into six categories, see BC 58) and sets the framework for following up on all loans (e.g., yearly renewal, yearly onsite visits by the bank, up-to-date audited financials, et cetera). A special care is required for loans classified as Class 3 (“follow up and regularization”) whereby the bank should set a plan to decrease the exposure and follow up on this plan at least semi-annually. As for loans classified in classes 4 and 5 (“substandard” and “doubtful,” respectively), each bank should establish a specialized committee that closely monitors these loans on a quarterly basis and will follow up on the progress regarding collection and will reassess the adequacy of provisioning in case no collection is deemed probable.

56. **It is inaccurate to say BCC has limited information on the quality of the loan portfolio.**

- The BCC obtains information via onsite inspections that cover at least 50 percent of banks’ portfolio. Regardless of the size of the sample, every file selected is thoroughly examined and scrutinized, and all relevant details affecting the credit risk and the loan classification are mentioned in the work sheet. Moreover, and in case of insufficient data in a certain file, a deadline is given to provide the missing documents, and the onsite examiner will reassess the classification of the file accordingly. Second, as per BC 58, classes 1 and 2 aren’t only considered from the perspective of completeness of files, but is based on the adequacy of the client’s repayment capacity and overall sound financial position. This can be clearly seen from the remarks mentioned by onsite examiners for loans classified as class 2 in the tables of classification attached to the onsite report.
- The definition of a connected group is mainly based on the ownership structure. A connected group might have different classifications since classification is based on financials, repayment capacity, type of business of each unit of the group. However, in case there is a proof of a connectivity in funding between 2 companies of the same group, this may lead to a common risk and subsequently same classification.
- As per BC 135, restructured loans are not immediately upgraded to the performing category; instead, such upgrading requires prior approval of BCC. The BCC will thoroughly study the restructuring plan to evaluate its feasibility, and will only allow an upgrade (and possible release of the associated provision) if the bank can determine that the client has been meeting its obligations under the rescheduling plan.