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# Lebanon – at critical crossroads

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## Political uncertainty compounds acute economic risks

Unprecedented cross-sectarian protests have come at a challenging juncture for the economy, increasing hard landing risks, in our view. Banque du Liban (BdL) Governor Salame's recent comments highlight the urgency for a peaceful political resolution of the crisis "in days". While the political class has generally heeded his advice and warnings, the blockage appears to persist so far and the economy is coming to a halt.

## Technocratic Cabinet – a silver lining but no easy solution

A technocratic Cabinet with a clear reform mandate and implementation ability may restore domestic confidence, gain international support and buy time. But it could inherit tough economic conditions and still face difficulty in implementing austerity. Any new Cabinet would need support from existing political parties and in parliament. In the lack of major opposition parties, parliamentary elections may not bring in much change.

## Current reform agenda – ambitious, overdue, or unlikely

The 2020 budget effort is commendable as we estimate it targets a debt-stabilizing primary balance (4-5% of GDP). In our view, it is unlikely to be met due to a) weak growth; b) 2019 potential slippage; c) unclear capex accounting; and, d) unrealistic level for Electricite du Liban (EdL) transfers. One-off revenue contributions from BdL and banks mean the deficit will likely widen again in 2021. EdL breakeven target date of end-2021 is unlikely to be met. Targeted privatizations proved politically divisive in the past. Structural governance reforms may bridge the gap with donors but no financial support appears imminent.

## Vulnerable to a sudden stop

Gross liquid Fx resources of the banking system (BdL + banks) of cUS$44bn would be depleted in 3.3-4.3 months in the event of an Fx deposit bank run. We estimate US$10.3bn in Fx deposits come due each month (US$7.6bn from residents; US$2.8bn from non-residents). Every 1ppt increase in dollarization generates US$1.7bn in Fx demand. Current ATM withdrawal limits do not appear uniform across banks and may be tightened. Should capital controls be imposed, BdL could instead sustain the shock for 1-2 years but the Lebanese banking sector funding model could be affected sustainably. In the absence of inflows, reforms and confidence, this would only delay a crisis.

## Funding model is running out of steam

Prior to the political crisis, our models show an annual external funding gap of cUS$5.5bn (9.5% of GDP). Current external funding strains reflect: a) increasing external funding requirements; b) loss of market access; and, c) growing deposit outflows. To close the gap, non-resident deposits would need instead to grow organically in excess of 10%, versus the average 7% over the 2003-18 period. This would be challenging to achieve.

## Hard landing risks grow

Hard landing risks grow in the absence of a political settlement that could restore confidence. A hard landing could involve a sharp real exchange rate adjustment, deep debt restructuring, large banking sector recapitalization costs and deposit bail-ins.

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# Political reset increases uncertainty

Ongoing unprecedented cross-sectarian street protests keep political outcomes uncertain and make economic manoeuvring more challenging. Protests also highlight the difficulty to implement fiscal austerity.

### Government attempting to weather the storm

Factions in the government appear to be resisting for now protestors' demands, setting up a continued standoff. These demands include resignation of the current Cabinet and the setup of a technocratic Cabinet that would oversee electoral law change and early parliamentary elections. Our interpretation of protestors' demands and slogans is that the protestors feel that the current political class has no moral authority to impose austerity on the population. Protestors' response to PM Hariri's measures could be highlighting the erosion of the political capital of the current Administration.

PM Hariri has secured support from most political parties for his announced reform plan, but 4 ministers from PM Hariri's Christian allies resigned. Continued street pressure could push the two centrist PSP Cabinet ministers to resign. However, a third of the 30-member Cabinet or the PM needs to walk out for the Cabinet to be considered resigned. Most political parties are represented in the current Cabinet and thus may have a vested interest in maintaining it. A Cabinet reshuffle through constitutional means may be in the cards, as implied by recent pronouncements. Hezbollah opposed Cabinet resignation. Premature Cabinet resignation may add to the uncertainty. Army neutrality is key.

### Technocratic Cabinet could face its own set of challenges

Any new Cabinet would need support from existing political parties and parliament. Given a lack of major opposition parties, parliamentary elections may not bring much change. With a disciplined and mobilized base, the pro-Iran March 8 Alliance could make further political gains and weaken prospects for international support.

There is a potential silver lining. Street pressure may increase sufficiently to impose urgency on the political class to allow a technocratic Cabinet to be formed with a clear reformist mandate. It is unclear if PM Hariri would lead the Cabinet. The key objective would be to restore domestic and depositor confidence, and instil credibility to reforms.

Still, a potential technocratic Cabinet could inherit a much weaker economy with poor depositor confidence. It would need to rapidly reduce sovereign financing needs to a level commensurate with diminished financing sources, and restore domestic confidence. Austerity may still not be acceptable to the broader population, although it could be planned in a less regressive manner and accompanied with high-profile anti-corruption efforts.

Any international or multilateral support would be predicated on reform credentials, in our view. PM Hariri had been scheduled to visit Riyadh at month-end. We understand from recent meetings that GCC financial support is unlikely near-term. GCC support of a new Cabinet likely depends on reforms and domestic political orientations.

While an economic reset could impose high costs on the population and thus not be a voluntary policy option at this stage, a new technocratic non-affiliated Cabinet may be able to blame the previous administration for mismanagement and a hard landing. This would also carry important future political ramifications.

### Economy likely coming to a halt

Current conditions, if prolonged, may represent an unsustainable halt of the economy. A number of basic social services are not being undertaken and a bank holiday is currently in place. ATMs are being supplied, according to the Association of Banks in Lebanon (ABL). Some importers of essential goods warned against shortages due to roadblocks and difficulty accessing hard currency. We would assume imports are currently likely severely hampered, pushing the economy into recession.

# Reforms – ambitious, overdue or unlikely

### PM Hariri gains leverage within Cabinet

The reforms and the 2020 budget announced by PM Hariri in response to protests suggest he has gained leverage versus his coalition partners. A number of reforms, particularly in relation to CEDRE requirements, may have faced opposition from coalition partners previously. As such, PM Hariri's reform list may suggest a potential improvement on reform execution compared to the situation prior to the protests. Still, the pro-Iran March 8 Alliance remains the dominant force.

### Ambitious but overdue structural reform agenda

PM Hariri has set an ambitious legislative agenda for laws related to structural governance reforms. These include the setup of various regulatory bodies and of an anti-corruption authority, as well as laws on public procurement, competition, progressive taxation and oil sector transparency. The implementation of some of these reforms would support CEDRE disbursement. However, political developments are likely to also be monitored by donors.

We understand that a draft law on the recuperation of stolen public funds is being circulated in government circles. The Judges' Club submitted a request earlier in the week to the Special Investigation Commission (SIC) to lift banking secrecy and temporarily freeze all bank accounts with amounts larger than US$0.5bn for all politicians, officials and affiliated persons to allow investigations on the funds' sources.

### Privatizations considered over the medium-term

Authorities plan to study a number of privatizations, although none of them appears imminent and some proved politically divisive in the past. The telecom sector privatization is likely the one that could be executed on the fastest timescale, although we note that its planned privatization more than a decade ago was not completed. Privatization of the telecom sector would deprive the budget from annual revenues of cUS$1.1bn (1.9% of GDP). Other entities (Casino du Liban and Port of Beirut) contribute a much smaller amount (0.3% of GDP). Successful privatizations would nevertheless reduce operational and wage costs on the budget. Total budget transfers to cover wage costs at public institutions stood at US$0.3bn (0.6% of GDP in 2018).

**Table 1: Selected budget lines related to announced reforms**

| 2018 | LLbn | US$bn | % of GDP |
|---|---|---|---|
| **Selected income from public institutions and government properties (non-tax revenues)** | | | |
| Revenues from Casino Du Liban | 135 | 0.1 | 0.2 |
| Revenues from Port of Beirut | 110 | 0.1 | 0.1 |
| Transfer from the Telecom Surplus | 1,614 | 1.1 | 1.9 |
| **Domestic tax transfers from Tobacco Regie** | **131** | **0.1** | **0.2** |
| **Transfers to Public Institutions to Cover Salaries** | **495** | **0.3** | **0.6** |
| % of total personnel cost in the budget | 5.1 | | |
| **Capital expenditures - construction in progress** | | | |
| Displaced Fund | 10 | 0.0 | 0.0 |
| Council of the South | 57 | 0.0 | 0.1 |
| Council for Development and Reconstruction (CDR) | 463 | 0.3 | 0.5 |
| % of three Councils/Fund in total capital expenditures | 38.4 | | |

Source: MoF, BofA Merrill Lynch Global Research

**Table 2: Reform program announced by PM Hariri**

| | LLtrn | US$bn | % of GDP | Notes |
|---|---|---|---|---|
| **Fiscal measures for 2020** | | | | |
| Targeted 2020 budget deficit | 0.6 | 0.4 | 0.6 | |
| Banque du Liban (BdL) one-off waiver of interest income | 4.5 | 3.0 | 5.1 | |
| One-off 2% tax on bank profits | 0.6 | 0.4 | 0.7 | |
| Cap on Electricite du Liban (EdL) transfers | 1.5 | 1.0 | 1.7 | |
| 50% cut to salaries and indemnities of current and former Ministers, MPs and Presidents | - | - | - | |
| 70% reduction to budgets of Council for Reconstruction and Development, South Council, Displaced Fund | 0.9 | 0.6 | 1.0 | |
| Merging of some ministries and institutions | - | - | - | Recommendations by end-November 2019 |
| Moving capex off-budget | 1.4 | 0.9 | 1.6 | |
| Surplus of government institutions to be transferred to the MoF | - | - | - | |
| Review of real estate holdings and rents paid by the government | - | - | - | |
| Subsidy for exporters | - | - | - | |
| Commitment not to impose other taxes in 2020 | - | - | - | |
| Commitment to repaying all eurobond maturities for 2020 | - | - | - | |
| Freeze on public sector salaries | - | - | - | |
| **Electricity sector reform** | | | | |
| Increase in electricity production to 24/7 by 2H20 | - | - | - | |
| Reduction to 0 of EdL transfers by end-2021 | - | - | - | |
| Finalize bids offered to build Floating Storage Regasification Units | - | - | - | |
| Expediting deadline for bid submission | - | - | - | By 15 January 2020 |
| Expediting deadline for contract signature | - | - | - | By 22 February 2020 |
| **Governance reform** | | | | |
| Creation of regulatory bodies for the electricity, telecom, civil aviation and stock exchange | - | - | - | By 15 November 2019 |
| Creation of anti-corruption body | - | - | - | By year-end |
| Drafting law on recuperation of stolen public funds | - | - | - | By year-end |
| Ratifying law on settling illicit maritime construction | - | - | - | By year-end |
| Reducing tax evasion and smuggling by installing scanners on border gates | - | - | - | |
| Unification of public tenders of medicine | - | - | - | |
| Passing application decrees of existing laws in various areas | - | - | - | Includes oil sector transparency law |
| **Capital Investment Program (CIP) and other investments** | | | | |
| Approval of first phase of projects | - | - | - | By 7 November 2019 |
| Launch previously approved investment projects | 3.9 | 2.6 | 4.4 | |
| **CEDRE reforms** | | | | |
| Ratification of laws required by donors (including Public Procurement, Competition, Progressive Taxation) | - | - | - | By mid-2020 |
| **Privatizations** | | | | |
| Telecom sector | - | - | - | HCPP and external consultant to draw bid specifications |
| Beirut Stock Exchange, Middle East Airlines, Casino du Liban | - | - | - | Recommendations by year-end |
| Intra, Beirut Port, Tobacco Company | - | - | - | Recommendations by year-end |
| Tele Liban, National Agency Information | - | - | - | After cancellation of Information Ministry by November 2019 |
| **Social measures** | | | | |
| Increase in subsidized housing loans (financed by a soft loan from the Arab Fund for Economic & Social Development) | 0.2 | 0.2 | 0.3 | |
| Increase in beneficiaries of poverty alleviation program (financed through a US$0.1bn 30-year 1% soft loan from the World Bank) | 0.0 | 0.0 | 0.0 | |

Source: Bloomberg, press reports, BofA Merrill Lynch Global Research

### Ambitious 2020 budget targets debt stabilization

The 2020 budget, on paper, is consistent with central government debt stabilization. Our estimate of the targeted level of primary surplus in the revised 2020 budget is consistent with estimates of the medium-term debt-stabilizing primary balance (4-5% of GDP). PM Hariri announced the Cabinet approved the 2020 budget with a revised headline fiscal balance target of -0.6% of GDP. This compares to an earlier draft of -7.4% of GDP (-US$4.4bn). The revised primary balance is targeted at 4.6% of GDP (US$2.7bn), from 2.9% of GDP (US$1.7bn) in the original draft. This is an additional primary fiscal balance adjustment effort of 1.7ppt of GDP. Fiscal consolidation, if realized, is likely to slow down economic activity and could keep social tensions high.

### 2020 budget target unlikely to be met

The 2020 budget effort is commendable, in our view. The target is nevertheless unlikely to be met due to a) weak growth or recession caused by ongoing protests and the impact of planned fiscal consolidation; b) the full year 2019 outturn, as the base may be impacted by potential clearance of arrears; c) unclear accounting treatment of capital expenditures; and, d) unrealistic budgeted level for EdL transfers. Furthermore, BdL and banking sector contributions to the 2020 budget are pencilled in for now as one-off exceptional items.

### Unclear treatment of capital expenditures in the budget

Moving capital expenditures off-budget could be an accounting treatment embellishing the central government fiscal accounts. Authorities have suggested that, going forward, capital expenditures would be financed off-budget by concessional long-term loans rather than more expensive market financing. It is unclear if such financing is lined up for 2020, and, hence, the lack of any capital expenditures in 2020 would generate savings of US$0.9bn (1.6% of GDP) to the budget. This contractionary impulse may further weaken real GDP growth, possibly exacerbating social pressures.

The planned 70% cut in the 2020 budget to the appropriations of the Council for Development and Reconstruction (CDR), the Council of the South, and the Displaced Fund could generate savings of US$0.6bn (1.0% of GDP), according to authorities. However, this envelop could represent double-counting with the overall capex reductions since these institutions accounted for c40% (US$0.4bn; 0.6% of GDP) of total capital expenditures in 2018.

### Budgeted EdL transfers appropriation likely to be breached

In the absence of EdL tariff hikes, the targeted EdL transfers cap is unlikely to be met, and a supplemental budget is likely to be approved to prevent increased power outages in 2H20, in our view. The 2020 budget targets capping the Electricite du Liban (EdL) transfers to US$1bn (1.7% of GDP), from US$1.8bn (3.2% of GDP) in 2018 and US$1.7bn (2.9% of GDP) budgeted for 2019. We have highlighted that, while the EdL reform plan is progressing towards execution, tariff increases are unlikely before end-2020 at the earliest, in our view. A targeted tariff increase in early 2020, as per earlier donor demands, is unlikely.

The announced reform plan target deadline dates for submission of bid proposals (15 January 2020) and for contract signing date (22 February 2020) appear tight, and would require immediate release of tender documents. Likewise, the targeted increase in electricity production capacity (by 2H20) appears tight. The EdL reform plan originally envisaged the temporary production capacity satisfaction date to be 2 months after the contract signing date, and the latest temporary production capacity commercial operation date to be no later than 12 months after the contact signing date.

The planned finalization of the bids offered to build Floating Storage Regasification Units (FSRUs) is important to meet the objective to supply all existing power plants by 2021. Possible delays could likely make 2022 a more achievable objective. Gasification of the sector would support a narrowing in the current account deficit as current fuel imports for power generation consist of more expensive diesel and fuel oil.

**EdL breakeven target date of end-2021 is unlikely to be met**

The reform plan's expedited objective to reduce EdL transfers to 0 by end-2021 (instead of end-2022) appears challenging to meet. This would be due to a) possible technical delays in implementation; b) ambitious targets for reduction of technical and non-technical losses versus cross-country experiences; and, c) the likely need to increase tariffs to levels above current plans.

Recall that the reform plan pencils in the launch of new tenders for long-term power purchase agreements. The bidders would have to propose both a short-term solution to increase power supply in the short-term prior to EdL tariffs increase and up until 2025, alongside a long-term solution to increase supply by building three new power stations by 2023- 24. The plan would also include solar and wind power supply PPP projects, and, in a second phase, rehabilitation of existing power plants.

The plan pencils in improvement in bill collection (with a government targeted eventual recovery of US$2bn in unpaid bills) and installation of smart counters from 2019. This would help gradually reduce non-technical losses (c21% of total EdL production). A planned modernization and extension of the transport and distribution network would reduce technical losses (c17% of total EdL production).

We understand current plans are to bring EdL average tariffs to 14.4c/kWh once 24/7 production capacity is installed. The average EdL tariff is currently 9.5c/kWh while the cost of generation for EdL is around 16c/kWh prior to technical/non-technical losses and EdL operating and capex costs. For the hours where EdL power is interrupted and private generators are used, the cost is around 22c/kWh and can be as high as 30c/kWh. The IMF estimates the EdL breakeven tariff to be 23c/kWh after covering production and distribution costs as well as the current level of technical and non-technical losses. Including capital expenditures would currently bring EdL breakeven tariff to 28c/kWh, according to the IMF.

Under the IMF assumptions of a reduction to total losses to 20% of production by 2025, 24/7 production capacity by end-2020 and gasification in 2022, EdL transfers would be reduced to 0.4% of GDP by 2025. Reduced losses in 2019-2020 would occur through better collection and reduced losses. The bulk of the drop in EdL transfers would take place over 2021-2022, where transfers could drop to 1.5% and 0.8% of GDP respectively, due to to tariff hikes and gasification. In this scenario, the IMF estimates tariffs would need to increase to 16.2c/kWh to fully eliminate EdL transfers by 2025.

**BdL scheme could increase strains in balance sheet**

Banque du Liban (BdL) one-off waiver of interest income is likely to help decrease government interest payments in the 2020 budget at the cost of lowering BdL's net interest income. Authorities have suggested the BdL would reverse US$3bn of coupon payments received from the MoF back to the MoF in 2020. Our calculations based on our estimates of BdL holdings of domestic debt suggest fiscal savings of US$1.8bn, and US$2.1bn if the scheme extended to Eurobond coupons.

If our calculations are correct, the shortfall may imply further measures to meet the budgeted fiscal savings. The BdL-MoF scheme could thus in addition include a transfer of the upward revaluation of gold reserves (unrealized capital gains) to the MoF to retire debt and decrease debt service, as per authorities' suggestions. However, it is unclear to us whether this would be feasible. BdL holds 9.2mn troy ounces of gold, with a reported national valuation of US$14.1bn as of August 2019. This suggests a national gold valuation close to the gold spot price of US$1,500/troy ounce, and not much room for upward mark-to-market revaluation.

### Mechanism of the one-off tax on banks somewhat unclear

The 2020 budget includes a 2% one-off tax on bank profits. The IMF suggests banking sector net income was flat at US$2.2bn in 2018, so a 2% tax is unlikely to yield the US$0.4bn in proceeds pencilled in the budget. Authorities suggested they would work on the mechanism of the tax with the BdL and presumably banks to reach the desired budgetary outcome. Hence, the tax rate or the measure may be revised accordingly.

**Table 3: BdL holdings of domestic T-bills and T-bonds**

| Placement | Size (LLtrn) | Size (US$bn) | Interest rate (%) | Issuance | Duration (years) | Maturity |
|---|---|---|---|---|---|---|
| Private | 1.5 | 1.0 | 1.0 | 30-Nov-17 | 2.0 | 30-Nov-19 |
| Private | 1.5 | 1.0 | 1.0 | 01-Dec-17 | 3.0 | 30-Nov-20 |
| Private | 2.0 | 1.3 | 1.0 | 14-Jun-18 | 3.0 | 13-Jun-21 |
| Private | 2.0 | 1.3 | 1.0 | 3Q18 | 5.0 | 3Q23 |
| Private | 2.0 | 1.3 | 1.0 | 3Q18 | 7.0 | 3Q25 |
| Private | 2.3 | 1.5 | 1.0 | 4Q18 | 10.0 | 4Q28 |
| Auction | 31.9 | 21.3 | 8.3 | - | 4.1 | - |
| **Total** | **43.1** | **28.8** | **6.4** | **-** | **4.4** | **-** |
| **BdL coupons on domestic T-bills and T-bonds** | **2.8** | **1.8** | | | | |

Source: MoF, BofA Merrill Lynch Global Research

### 2019 fiscal deficit narrows, but performance masked by arrears

7m19 budget trends show considerable fiscal tightening versus 2018 outturns. Recall that major fiscal slippage left the fiscal balance at -US$6.3bn (-11.1% of GDP) and the primary balance at -US$0.6bn (-1.1% of GDP) in 2018. 7m19 annualized fiscal data would bring the fiscal balance to -US$4.2bn (-7.2% of GDP) and the primary balance to US$1.0bn (1.7% of GDP) for the full year 2019. This is due to expenditure restraint, despite weak revenue performance, as well as the likely accumulation of arrears. This combination is consistent with real GDP growth of close to 0% this year, according to government pronouncements.

The 2019 fiscal data also benefited from interest savings due to the repayment of two Eurobonds this year thanks to the BdL, and the issuance of a 0% interest US$1.15bn BdL bridge loan (not included in the central government debt stock). The latter saving could be temporary if BdL replaces the bridge loan by Eurobonds in a future BdL-MoF transaction. It is unclear if BdL may waive coupon payments for 2020 as possibly called for in the revised 2020 budget.

The 7m19 figures do not reflect the impact of the 2019 budget. We have highlighted the budget passage has room to deliver fiscal adjustment of 1ppt of GDP in 2H19, but some of the gains may be used to clear arrears.

### CEDRE donor support is unlikely near-term

Multilateral support is likely to continue to be predicated on reform credentials given the possible large scale of the funding required to restore confidence, in our view. The Paris visit of PM Hariri with French President Macron has resulted in the setup of the follow-up mechanism for CEDRE. A high-level strategic meeting at the ministerial level was targeted for November, but is likely to be delayed by current political events. While the implementation of the reforms pledged by PM Hariri would support progress with CEDRE donors discussions, we would expect donors to remain on the sidelines until the political situation becomes clearer.

A high-level Lebanese-Saudi committee was to meet in October to sign 19 agreements and PM Hariri to visit Riyadh at month-end. We did not get the sense from our trip that a substantial infusion of financial aid is in the offing near-term.

### CEDRE pledges meant to cover domestic investment program

Donor project financing disbursements could provide a growth offset to the impact on contractionary fiscal policy, but net Fx inflows are likely to be small. The World Bank assesses that most CIP electricity projects could attract FDI (alongside smaller sectors such as solid waste and culture), which could thus limit FDI potential to cUS$5bn. Furthermore, the largest CIP sector projects (electricity, waste/wastewater, and transport) appear to be import-intensive, which is likely to limit net Fx inflows.

**Table 4: CEDRE donor conference pledges breakdown**

| Country / Institution | Amount (US$bn) | Type | Duration (years) |
|---|---|---|---|
| World Bank | 4.0 | Loan | 5 |
| European Bank for Reconstruction and Development (EBRD) | 1.4 | Loan | 6 |
| European Investment Bank (EIB) | 1.0 | Loan | 5 |
| Arab Fund for Economic and Social Development (AFESD) | 1.0 | Loan | - |
| Islamic Development Bank (IDB) | 0.8 | Loan | 5 |
| Kuwait Fund for Arab Economic Development (KFAED) | 0.7 | Loan | 5 |
| Qatar | 0.5 | Loan | 5 |
| France | 0.5 | Loan | - |
| Holland | 0.4 | Loan | - |
| Kuwait | 0.2 | Loan | - |
| United Kingdom | 0.2 | Loan | - |
| Italy | 0.1 | Loan | - |
| Germany | 0.1 | Loan | - |
| France | 0.2 | Grant | - |
| European Union | 0.2 | Grant | - |
| Turkey | 0.2 | Grant | - |
| United States | 0.2 | Grant | - |
| Saudi Arabia | 1.0 | Credit line | - |
| **Total** | **12.5** | | |
| *% of GDP* | *22.7* | | |
| Loans | 10.7 | | |
| Grants | 0.8 | | |
| Credit line | 1.0 | | |

Source: Press reports, BofA Merrill Lynch Global Research. The AFESD loan facility is US$0.5bn but could be scaled up to US$1bn if reforms are realized. Authorities plan to use part of the pledged grants to subsidize interest costs of further multilateral borrowing.

The total cost of the Capital Investment Program (CIP) is US$22.9bn (41.7% of GDP) across three cycles spanning the period 2018-2030. About 33% is projected to come from private investment (as concessional loans are likely planned to finance projects with low economic returns). The cost of the first CIP phase over the next 6 years (including up to 2 years in preparatory work and the remainder in implementation) is US$10.8bn, according to authorities' estimates. The largest CIP allocations, excluding expropriation costs, are to the sectors of transport, energy and water (24%, 24% and 19% of total respectively). CEDRE pledges fully cover the cost of the first CIP cycle.

**Table 5: Capital Investment Program (CIP) breakdown**

| Sector | Number of projects | Cost (US$bn) | % of total | Period | Number of cycles |
|---|---|---|---|---|---|
| Electricity | 23 | 5.6 | 24.4 | 2018-2030 | 3 |
| Water and Wastewater | 206 | 7.5 | 32.8 | 2018-2030 | 3 |
| Transport | 24 | 7.4 | 32.2 | 2018-2030 | 3 |
| Solid Waste Management | 1 | 1.4 | 6.1 | 2018-2021 | 1 |
| Telecom | 8 | 0.7 | 3.1 | 2018-2025 | 2 |
| Industry | 2 | 0.1 | 0.3 | 2018-2025 | 2 |
| Cultural | 11 | 0.3 | 1.2 | 2018-2025 | 2 |
| Total | 275 | 22.9 | 100.0 | | |
| *% of GDP* | | *41.7* | | | |
| Cycle 1 | | 10.8 | 47.1 | | |
| Cycle 2 | | 6.5 | 28.1 | | |
| Cycle 3 | | 5.7 | 24.8 | | |

Source: World Bank, BofA Merrill Lynch Global Research.

### IMF program being resisted by political leaders

The decision to resort to an IMF program will depend on political will, according to BdL Governor Salame. The IMF assessment of overvalued exchange rate and unsustainable external debt suggests tough conditionality to restore sustainability and justify funding. Lebanon's geopolitical importance would translate into program support from IMF shareholders, in our view.

# BdL to maintain tight monetary control

BdL is likely to closely monitor trends in cash and deposit withdrawals and outflows, and we expect it stands ready to maintain tight control on capital going forward, if required. We note that there has not been an official BdL circular imposing deposit constraints and requirements on the banking sector, whether pre-protests or since then. Our calculations suggest BdL is most vulnerable to Fx deposit rollovers.

Pre-protests, local press reported tight Fx liquidity in the banking sector, with anecdotal evidence of varying daily limits on Fx deposit withdrawals and dollarization across different banks. It is hard to have an accurate representation of any deposit withdrawal or dollarization limits, and, at any case, these do not appear to be uniform across banks.

Any unofficial deposit controls could be further tightened once banks re-open for business if the political outlook remains uncertain, in our view. If so, this would buy time by staggering any outflow or Fx demand over time. However, this would also likely prevent any major deposit inflows from flowing into the country. As such, this would not be a sustainable strategy.

Tight Fx liquidity suggests constraining and rationing of Fx demand in the economy. In regards to essential imports, BdL announced pre-protests instructions to regulate the provision of Fx for imports of wheat, fuel and medicine. These three sectors would be able to access hard currency directly from the BdL through the banking sector using this mechanism and upon approval of each transaction. Importers of wheat and fuel stations were threatening to strike due to difficulties in sourcing Fx, and the mismatch between their LL revenues and Fx payments.

Deposit withdrawal limits and tight Fx liquidity would affect the current account (while also affecting financial flows). They could impact remittances, which stood at an annual US$2.4bn in 2018, down from a peak of US$3.6bn in 2016. A drop could partially offset a contraction in imports, which last stood at US$17.8bn in 2018 on a fob basis. Despite methodological issues, note we have used remittance data from national sources, rather than World Bank estimates, to remain consistent with national BoP statistics.

**BdL can sustain the shock for 1-2 years if capital controls are imposed**

We estimate BdL Fx reserves would be depleted within 2 years should political uncertainty and deposit controls prevent both outflows and inflows going forward. Should this back-of-the-envelope calculation be accurate, a near-term hard landing could be avoided. However, it could irremediably affect Lebanon's funding model since it is likely to prevent or delay a return of inflows. As such, it would only delay a hard landing in the absence of major reforms and a return of confidence.

In the scenario where deposit controls effectively prevent outflows (and any inflows), the largest chunk of external refinancing needs would be handled given that non-resident deposits would be kept largely flat. This would leave the BdL having to use its stock of gross Fx reserves to service the current account deficit and government medium-term external debt amortizations, which it currently covers about twice over.

BdL gross Fx reserves excluding gold, US$3.3bn of Eurobonds and cUS$1bn in illiquid encumbered assets stood at US$34.0bn as of mid-October. We do not take into consideration any leverage possibly obtained by the BdL through repo operations of its stock of Eurobonds with international market participants (with a likely deep haircut given market price action). In addition, domestic banks held US$10.1bn of claims with non-resident banks and central banks as of August 2019, although this is the lowest level since a peak of US$14.0 in April 2017.

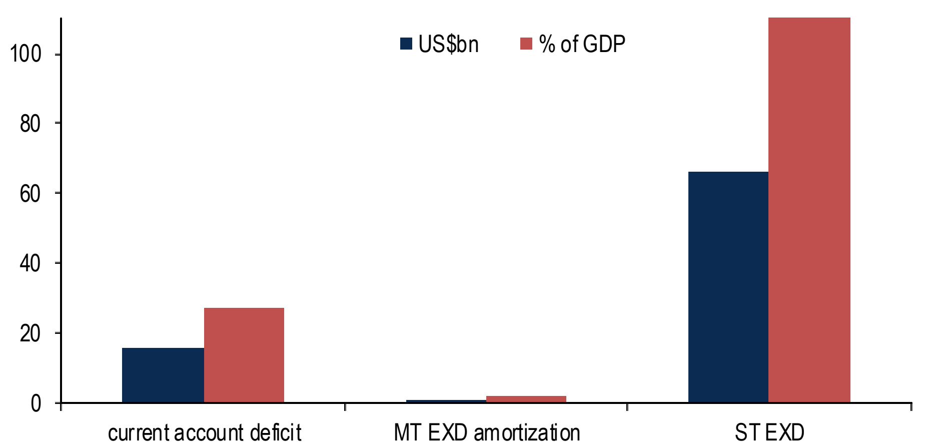
Law 42 from 1986 prevents the BdL from disposing of its gold assets under any circumstances, directly or indirectly, unless there is legislation passed by parliament to allow this. We understand BdL gold reserves are currently held abroad in the US. This restriction was put in place during the Lebanese Civil War. Parliament could amend the legislation if required. However, BdL would need to weigh the time required to liquidate gold reserves versus the signalling aspect of this move, in our view.

## External financing needs remain large

Gross external financing needs could stand at cUS$83.4bn (141.7% of GDP) for 2020. This would include a current account deficit of US$15.9bn (27.0% of GDP; IMF presentation), government medium-term external debt amortization of US$1.2bn (2.1% of GDP; adjusting US$2.5bn in Eurobond maturities for residency), and an assumed US$66.3bn of short-term non-resident deposits (112.6% of GDP). The latter would represent an assumed 35% of total banking sector deposits, versus the official share of non-resident deposits to total deposits of 25% as of mid-2019 (in USD terms: (US$47.4bn). The adjustment takes into account that some non-resident depositors are classified as residents in banking sector data due their registration of a local address.

The average tenor of deposits has increased from 45 days in 2007-8 to about a year now (14 months for LL-denominated deposits and 11 months for Fx-denominated deposits). As such, we include the totality of non-resident deposits into the short-term external debt stock.

**Chart 1: Large external financing requirements for 2020**



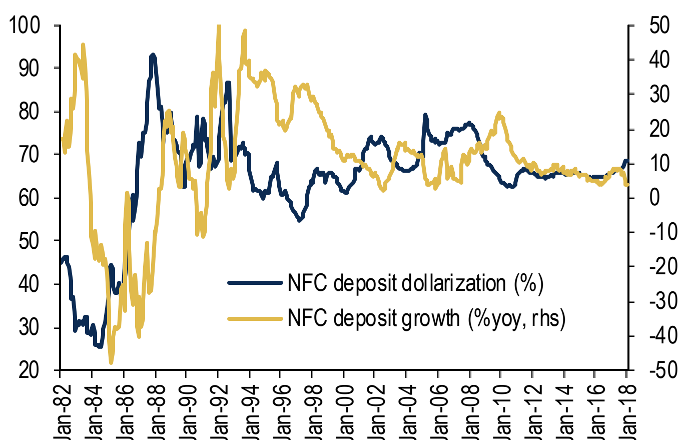

Source: Haver, MoF, BdL, BofA Merrill Lynch Global Research

## BdL more vulnerable to deposit runs than to dollarization increase

Gross liquid Fx resources of the banking system (BdL + banks) would be depleted in 3.3-4.3 months should Fx deposits be withdrawn at the monthly pace implied by the stock of Fx deposits and an associated c12-month maturity. Indeed, this profile suggests cUS$10.3bn in Fx deposits coming due each month (US$7.6bn from residents and US$2.8bn from non-residents). This is due to the very large stock of Fx deposits and their relatively short tenor, as the banking sector held resident Fx deposits of US$90.6bn and non-resident Fx deposits of US$33.3bn as of August 2019. To prevent such a large negative impact on BdL gross reserves, very strict deposit withdrawal limits would likely need to be imposed. We calculate that a daily withdrawal limit of cUS$230 per household is equivalent to the ability to withdraw the current monthly Fx deposit maturities.

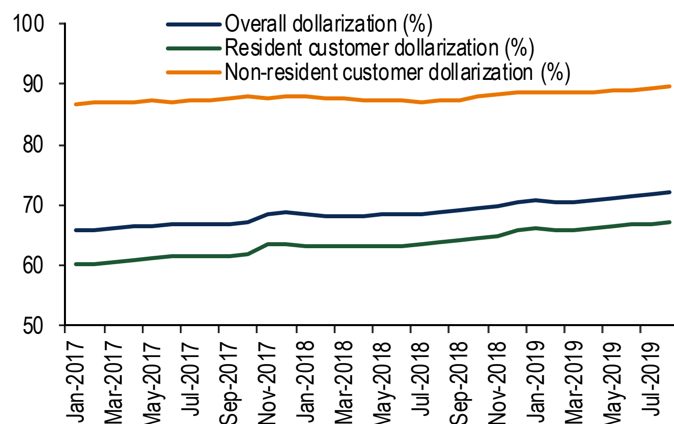
In comparison, the dollarization pace witnessed over January 2017-August 2019 would only cost the financial system US$0.3bn per month in Fx resources. We calculate the financial system has needed c5months for customer deposit dollarization to increase by 1ppt. Every 1ppt increase in dollarization generates US$1.7bn in Fx demand. Customer deposit dollarization in the banking sector increased from 65.9% in January 2017 to 72% in August 2019.

**Chart 2: Dollarization has increased, deposit growth has weakened**




Source: Haver, BofA Merrill Lynch Global Research.

**Chart 3: Dollarization in commercial banks is increasing**




Source: Haver, BofA Merrill Lynch Global Research.

**Table 6: BdL much more vulnerable to rollover of Fx deposits than to deposit dollarization**

| Fx deposit withdrawal impact calculations | | Deposit dollarization impact calculations | |
|---|---|---|---|
| **Total Fx deposits (US$bn)** | **123.9** | **Total LL deposits (US$bn)** | **48.0** |
| Resident Fx deposits (US$bn) | 90.6 | Resident LL deposits (US$bn) | 44.1 |
| Non-resident Fx deposits (US$bn) | 33.3 | Non-resident LL deposits (US$bn) | 3.9 |
| Maturity (months) | 12.0 | Total dollarization (%) | 72.1 |
| Monthly maturities (US$bn) | 10.3 | Resident dollarization (%) | 67.3 |
| Resident Fx deposits (US$bn) | 7.6 | Non-resident dollarization (%) | 89.5 |
| Non-resident Fx deposits (US$bn) | 2.8 | | |
| | | Total cost of 1ppt increase in dollarization (US$bn) | 1.7 |
| BdL gross Fx reserves (US$bn) | 34.0 | Resident (US$bn) | 1.3 |
| BdL coverage (number of months) | 3.3 | Non-resident (US$bn) | 0.4 |
| Resident | 4.5 | | |
| Non-resident | 12.3 | Average monthly uptick in total dollarization (ppt) | 0.2 |
| | | Resident (ppt) | 0.2 |
| Domestic banks claims with non-resident banks and central banks (US$bn) | 10.1 | Non-resident (ppt) | 0.1 |
| Augmented BdL + bank Fx liquid resources | 44.1 | | |
| BdL + banks coverage (number of months) | 4.3 | Number of months to reach 1ppt dollarization increase | 5.1 |
| Resident | 5.8 | Resident | 4.6 |
| Non-resident | 15.9 | Non-resident | 11.7 |
| Daily limit on Fx withdrawals consistent with monthly maturity profile (US$) | 228.4 | Average monthly cost of total dollarization (ppt) | 0.3 |
| Resident (US$) | 222.0 | Resident (ppt) | 0.3 |
| Non-resident (US$) | 247.7 | Non-resident (ppt) | 0.0 |

Source: Haver, BofA Merrill Lynch Global Research. BdL gross Fx reserves excluding gold, US$3.3bn of Eurobonds and cUS$1bn in illiquid encumbered assets stood at US$34.0bn as of mid-October. Domestic banks held US$10.1bn of claims with non-resident banks and central banks as of August 2019. Deposit data as of August 2019. Average pace of dollarization calculated over January 2017-August 2019. Maturity of Fx deposits is assumed to be 12.0 months. Daily withdrawal limits assume 6 bank working days per week, resident population of 6.1mn people, household size of 4.3, non-resident expatriate population of 14mn people with household size of 3 and of which 10% maintain bank accounts in Lebanon. We do not take into account the impact of accrued interest in our dollarization calculations.

## Funding model is running out of steam

Prior to the political crisis, our models show an annual external funding gap of cUS$5.5bn (9.5% of GDP). This gap was being bridged by a) BdL drawdown of Fx reserves; b) banks drawing down on foreign assets; and, c) BdL financial engineering operations. The latter had been buying time, despite their cost to the BdL, but can only be successful if a) banks generate hard currency by further drawing down on foreign assets (limited room beyond 1-2 years at the current stock of foreign assets); or, b) banks succeed in attracting further non-resident deposits. The latter is likely to be compromised given the current political crisis.

Current external funding strains reflect: a) increasing external funding requirements, on the back of a widening current account deficit and a likely overvalued currency; b) loss of international market access; and c) growing outflows of resident and non-resident

deposits (when corrected for interest rate effect). The weaker level of non-resident deposits reflects poor confidence given geopolitical headwinds and more challenging economic conditions in the countries of origin. There is no official breakdown of the country of origin of non-resident deposits, but a local study on remittances suggested that sources for remittances were Arab countries with c40%, America with c20%, Europe with c20%, Africa with c15%, and others with c5% of the total.

To close the US$5.5bn external funding gap, we calculate that non-resident deposit would need to grow organically in excess of 10%, versus their average 7%yoy over the 2003-18 period. Even prior to the current political crisis, this was difficult to achieve.

Given the low manufacturing base of the country, it could likely to take years of fiscal austerity to reduce the current account deficit to levels less challenging to finance, in our view.

**Table 7: Lebanon external funding requirements and sources**

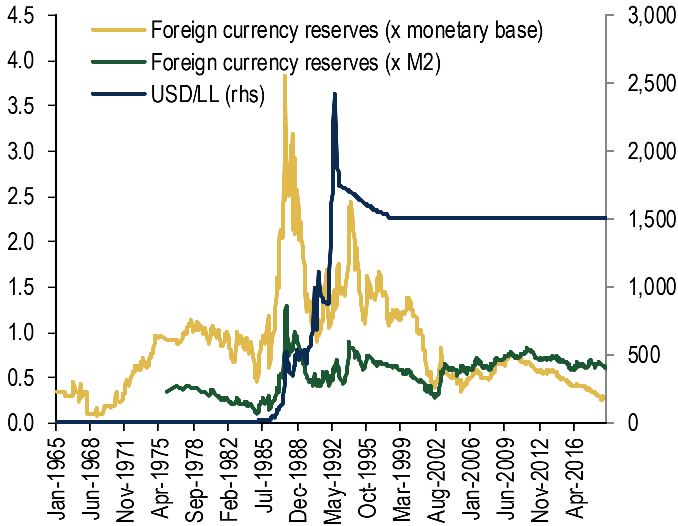
| US$bn | '03 | '04 | '05 | '06 | '07 | '08 | '09 | '10 | '11 | '12 | '13 | '14 | '15 | '16 | '17 | '18 | '19F |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Current account deficit** | **5.0** | **4.1** | **2.2** | **1.1** | **1.4** | **4.1** | **6.7** | **7.6** | **4.9** | **9.8** | **11.9** | **11.6** | **8.4** | **10.5** | **12.1** | **12.4** | **13.0** |
| % of GDP | 25.7 | 19.5 | 10.4 | 5.2 | 5.5 | 14.2 | 19.0 | 19.7 | 12.1 | 22.2 | 25.4 | 24.0 | 16.7 | 20.5 | 22.7 | 22.1 | 22.7 |
| Goods exports, f.o.b. | 1.7 | 2.1 | 2.3 | 3.2 | 4.0 | 5.3 | 4.7 | 5.5 | 5.4 | 5.6 | 5.2 | 4.6 | 4.0 | 3.9 | 4.0 | 3.8 | 4.0 |
| Goods imports, f.o.b. | 6.5 | 8.5 | 8.4 | 9.3 | 11.9 | 16.3 | 15.9 | 17.7 | 19.4 | 20.3 | 20.5 | 19.6 | 17.3 | 17.9 | 18.4 | 19.0 | 19.8 |
| **Medium-term external debt amortization** | **2.5** | **2.5** | **2.5** | **2.5** | **2.5** | **2.8** | **3.1** | **2.7** | **2.6** | **1.7** | **1.6** | **2.3** | **2.0** | **2.6** | **3.0** | **2.6** | **2.7** |
| **Short-term external debt (non-resident deposits)** | **7.4** | **9.3** | **12.1** | **11.6** | **12.2** | **13.6** | **15.8** | **21.2** | **23.0** | **27.1** | **30.0** | **33.5** | **36.1** | **38.4** | **40.2** | **42.6** | **47.0** |
| **Gross external funding requirements** | **14.9** | **15.9** | **16.8** | **15.3** | **16.1** | **20.6** | **25.6** | **31.5** | **30.4** | **38.6** | **43.5** | **47.4** | **46.5** | **51.5** | **55.4** | **57.7** | **62.7** |
| % of GDP | 76.3 | 75.4 | 78.4 | 69.3 | 64.6 | 70.6 | 72.2 | 81.9 | 75.9 | 87.3 | 92.7 | 98.1 | 93.1 | 100.5 | 103.8 | 102.3 | 109.1 |
| **Gross external funding sources** | **9.8** | **16.7** | **17.3** | **15.5** | **15.5** | **28.0** | **34.2** | **34.5** | **32.7** | **39.2** | **45.5** | **50.7** | **45.6** | **55.4** | **57.8** | **55.4** | **57.3** |
| % of GDP | 50.4 | 79.1 | 80.5 | 70.4 | 62.2 | 95.8 | 96.5 | 89.8 | 81.5 | 88.6 | 97.1 | 105.0 | 91.2 | 108.1 | 108.2 | 98.2 | 99.5 |
| Capital account balance | 0.0 | 0.1 | 0.0 | 1.9 | 0.6 | 0.4 | 0.0 | 0.3 | 0.2 | 0.2 | 1.6 | 1.4 | 1.8 | 1.6 | 1.7 | 1.6 | 1.6 |
| Net FDI | 2.9 | 1.8 | 2.6 | 2.1 | 1.9 | 3.3 | 3.7 | 3.8 | 2.7 | 2.5 | 0.9 | 1.7 | 0.9 | 1.2 | 1.2 | 1.4 | 1.4 |
| Net portfolio investment | 0.1 | -0.7 | 0.5 | 1.3 | 0.2 | 0.6 | 2.5 | -2.4 | -0.8 | 0.7 | 1.4 | 2.6 | 1.0 | 8.1 | 4.9 | -1.5 | -1.0 |
| Currency & deposits assets | -1.9 | 0.5 | -1.0 | -6.6 | -4.7 | 2.9 | -2.4 | -2.7 | -0.6 | -1.5 | -0.2 | 1.9 | 0.6 | 0.5 | -0.8 | -3.4 | 3.6 |
| Net other investment (excluding net currency/deposits) | 4.6 | 5.5 | 5.6 | 5.1 | 5.4 | 5.2 | 7.5 | 4.6 | -0.6 | -0.3 | -1.0 | 2.2 | -0.5 | 4.8 | 3.2 | 2.6 | 2.6 |
| Net Errors and Omissions | -6.7 | -3.2 | -4.2 | -3.1 | -5.6 | -1.7 | -3.7 | 6.6 | 2.2 | 5.2 | 6.1 | -1.1 | -2.7 | -3.1 | 1.6 | 5.3 | 0.0 |
| Short-term external debt (non-resident deposits) | 9.3 | 12.1 | 11.6 | 12.2 | 13.6 | 15.8 | 21.2 | 23.0 | 27.1 | 30.0 | 33.5 | 36.1 | 38.4 | 40.2 | 42.6 | 47.0 | 46.7 |
| Other | 1.5 | 0.7 | 2.0 | 2.5 | 4.0 | 1.5 | 5.4 | 1.4 | 2.4 | 2.4 | 3.2 | 6.0 | 6.1 | 2.0 | 3.3 | 2.5 | 2.5 |
| **Reserve assets ('-' increase)** | **5.0** | **-0.8** | **-0.5** | **-0.2** | **0.6** | **-7.4** | **-8.6** | **-3.0** | **-2.3** | **-0.6** | **-2.0** | **-3.3** | **0.9** | **-3.9** | **-2.4** | **2.3** | **5.5** |
| Memo: | | | | | | | | | | | | | | | | | |
| Average rate on LL-deposits (%) | 8.3 | 7.1 | 7.7 | 7.5 | 7.5 | 7.3 | 7.0 | 5.9 | 5.6 | 5.5 | 5.4 | 5.5 | 5.6 | 5.6 | 5.6 | 7.1 | 9.0 |
| Average rate on USD-deposits (%) | 3.6 | 3.3 | 3.7 | 4.4 | 4.8 | 3.7 | 3.2 | 2.8 | 2.8 | 2.8 | 2.9 | 3.0 | 3.2 | 3.3 | 3.6 | 4.3 | 6.2 |
| Assumed average rate on non-resident deposits (%) | 4.0 | 3.7 | 4.1 | 4.8 | 5.1 | 4.1 | 3.6 | 3.2 | 3.1 | 3.1 | 3.2 | 3.3 | 3.4 | 3.6 | 3.8 | 4.6 | 6.5 |
| Organic growth in non-resident deposits (%yoy, exc. interest) | -3.9 | 26.0 | -7.9 | 0.0 | 6.9 | 11.9 | 30.3 | 5.4 | 14.7 | 7.7 | 8.5 | 4.6 | 2.9 | 1.2 | 2.1 | 5.6 | -2.7 |
| Non-resident deposits (US$bn) | 9.3 | 12.1 | 11.6 | 12.2 | 13.6 | 15.8 | 21.2 | 23.0 | 27.1 | 30.0 | 33.5 | 36.1 | 38.4 | 40.2 | 42.6 | 47.0 | 46.7 |
| Change in non-resident deposits (US$bn) | 2.0 | 2.8 | -0.5 | 0.5 | 1.5 | 2.2 | 5.4 | 1.8 | 4.1 | 2.9 | 3.5 | 2.6 | 2.3 | 1.8 | 2.4 | 4.3 | -0.3 |
| Growth in non-resident deposits (%yoy) | 0.2 | 29.7 | -3.8 | 4.7 | 12.0 | 15.9 | 33.9 | 8.6 | 17.8 | 10.8 | 11.7 | 7.9 | 6.3 | 4.8 | 6.0 | 10.2 | 3.8 |
| Non-resident deposits (US$bn, level implied by interest rate) | 9.3 | 9.7 | 12.6 | 12.2 | 12.8 | 14.2 | 16.4 | 21.8 | 23.7 | 27.9 | 30.9 | 34.6 | 37.4 | 39.8 | 41.8 | 44.6 | 50.0 |
| Change in non-resident deposits (US$bn, corrected for interest rate effect) | - | 2.4 | -1.0 | 0.0 | 0.8 | 1.6 | 4.8 | 1.1 | 3.4 | 2.1 | 2.6 | 1.5 | 1.0 | 0.5 | 0.8 | 2.4 | -3.4 |
| Net currency and deposits - BoP data | -1.0 | 1.4 | -1.9 | -6.0 | -1.7 | 3.7 | 5.3 | -2.2 | 3.4 | 1.0 | 3.4 | 4.6 | 3.0 | 2.3 | 1.9 | 0.9 | 0.2 |
| Liabilities - BoP data | 0.9 | 0.9 | -0.9 | 0.5 | 3.0 | 0.8 | 7.7 | 0.5 | 3.9 | 2.6 | 3.5 | 2.7 | 2.4 | 1.7 | 2.7 | 4.3 | -3.4 |
| Assets - BoP data | 1.9 | -0.5 | 1.0 | 6.6 | 4.7 | -2.9 | 2.4 | 2.7 | 0.6 | 1.5 | 0.2 | -1.9 | -0.6 | -0.5 | 0.8 | 3.4 | -3.6 |
| BdL gross international reserves (US$bn) | 10.3 | 9.6 | 9.6 | 11.4 | 11.5 | 18.6 | 27.2 | 29.8 | 31.6 | 32.2 | 33.9 | 37.3 | 36.7 | 40.2 | 40.6 | 36.5 | 31.0 |

Source: Haver, BofA Merrill Lynch Global Research. We use national sources for BoP and hence, current account and financial account data do not fully match with IMF data. Medium-term external debt amortization series is not adjusted for residency for simplicity. Non-resident deposit data is derived from balance sheet of the banking sector and hence includes interest rate effects. 'Other' is a category that catches statistical discrepancies, including between BoP and banking sector-derived data. Dollarization rate is assumed at 90% for non-resident deposits. BdL gross international reserves data is consistent with the IMF series excluding gold, eurobonds and encumbered assets. 2019F is an illustrative projection in the absence of the current political crisis. For 2019F, we keep financial account data at the level of 2018, but update banking sector data for the January-August 2019 realization, and portfolio investment for the full-year. Because we use national sources to benefit from a long-time series, our external funding requirements estimate is not consistent with our separate estimates that use IMF data for current account, adjust medium-term external debt amortization by residency, and adjust non-resident deposits to form a higher share of total deposits.

## No clear lesson from own history

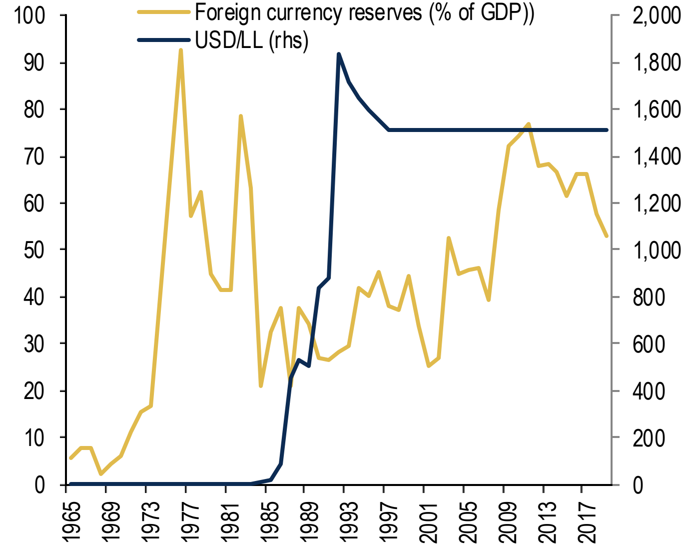
There is no clear cut line in the sand for the BdL in regards to Fx reserves levels, judging from historical precedents. BdL Fx reserves cover 60% and 30% of M2 and M0 respectively, but they have covered less than the monetary base since 2Q01. Similarly, BdL foreign currency reserves remain twice as high as the lows (30% of GDP) seen in the late 1980s crisis (which saw hyperinflation and Fx devaluation amid civil war).

**Chart 4: BdL financial engineering operations drive a wedge between Fx reserves coverage of M2 and of the monetary base**




Source: Haver, BofA Merrill Lynch Global Research

**Chart 5: BdL foreign currency reserves remain higher than lows seen in the late 1980s crisis**




Source: Haver, BofA Merrill Lynch Global Research

# Little room for soft landing

Beyond the near-term developments, authorities would need to urgently materially reduce imbalances to a level commensurate with the reduced external financing inflows or the lack thereof. This is likely to require political stability, ability to implement fiscal austerity and structural reforms, a return of depositor confidence, engagement with international donor community and an injection of financial assistance to buy time.

### Lessons from Cyprus

The Cyprus crisis in 2012-13 could provide a template for implications of a hard landing, given some economic similarities. Cyprus had an oversized banking sector funded partly non-resident deposits, with high exposure to the domestic real estate sector and concentrated exposure to Greece. The latter incurred heavy losses due to the Greek restructuring, resulting in recapitalization needs. The government also had large fiscal deficits and high public sector debt (86% of GDP in 2012). The government lost market access since mid-2011.

The balance sheet of the sovereign and banks were highly intertwined. Full bank recapitalization with public funds would have exacerbated poor public debt dynamics. Broad burden sharing was thus necessary and achieved through a bail-in of uninsured depositors. Payment restrictions and capital controls were imposed to safeguard financial stability. The downsizing of the financial services sector resulted in a need to adapt the country's business model. Significant fiscal consolidation was implemented as part of an IMF EFF program combined with European Stability Mechanism (ESM) financing, targeting a medium-term government debt level of c100% of GDP.

### A hard landing would materially change Lebanon's funding model

The cascade of events implied by a hard-landing would materially affect the banking sector model in Lebanon, in our view. The halt of non-resident deposit inflows could suggest a sharp real effective exchange rate adjustment would be necessary to narrow the large current account deficit. We described a hard landing scenario here.

In the worst case scenario, any inability to maintain the USD peg could lead to a sharp real effective exchange rate adjustment (the IMF suggested some of its models pointed to an overvaluation of 55-66%). This would impact on the ability to service external Eurobonds and is likely to imply to debt restructuring. In turn, given the large exposure of banks to the sovereign and the BdL and the likely increase in NPLs from a net Fx short corporate sector, this would be likely to lead to large banking sector recapitalization needs. In the absence of substantial financial assistance, and given that the large government debt and fiscal deficit prevent government-led financing, deposit bail-ins are likely to be required.

Illustratively, we had calculated that assuming a hypothetical 80% haircut on Eurobonds and a spike in NPLs to 20% on cUS$35bn on banking sector foreign-currency claims on residents would lead to banking sector losses of cUS$20bn (35% of GDP), erasing banking sector capital. In the event no external funding could be mobilized to keep banking sector adequacy ratio unchanged, this would require a bail-in of depositors of 10.6%. This level of bail-in excludes any additional losses should there be a restructuring of BdL Fx liabilities to the banking sector, and could thus be higher. In effect, BdL maintains a net Fx short position (as its foreign-currency liabilities are larger than in its foreign-currency assets) and would be adversely affected by a devaluation. We estimate the banking sector to hold a net long Fx position, taking into account its foreign currency deposits at the BdL.

As the bulk of deposits is concentrated, with the IMF estimating that 1% of deposit accounts hold 50% of total deposits, deposit losses could be distributed unevenly, according to political economy considerations. An external funding infusion would reduce this need.

## Special Disclosures

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# Disclosures

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