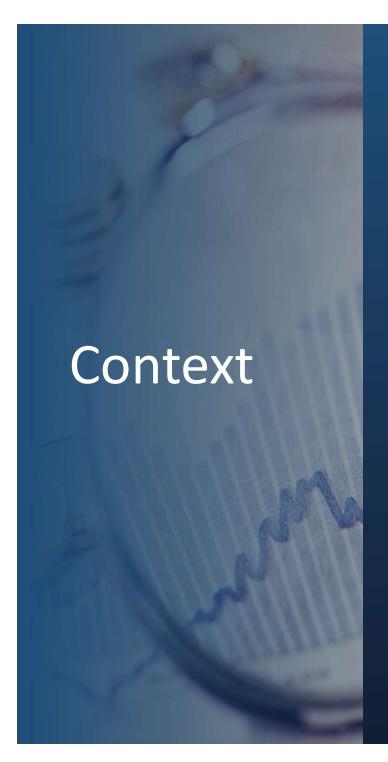




Central Bank of Chile Financial Markets Division

CEMLA April 14th, 2021



Chile was affected by two consecutive shocks: First an Idiosyncratic Shock (Oct'19–"social outbreak") and then the COVID-19 Global Shock.

The negative effects of these shocks on supply and demand have been without precedent. These have been partially mitigated by monetary policy and expansive fiscal policy, among other measures.

The International Reserves, and the BCCh's actions to strengthen and complement foreign exchange liquidity buffers, have been key to ensure the correct functioning of financial markets and maintaining the confidence of market agents.

In a period of 12 months: exchange rate volatility has been mitigated through a program of FX intervention, the FED's REPO FIMA program and the IMF's FCL line have been accessed, the PBoC's Swap Lines' scope and amount has been increased, a program to increase and replenish the International Reserves has been initiated.

## During March and April 2020, a combination of local and external events caused the risk scenario to increase significantly.

- 1. The pandemic introduced a severe risk scenario, causing a recession in 2020, which jeopardized the post social outbreak recovery. Businesses faced the second (and more severe shock) with smaller liquidity buffers which in turn limited their payment capacity. Banks had to face increased credit risk which elevated the costs of financing.
- 2. The severity of the shocks generated uncertainty regarding the effectiveness of the group of measures adopted to contain the impact.
- 3. The government's financial position understandably deteriorated due to increased expenditure, while the BCCh had already used US\$ 2,5 billon (6% of the total of its International Reserves) in December 2019 to contain foreign exchange volatility.
- 4. A stressed balance of payments scenario could not be ruled out if the agents perceived that external buffers were insufficient.

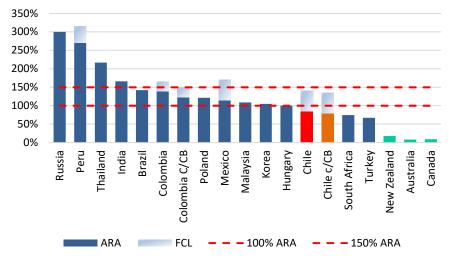
## During March and April 2020, a combination of local and external events caused the risk scenario to increase significantly.

- 7. Pension funds (the AFP system) began to exhibit more unpredictable behaviour than in the past due to the increased influence of investment advisors which recommended massive changes between multi-funds: back and forth between fixed income and equities.
- 8. In summary: In March/April of 2020 the BCCh had fewer international reserves than in the past, there was a perception that the government would begin to sell SWF (as it later did), and the pension funds (AFP) were not going to behave counter-cyclically as before. In effect, the AFPs sold local fixed income instruments in order to obtain liquidity, and then purchased USD to invest in US Treasuries.

#### The first step was to request a US\$ 24 billion Flexible Credit Line (FCL) from the IMF, equivalent to 1,000% of Chile's quota (May 2020).

- The new risk scenario was surprising due to its unusual nature and magnitude.
- In May 2020 it was already clear that the optimal level of reserves had to be reevaluated due to significantly increased risks which were unlikely to return to pre-crisis levels.
- The IMF's FCL offered the possibility of rapidly increasing the economy's liquidity buffers. An elevated amount of resources were requested in order to be prepared for the worst case scenario.

#### Reserves Adequacy according to the IMF's ARA



The US\$ 24 billion FCL allowed the the "tolerance band" return to according to the IMF's Assesing Reserve Adequacy model, increasing total reserves availability by 60% as a contingency.

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The BCCh indicated from the start that the FCL had a precautionary and transitory nature, as well as its intention of exiting the agreement in 24 months.

#### The BCCh believes that the sources of liquidity themselves have intrinsic value:

- Although having access to external liquidity sources such as the FCL is a fast and
  powerful tool, maintaining internal buffers at reasonable costs is preferable because it
  allows the greater independence of long term political decisions, and it improves the
  risk perception of economic agents, particularly in emerging countries.
- In the future when faced with unpredicted tensions it is always good to have access to a insurance policy such as the FCL. The condition is to not have already utilized it.
- It was estimated that the 24 month period was reasonable to prepare and implement an FCL exit strategy:
- 1. Greater clarity on the evolution of the pandemic was expected during that 24 month period which, although transitory, would leave us in a more vulnerable position.
- It allowed time for an adequate review of the new optimal reserve level and implementing a gradual plan to materialize it.

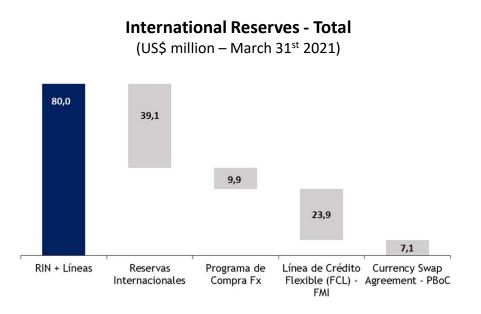
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# The second step was to re-evaluate the optimal international reserves level and implement a plan for replenishment and further accumulation.

- After receiving the FCL in May 2020, the optimal reserve level was re-evaluated and by the end of 2020 the principal arguments for proposing the purchase of an additional US\$ 12 billion were:
- More risks: Risks were expected to remain elevated for idiosyncratic and global reasons, though
  they were lower than at the beginning of 2020. Further stress scenarios could not be discarded,
  and there were enough arguments to believe that liquidity buffers needed to be greater than those
  originally present in October 2019 (first shock).
- **Fewer** *buffers*: The shocks left the Chilean economy with smaller liquidity buffers both in the public and private sectors.
- Mechanical reduction of the Reserves/GDP ratio as measured in USD: If the local exchange rate corrected its late 2019 depreciation, and BCCh growth expectations were met, the Reserves/GDP ratio would be mechanically reduced by 2%.
- **Stress scenario evaluation:** Relevant Balance of Payment items were stressed. The results suggested a smaller excess margin given the level of reserves at that date.
- An added third shock: Pension fund withdrawals (from the AFP system) generated market volatility in the fixed income market and foreign exchange market.

### The current and projected situation of the International Reserves

- During the evaluation of the reserves level, the Reserves/GDP ratio was close to 16% (and would return to 13.5% once the economy recovered). At the end of the program we expect to have a Reserves/GDP ratio of 18%.
- Currently (March 31st), the international reserves investment portfolio is worth US\$ 39.1 billion, after accumulating US\$ 2.1 billion in reserves through USD purchases.

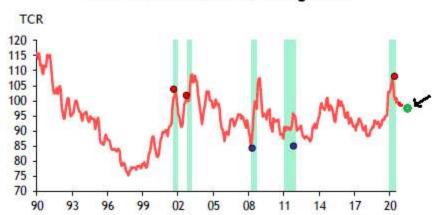


By March 31<sup>st</sup>, the internal and contingent reserves reached US\$ 80 billion. If no further measures are adopted, by the end of the FCL (May 2022), internal and contingent reserves will be around US\$ 56 billion.

#### Reserves accumulation mechanism

- The reserves accumulation program is consistent with both inflation and floating exchange rate goals. Implementation is gradual: US\$ 40 million per day, adding a total of US\$ 12 billion in 15 months.
- Graduality is important and reinforces the idea that the objective is not the currency level. That is, that a specific exchange rate is not sought.
- The reserves repleneshing and accumulation program started with a real exchange rate (RER) of close to 98. This is above the RER level at the time of implementing the reserves purchases, and above the RER level of prior purchase programs.

#### Interventions and Real Exchange Rate

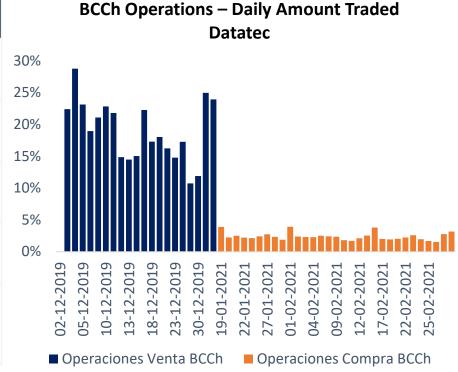


The reserves replenishing and accumulation program started by mid January 2021 and is not considered currency intervention.

#### Reserves accumulation mechanism

 Currently, the daily purchase amounts are comparatively low as compared to the volume of interbank transaction levels as traded in the Datatec electronic platform. In contrast, the 2019 currency intervention was significant (and it had a different objective).

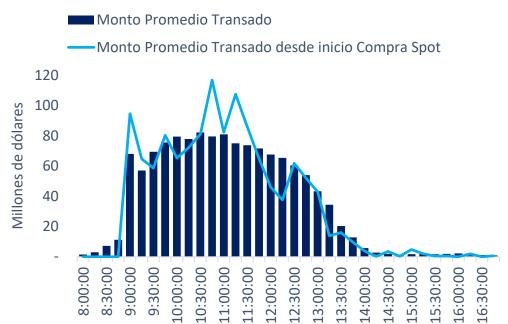
	Currency Intervention: FX forward and spot sales	Reserves Accumulation: Spot Purchases
Program Objective	Support prices	Replenish and accumulate international reserves
Mode	Spot/Forward Sales	Spot Purchases
Max. Amount	Max USD 20.000 million	USD 12.000 million
Daily Average Amount Traded	USD 353 million	USD 40 million
% Traded in Datatec	25%	3%



#### Reserves accumulation mechanism

 The current program uses an algorithm which randomly determines the amount/timing of the purchases. Increased probabilities are assigned to trading times with lower liquidity with the objective of promoting bradened negotiation periods in line with the internationalization of the CLP.

#### **FX Spot Average Market Liquidity**



Auctions by time slot			
8:30 - 9:00	1		
9:00 - 13:00	62		
13:00 - 14:00	9		
14:00 - 16:00	4		

#### Sharing considerations and experiences

- 1. Risks are dynamic, and the decision to increase/decrease reserves should also be, always contributing to the achievement of the mandate of the BCCh: to control inflation and financial stability.
- 2. In this context, there is no one optimal international reserves level. It is reasonable to use ranges which provide a reference in terms of the magnitude of the proposals. The US\$ 12 billion being purchased correspond to US\$ 2.5 billion of reserves replenishment and US\$ 9.5 billion of net purchases to reach a Reserves/GDP ratio of close to 18%.
- 3. An important part of the decision is based on the expert judgement of the balance of risks facing the economy. In this sense a common assessment among the different areas of the bank (Monetary Policy, Financial Policy, and lead by the Financial Markets Division) was key for discussions with the Board.
- 4. Quantitatively, the decision was supported by a series of indicators of reserves adequacy, including the IMF's ARA. However, one of the most valuable exercises was the balance of payments stress tests.

#### Sharing considerations and experiences

- 5. The decision to purchase reserves had a financial stability objective, therefore the Real Exchange Rate (RER) was not a variable in determining the timing of the purchases. Nevertheless, the possible impact on the RER was evaluated in terms on the evolution of inflation.
- 6. The financial impact on the bank's balance sheet was also evaluated. Though the bank is expected to have on average a negative carry, the market conditions were favourable given that currently the assets earn more than the bank's liabilities due to the way the bank's balance sheet has expanded.
- 7. Monetary efects of the measures were evaluated. This considered that the current liquidity injection is coherent both with a tecnically minimum Monetary Policy Rate and with its short term projections.
- 8. The benchmark of the international reserves was adjusted in successive stages to be coherent with the risk level which was faced and the increased liquidity needs. Future changes are possible as structural variables are adjusted (such as the level of reserves).





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