Central Bank of Chile’s Balance Sheet

Milcíades Contreras
Central Bank of Chile

Central Bank Risk Manager´s Conference
Reserve Bank of India
Mumbai, November 17-18, 2016

Introduction

The following presentation is an overview of the development of the balance sheet for Central Bank of Chile over the past years.

The balance sheet can be thought of as a dynamic tool helping the implementation of policies which are put into place to achieve the three main objectives of the Central Bank of Chile:

1) The stability of Chilean Peso (CLP, local currency)
2) Normal functioning of domestic payments
3) Normal functioning of external payments

CB objectives and policies

1. **The stability of Chilean Peso**

The Central Bank of Chile is involved in regulating the amount of money and credit in circulation in the economy.

The Constitution prohibits the Central Bank of Chile to finance government expenditures.

Similarly, the law that regulates the Central Bank of Chile prevents it from guaranteeing or acquiring documents issued by the government, its bodies or companies owned by it.

The monetary policy is implemented by keeping the average overnight lending rate among banks aligned with monetary policy rate. This rate is defined by the Board of Directors on a monthly basis.

Inflation target within a 2-year horizon is 3% (±1%).

CB objectives and policies

2. Normal functioning of domestic payments

The Central Bank of Chile serves as "lender of last resort", that is, a provider of liquidity to those institutions that face a temporary cash flow problem.

The Central Bank of Chile has some regulatory power over the financial system, mainly over aspects related to the payment system, such as reserve rates for deposits, and others.

3. Normal functioning of external payments

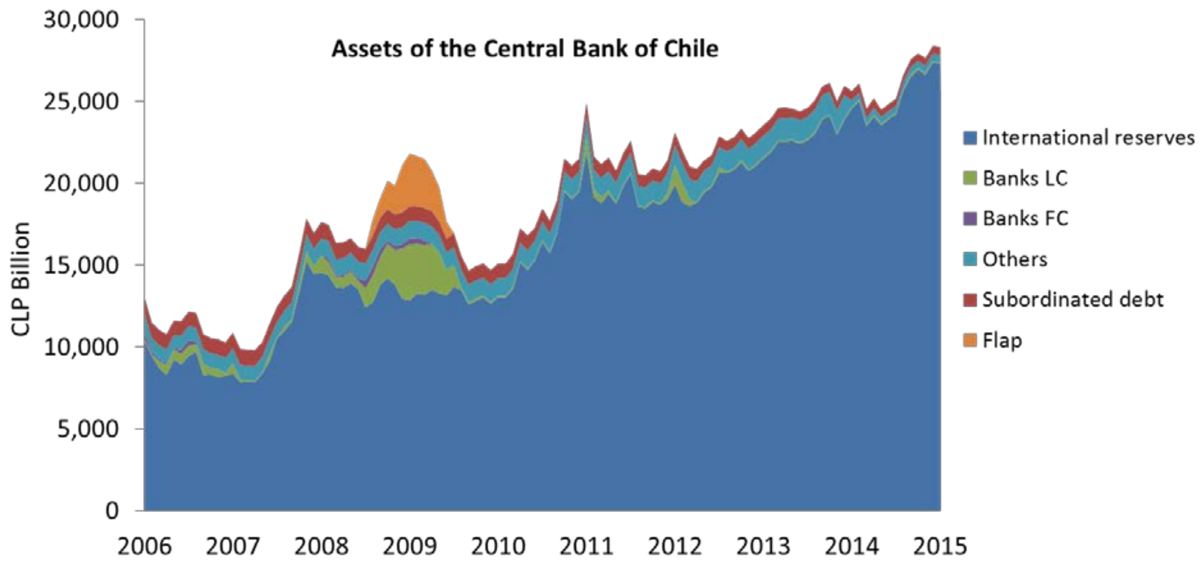
The Central Bank of Chile determines Chile's foreign exchange rate policy (fixed or float). The exchange rate has been free-floating since 1999.

The Central Bank of Chile is empowered to intervene in this market under exceptional circumstances, and must publicly inform of and justify these interventions.

Assets of the balance sheet

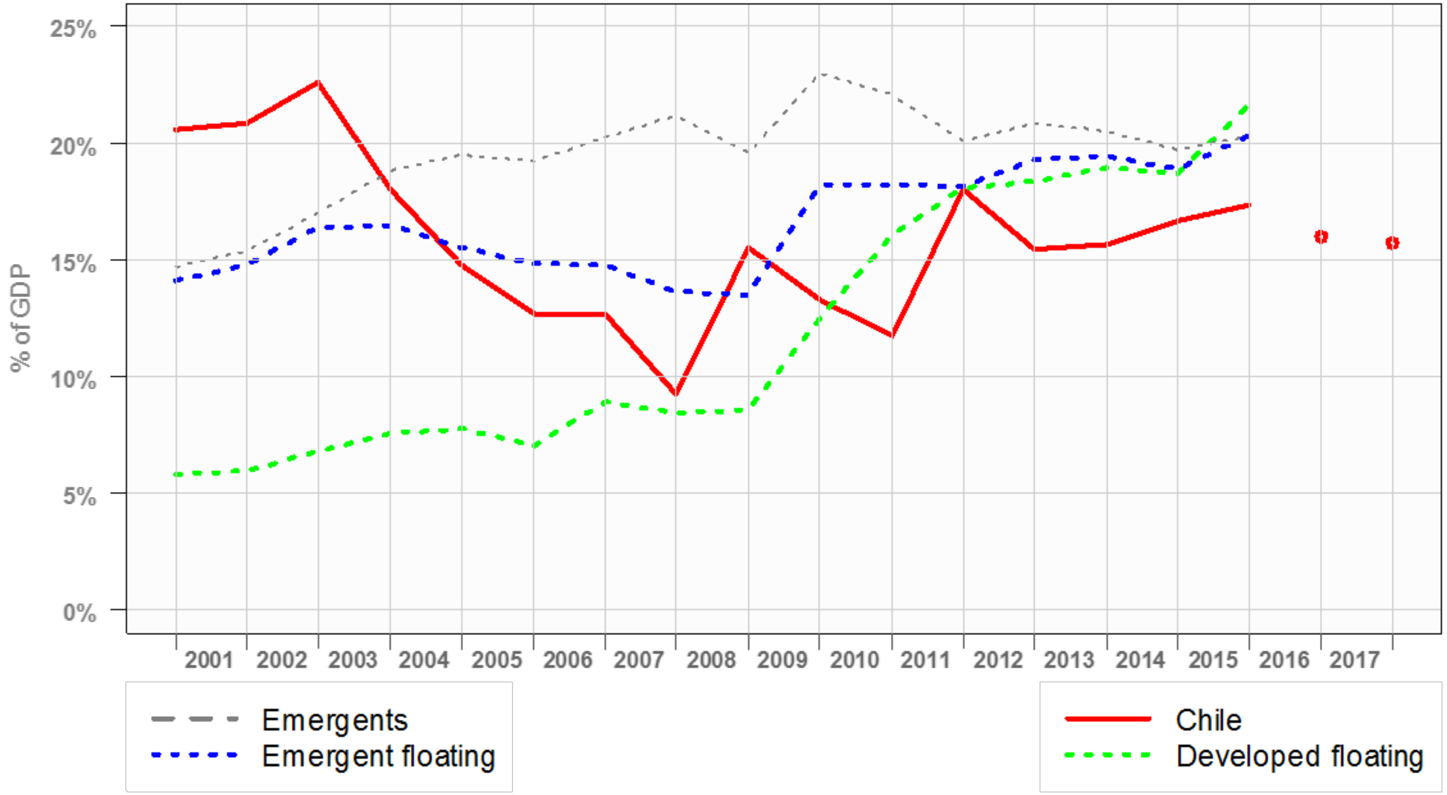
During last financial crisis the Central Bank of Chile doubled its international reserves level to be better prepared to provide foreign exchange liquidity and preserve financial stability in the event of stress scenarios in international credit markets.

With the purchase of USD 5.75 billions in 2008 and USD 12 billions in 2011, international reserves grew from 10% of GDP in 2007 to 18% of GDP in 2011.



International reserves of Central Bank of Chile

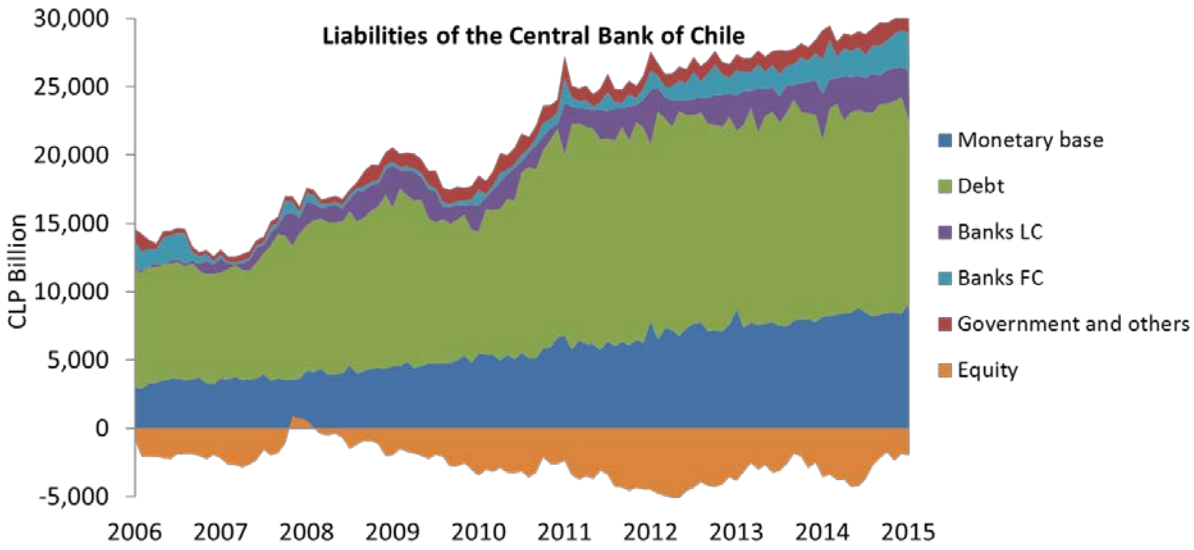
International reserves evolution



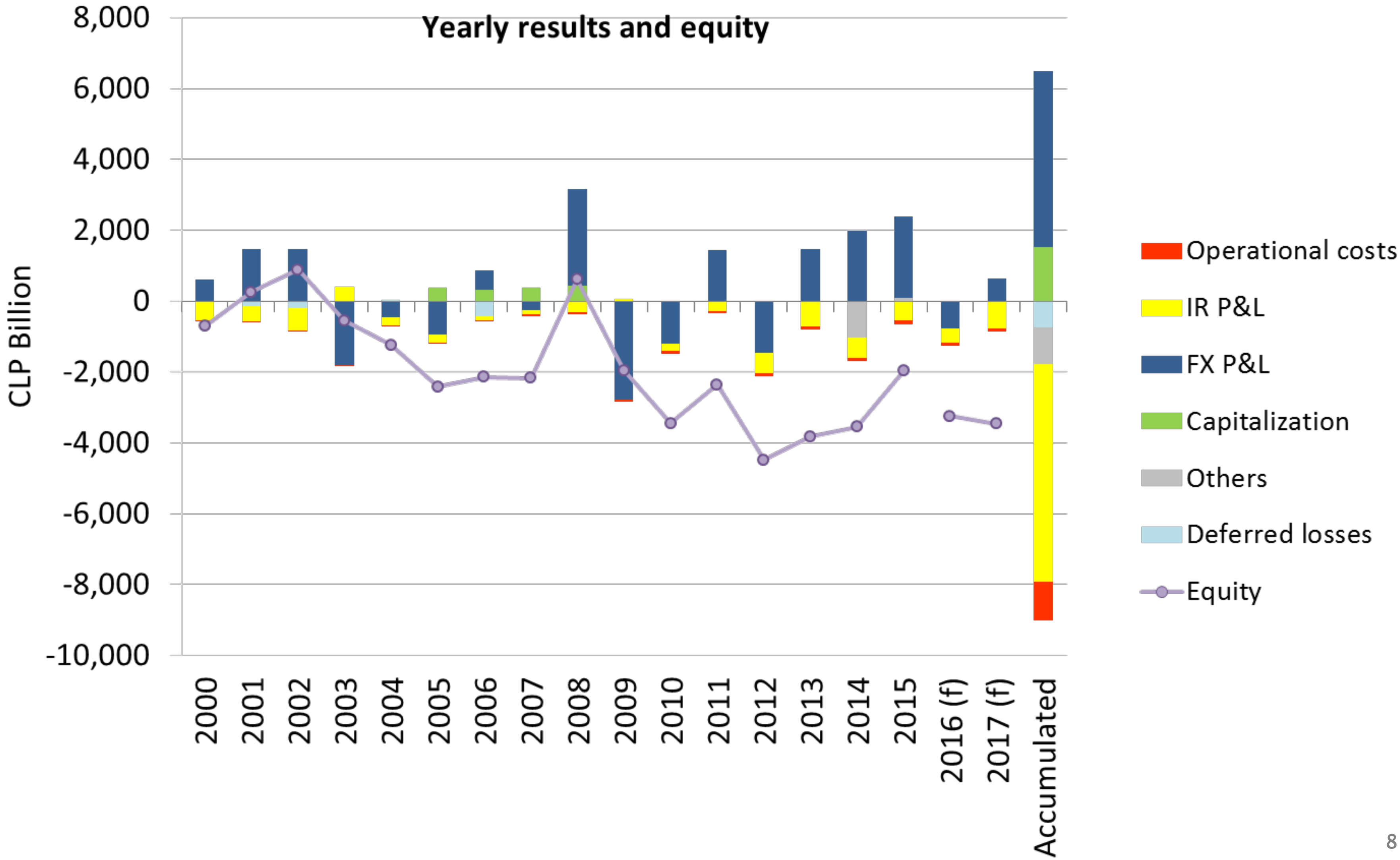
Source: Central Bank of Chile and G. Contreras, A. Jara, D. Saravia, E. Olaberría, Sobre el Nivel de Reservas Internacionales de Chile: Análisis a partir de enfoques complementarios, Revista Economía Chilena, 2012.

Liabilities of the balance sheet

In order to sterilize the international reserves purchase, that is increase reserve levels without affecting money supply to avoid inflationary effects, the Central Bank of Chile issued long term debt (BCP, BCU) by an equivalent amount.



Performance of the balance sheet



History of negative equity (1)

The accumulated negative equity has its roots in the rescue of the banking system of the 1980 crisis, which was not fully covered by government contributions.

The value of equity accumulates the effect of exchange rate fluctuations and the cost of building reserves that are financed with local debt due to interest rate differentials between foreign and local rates.

Before a small scale capitalization in 2006-2008, equity reached a low of -3.8% of GDP in 2005. In 2015 equity close at -1.3% of GDP (USD 2,8 billions).

History of negative equity (2)

Recapitalization mechanisms

The Fiscal Responsibility Law of 2006 allowed the Minister of Finance to yearly contribute equity to Central Bank for a period of 5 years for the equivalent of up to 0.5% of previous year GDP. Three contributions were made in 2006, 2007 y 2008 aggregating USD 1,700 millions.

Public sector assets

In 2014 the Central Bank of Chile recognized a provision for impairment of equity for USD 1,706 millions, corresponding to the total value of the credit recorded on the balance sheet stemming from the entities that made up the National Savings and Loan System.

At present there are neither automatic fiscal recapitalization rules, nor specific mechanisms to transfer risk to the government.

Has negative equity mattered?

The Central Bank of Chile has been effective in the implementation of monetary policy and its strong credibility has also been favored by an environment of low levels of public debt and healthy public finances in general.

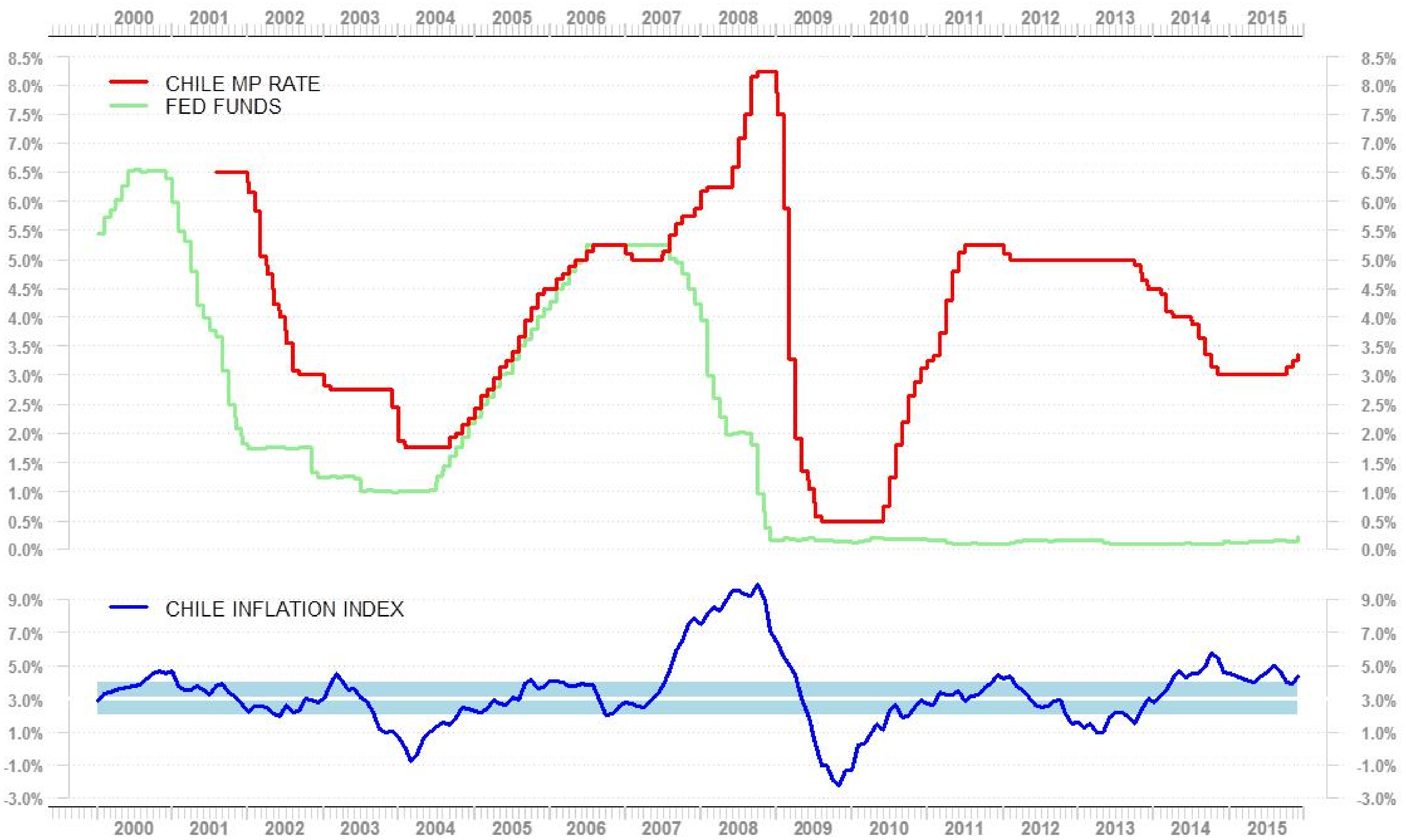
A controlled inflation, low government debt and an accountable fiscal policy along with appropriate levels of international reserves of government and Central Bank contributes to financial strength.

Due to seigniorage it is expected that over the years equity will turn positive although there is a large uncertainty in the recovery time forecast.

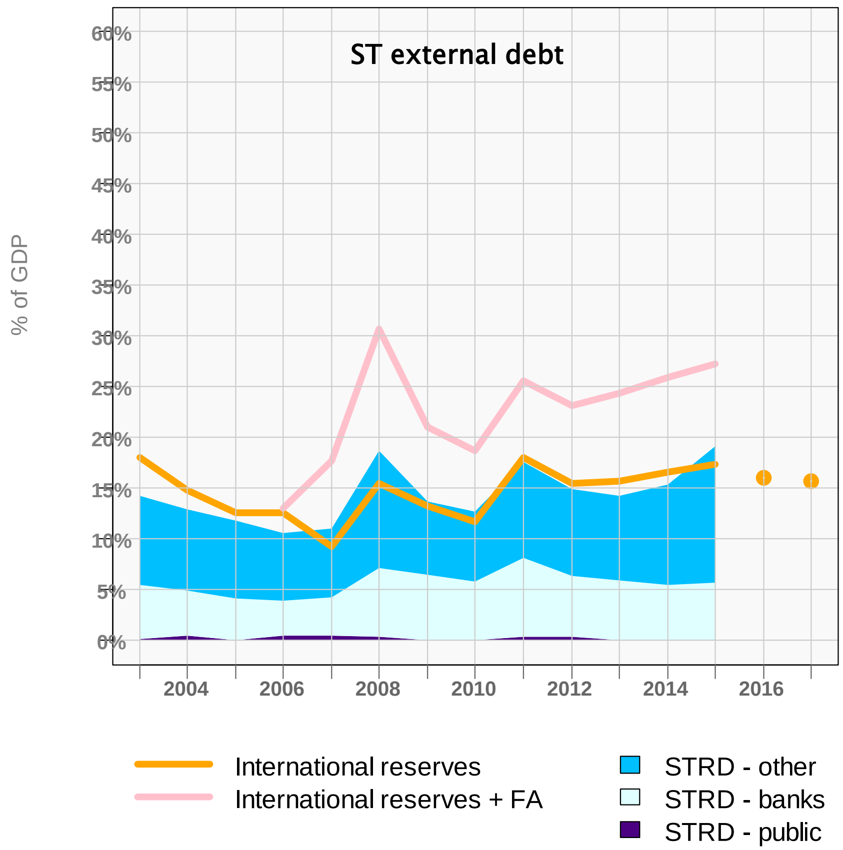
All these factors have been favorable to operating effectively with negative capital, and there is also the precedent of fiscal responsibility small scale recapitalizations.

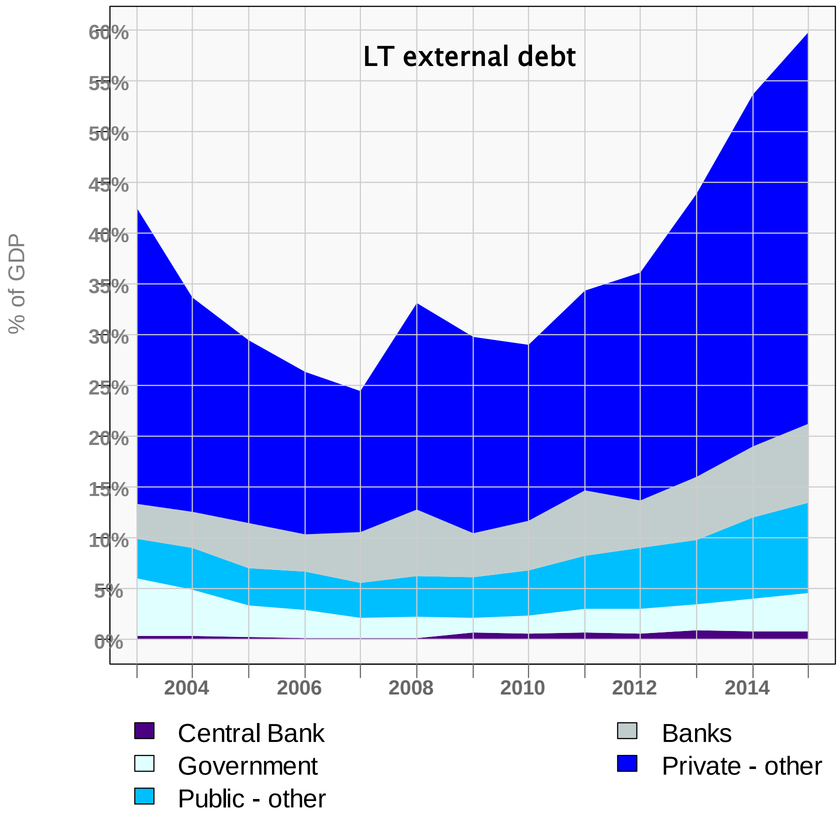
Nevertheless, negative equity presents a challenge to the management of the CB balance sheet.

Controlled inflation…



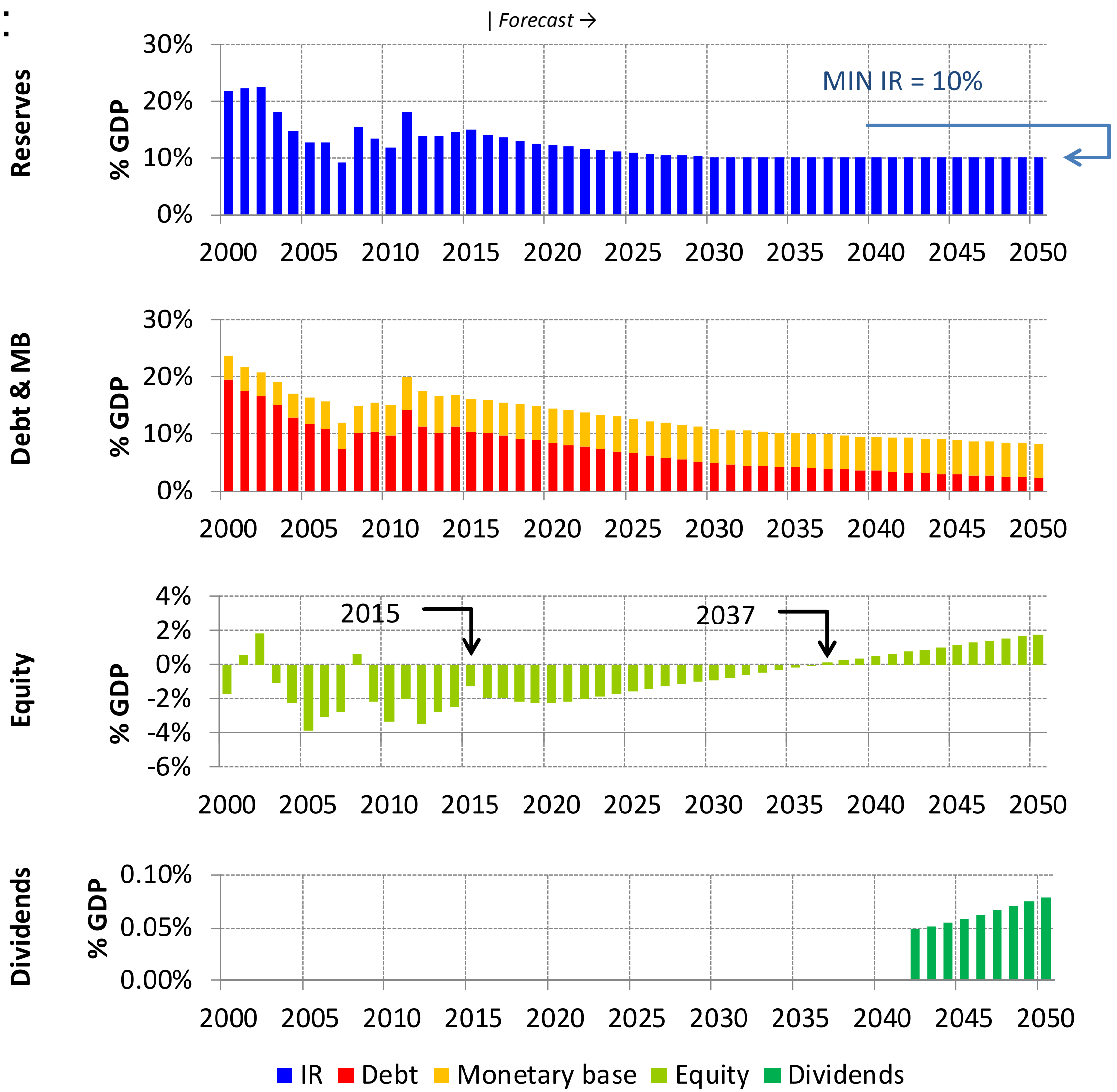
Appropriate levels of international reserves and low government debt…





Long term forecast of balance sheet

Current Equity:
−1.3% GDP



Factors affecting balance sheet evolution

Accounting methodology

Accounting criteria are defined by the Board of Directors and require consensus with the Superintendency of Banks and Financial Institutions.

With a few exceptions, IFRS are currently used.

International reserves instruments are marked to market on daily basis.

Debt is valued at auction rates.

Dividends distribution rule

Once initial equity has been established, up to 10% of net income can be accumulated as international reserves if the Board of Directors so decides.

The remainder of net income is paid as dividends unless a special law provides that all or part of the net income increases equity.

So far, dividends have never been paid.

Factors affecting balance sheet evolution

Minimum level for international reserves

The model has as an additional parameter a minimum level of reserves as a percentage of GDP. If international reserves falls below that threshold, the algorithm generates a reserve purchase and an increase in debt (sterilized intervention).

Monetary Base

Monetary base is important because it is (virtually) a no-cost liability and its growth allows to replace interest bearing debt acquired to finance Central Bank's assets.

For the last 10 years monetary base has grown at twice the rate of GDP.

Monetary base model

The underlying model to forecast monetary base has the form:

$$B_t = B_{t-1}(1 + \pi_t)(1 + \eta\, g_t)$$

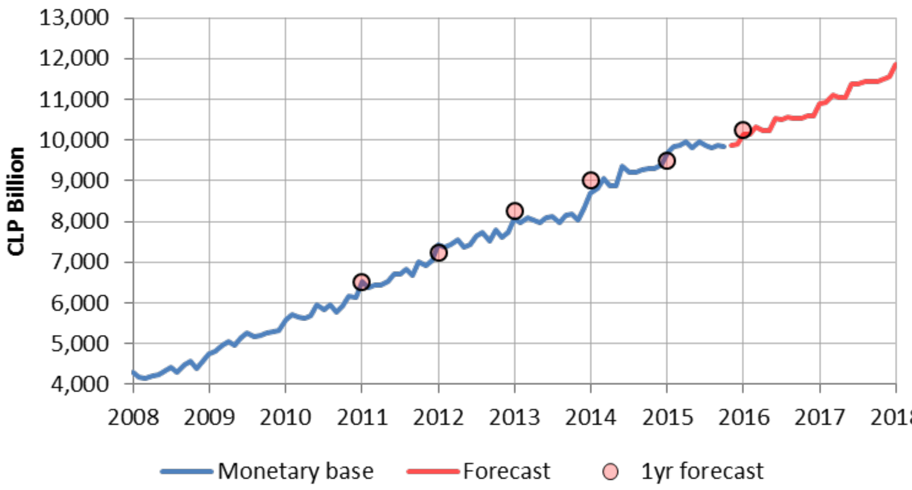
Where:

B_t: Monetary Base

π_t : Inflation

g_t: GDP growth

η: Monetary Base elasticity in response to GDP, With $\eta = 2$



Source: Compiled by author.
Note: Exchange rate 660 CLP/USD.

Final comments

The balance sheet of the Central Bank of Chile, and capital in particular, are sensitive to monetary policy decisions, foreign exchange rates, interest rates differential and the growth of monetary base.

The Central Bank of Chile took a series of actions during the financial crisis, including doubling its level of international reserves to strengthen its FX position. Special Repo operations with expanded collaterals were done to support local currency liquidity, and peso-dollar Swap operations to support dollar liquidity.

Building reserves that are financed with local debt increases FX risk and financial cost for the Central Bank of Chile due to interest rate differentials between foreign and local rates.

A central bank can operate with negative capital for a long time when other financial strength factors are favorable.

Central Bank of Chile’s Balance Sheet

Milcíades Contreras
Central Bank of Chile

Central Bank Risk Manager´s Conference
Reserve Bank of India
Mumbai, November 17-18, 2016