

# Experiences with Market Dislocations

## Central Bank of Chile



Liliana Cavieres O.  
Senior Economist in Financial Markets Division  
Central Bank of Chile

Regional Course on Financial Markets, CEMLA  
Nassau, The Bahamas, 10-12 September 2019

# Outline of the presentation

- Political Framework: Monetary Policy, Foreign Exchange Regime, Fiscal Policy.
- Characteristics of main financial markets: instruments and participants in Fixed Income, Money Market and Foreign Exchange markets.
- Events that caused relevant movements in domestic prices.

# Political Framework

- The Central Bank of Chile (CBC) structures its monetary policy in a framework of inflation target, which is complemented with a flexible foreign exchange regime (\*).
- This regime was implemented in 1999 and facilitates the adjustment of the economy to real shocks.
- In 2001, the CBC nominalized its main monetary policy instrument and adopted an inflation target regime: 3% with a range  $\pm 1\%$  in an horizon of 24 months.

(\*) Source: Central Bank of Chile ([www.bcentral.cl](http://www.bcentral.cl)) "Política Monetaria del Banco Central de Chile en el Marco de Metas de Inflación".

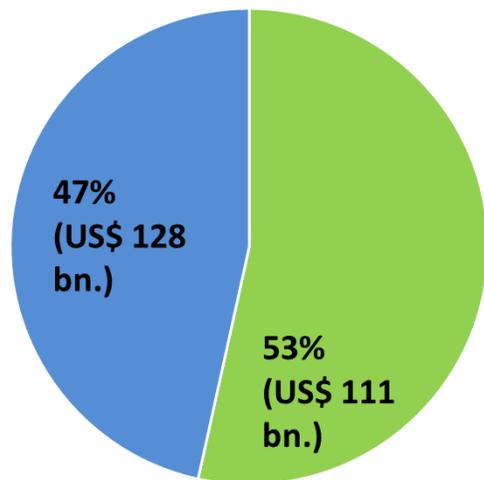
# Political Framework

- Fiscal policy has a structural balance rule of 0% GDP. This means the effective balance will be less than 0% GDP when cyclical conditions are unfavorable and over 0% of GDP when cyclical conditions are in favor to the fiscal budget (\*).
- There is an economic commission that sets structural parameters of the trend GDP and reference price of copper for the elaboration of the yearly Government Budget.
- In the foreign exchange market, main actors of the spot market are private companies, brokers and mutual funds. Non residents operates mostly in forward market.

# Regarding fixed income and money market instruments, inflation linked instruments and corporate bonds predominate in the Chilean market

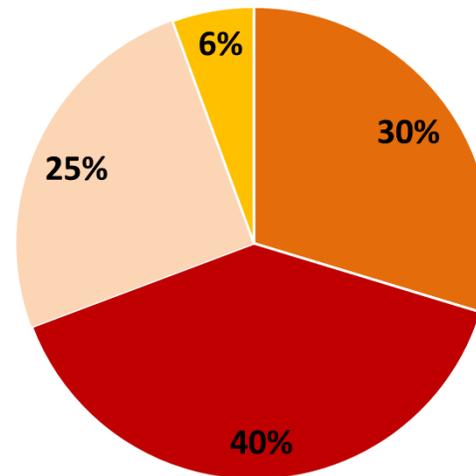
## Chilean Fixed Income and Money Market

By type of currency



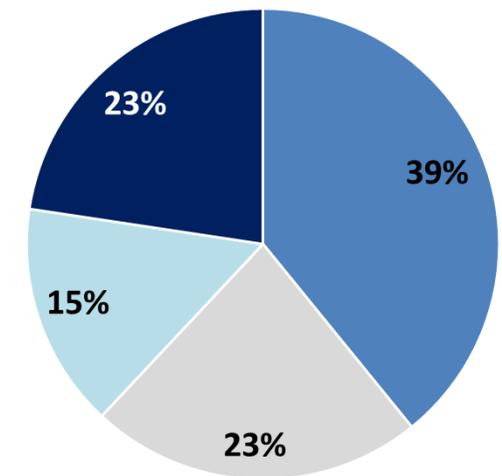
■ Inflation-linked ■ Nominal

By type of instrument



■ Benchmark Bonds ■ Corporate Bonds  
■ Time Deposits ■ Monetary Notes

By participants

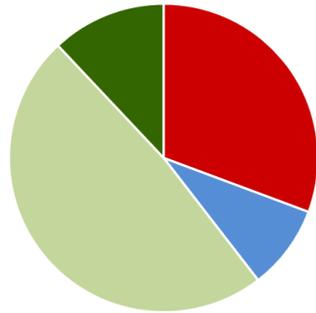


■ Pension Funds ■ Mutual Funds  
■ Banks ■ 3rd Parties and Other

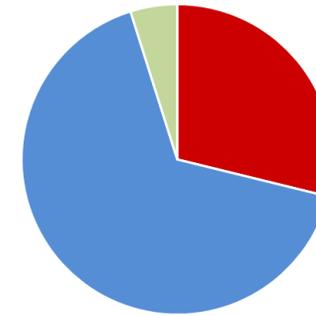
In nominal instruments, time deposits predominates while in inflation linked, corporate bonds have the largest market share. Pension funds have the majority of their portfolio in the long term

## Chilean Fixed Income and Money Market

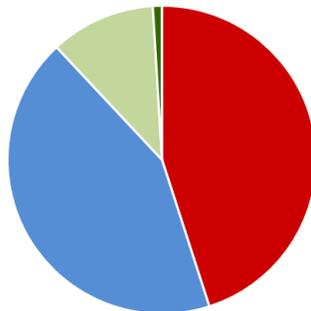
Nominal Instruments



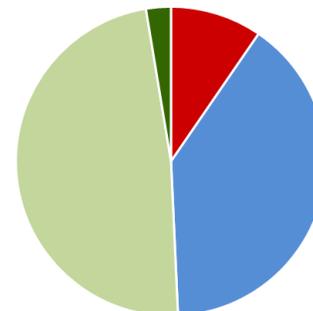
Inflation linked Instruments



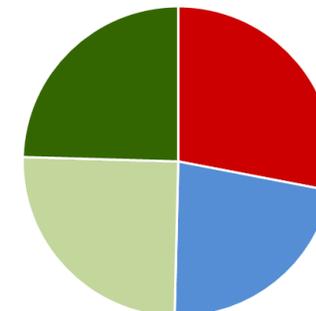
Pension Funds



Mutual Funds



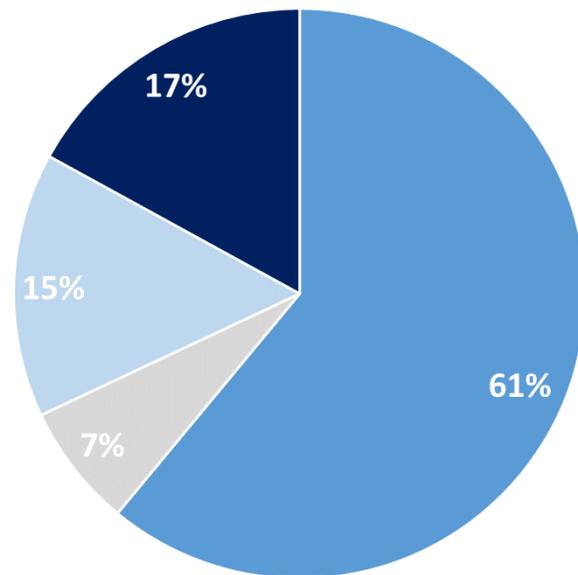
Banks



■ Benchmark Bonds   ■ Corporate Bonds   ■ Time Deposits   ■ Monetary Notes

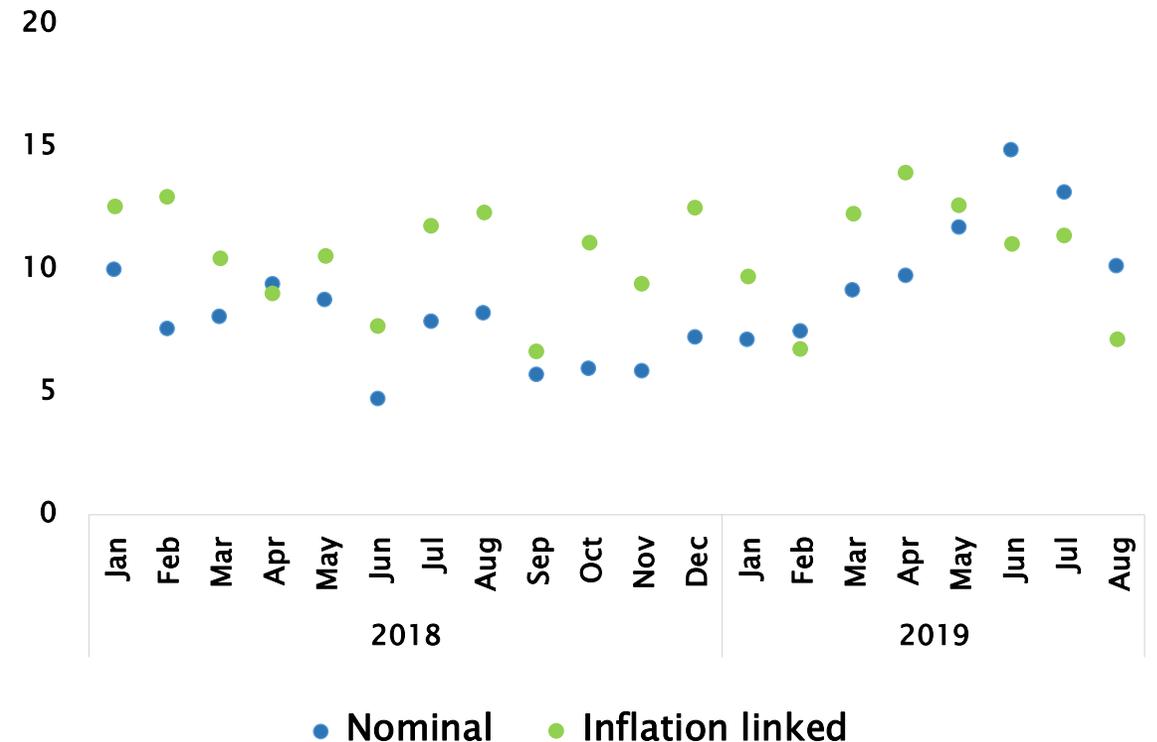
# Pension Funds holds the most important part of benchmark bonds, monthly turnover is around 10%

**Holders of benchmark bonds**  
(percentage)



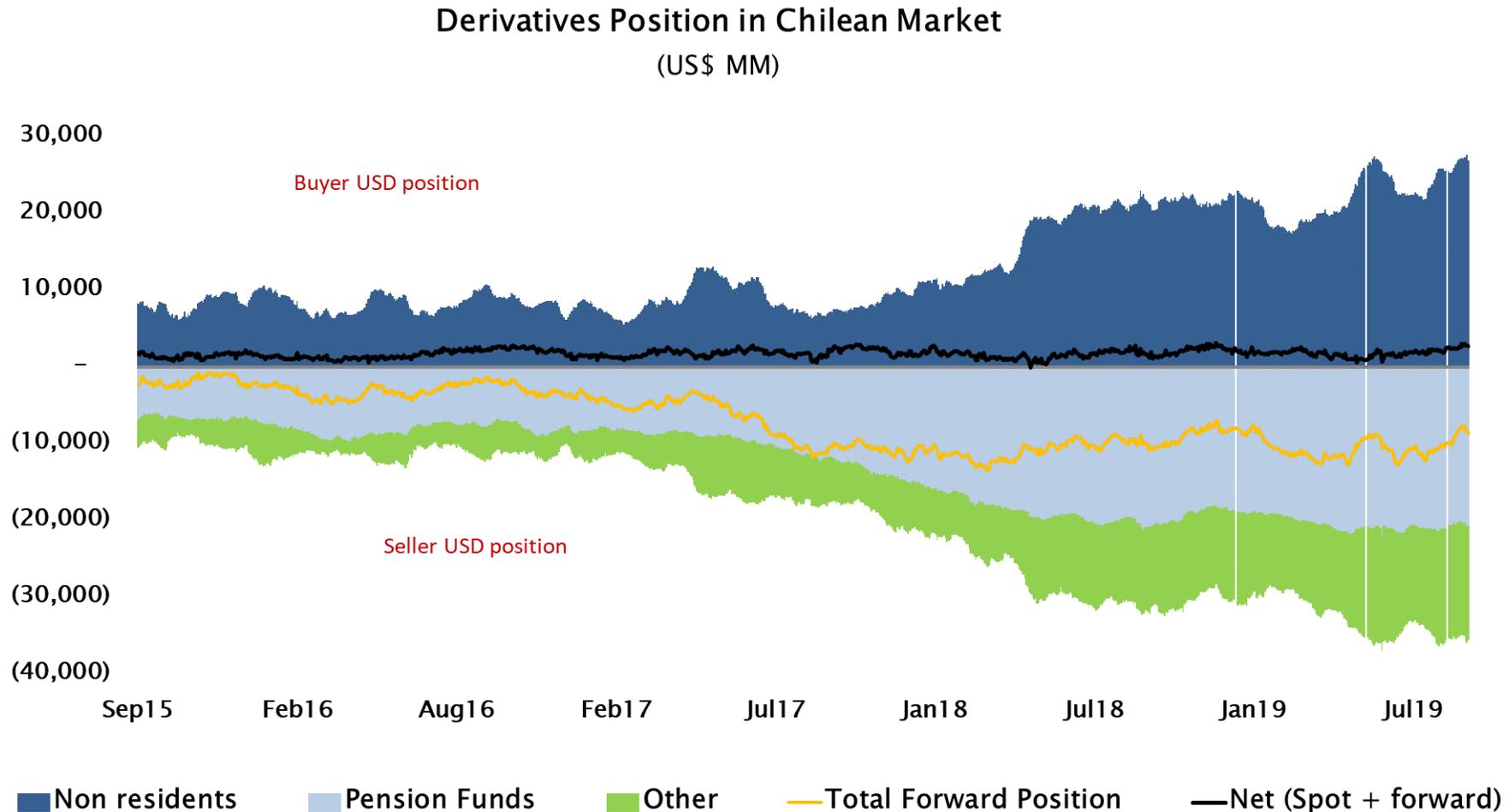
■ Pension Funds ■ Mutual Funds ■ Banks ■ 3rd Parties & other

**Turnover benchmark bonds**  
(percentage)



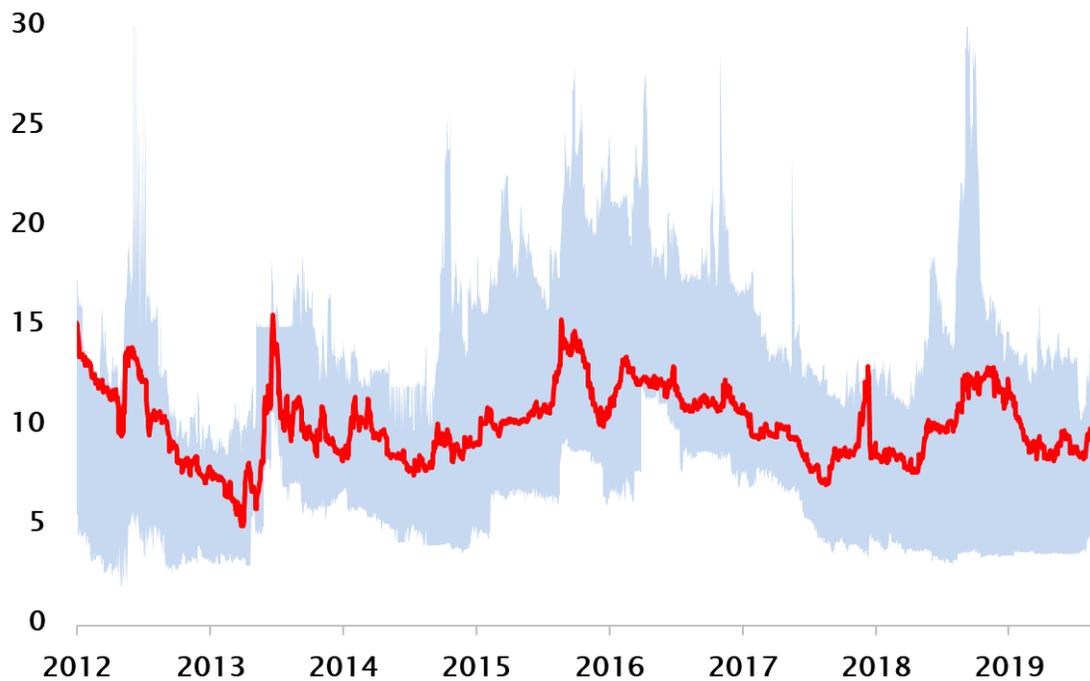
Source: Bloomberg, CBC, Santiago Stock Exchange (SSE). Turnover is a measure of bond market liquidity. The ratio shows the extent of trading in the secondary market relative to the amount of bonds outstanding.

# In the Foreign Exchange Market, Non residents have a buyer USD forward position, while pension funds usually sells USD in derivatives

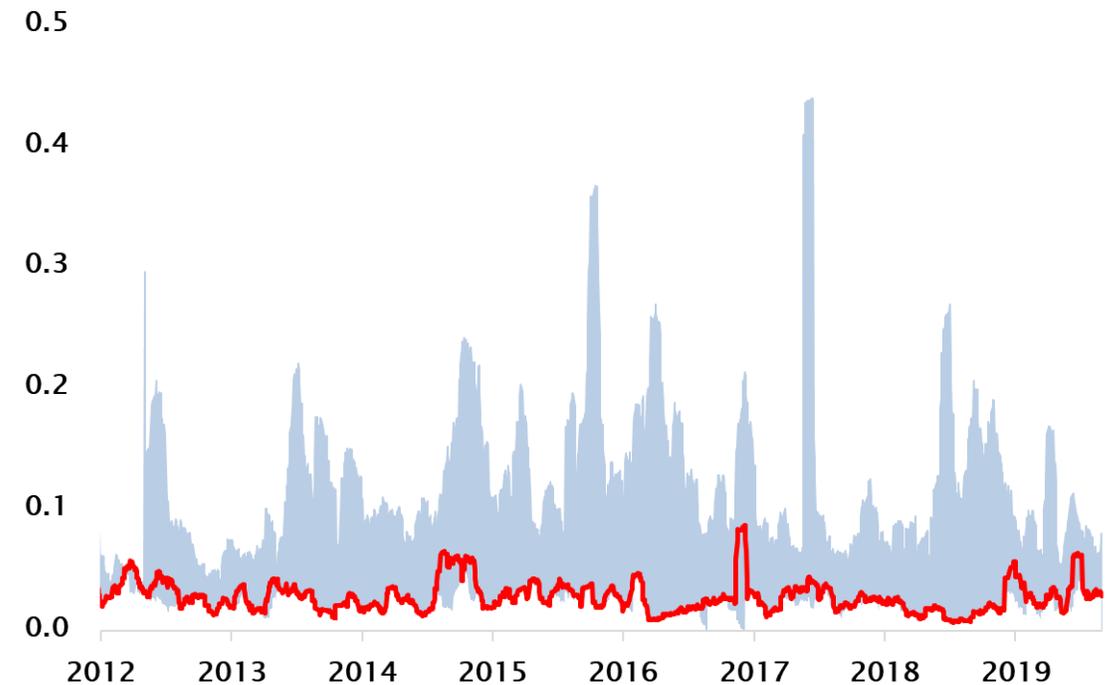


# The parity is the asset that facilitates the adjustment of the economy to external shocks

Currency implied volatility 1-month  
LatAm currencies  
(percentage)



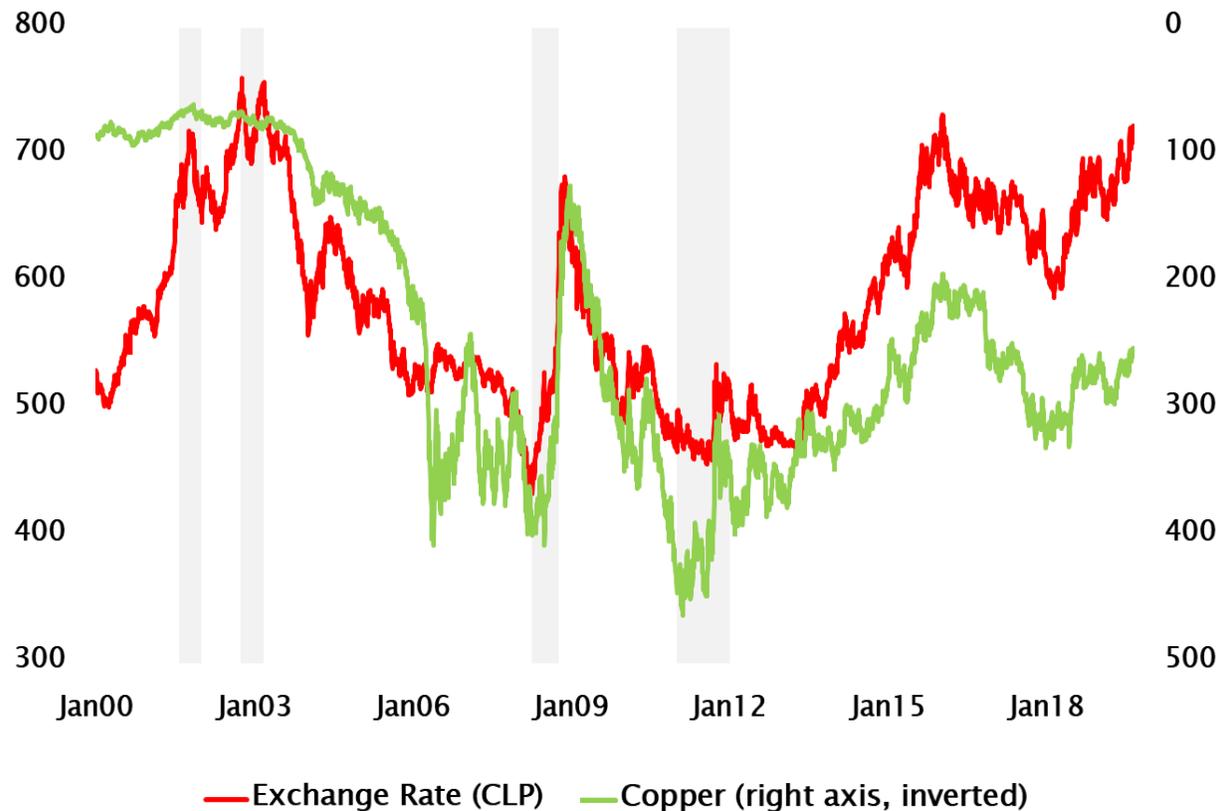
10-year rate volatility  
LatAm countries  
(percentage)



Min-max range — Chile

# The peso fluctuates in line with its fundamentals. In this market, the CBC has made four interventions: 2001; 2002-2003; 2008 and 2011

Exchange rate (CLP) and copper price  
(CLP/USD; cent. US\$/pnd)

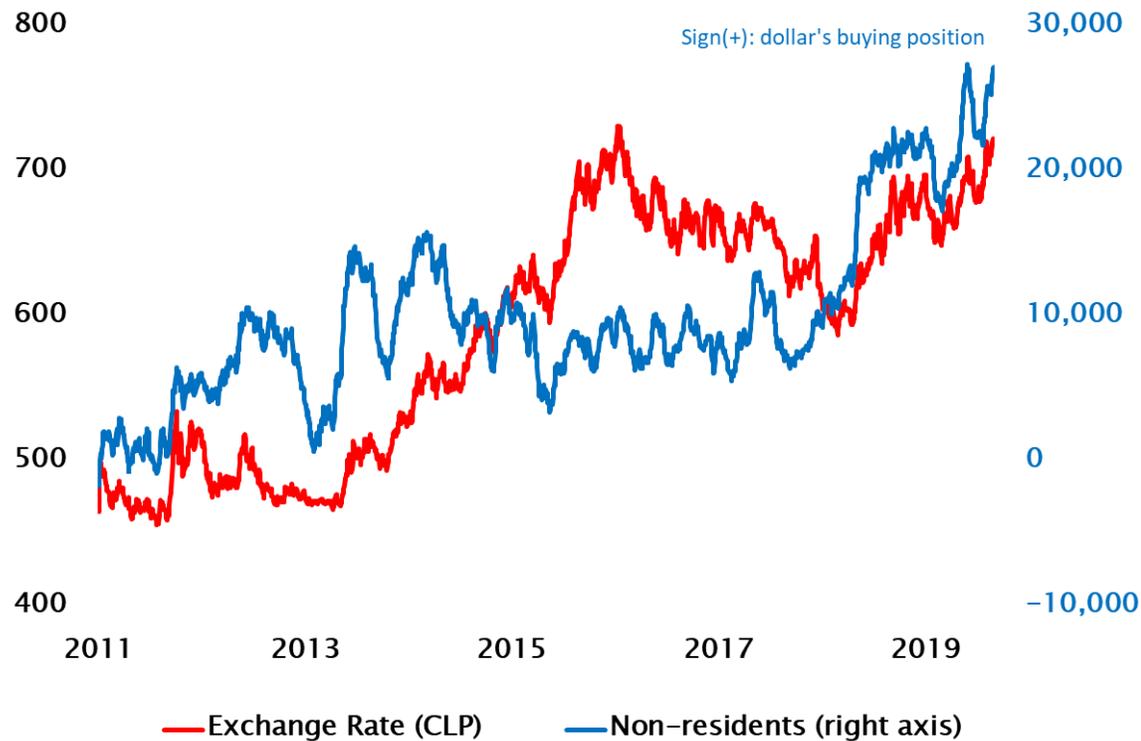


Source: Bloomberg, CBC.

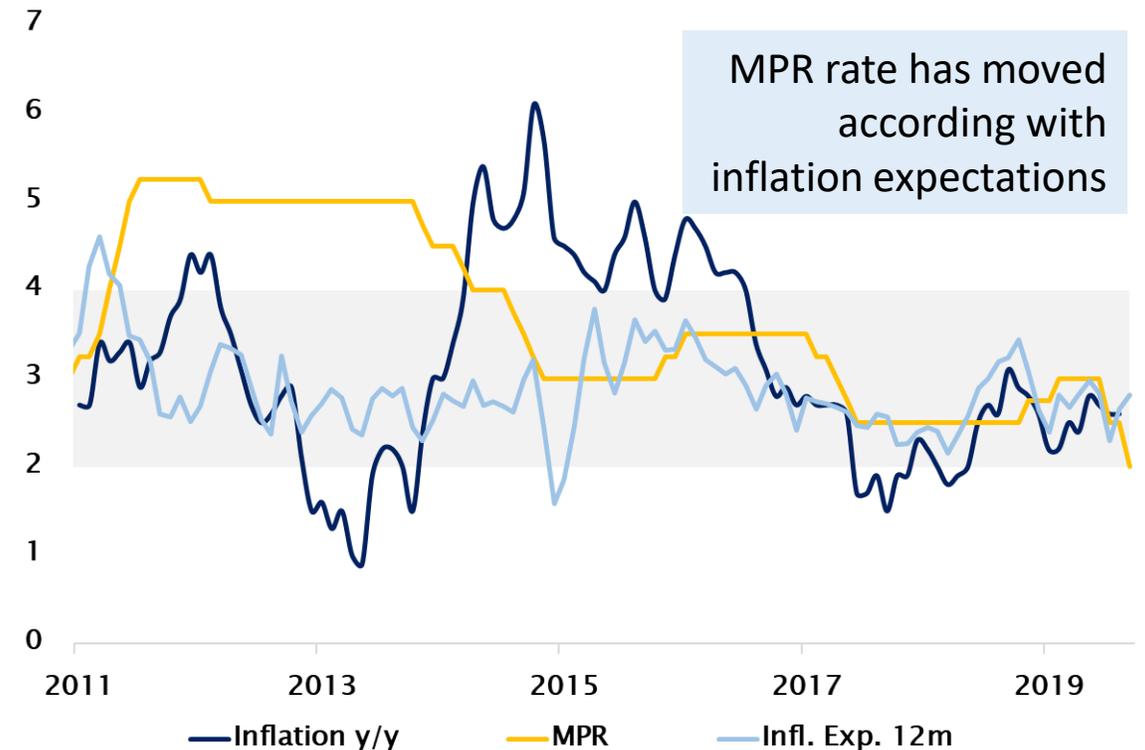
- **2001:** Period of intervention Aug.-Dec.2001. Amount announced in spot market US\$ MM 2,000.
- **2002-2003:** Period of intervention Oct.2002-Feb.2003. Amount announced in spot market US\$ MM 2,000.
- **2008:** Period of intervention Apr.-Sep.2008. Amount announced in spot market US\$ MM 8,000. Purchases were made to enhance the external CBC position.
- **2011:** Period of intervention Jan.-Dec.2011. Amount announced in spot market US\$ MM 12,000. Purchases were made to enhance the external CBC position.

Since 2013, the peso showed a depreciation in line with the withdrawal of the monetary stimulus in the US. This, along with other transitory factors, led inflation to increase

Exchange rate and Non-residents Forward positions  
(CLP/USD, U\$ MM)

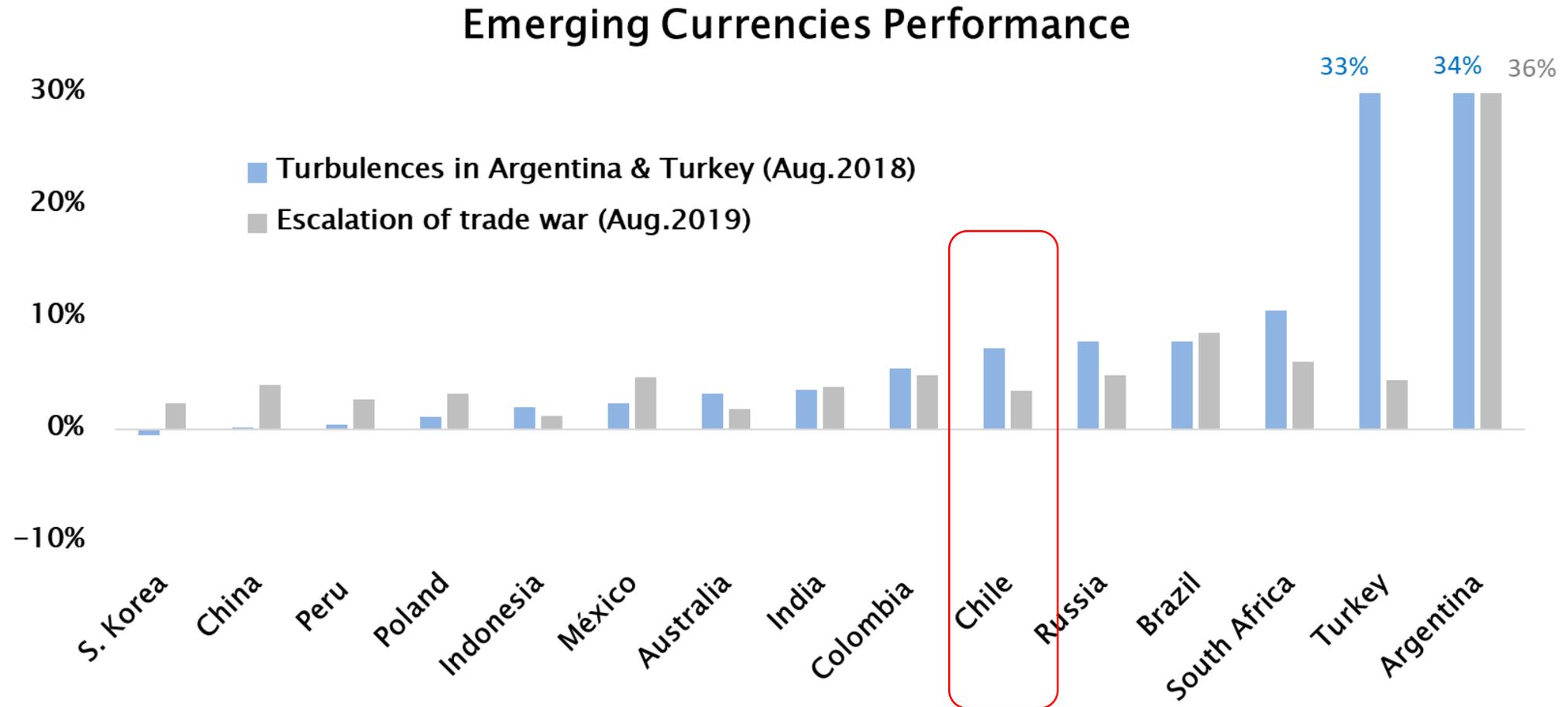


Inflation and Monetary Policy Rate (MPR)  
(percentage)

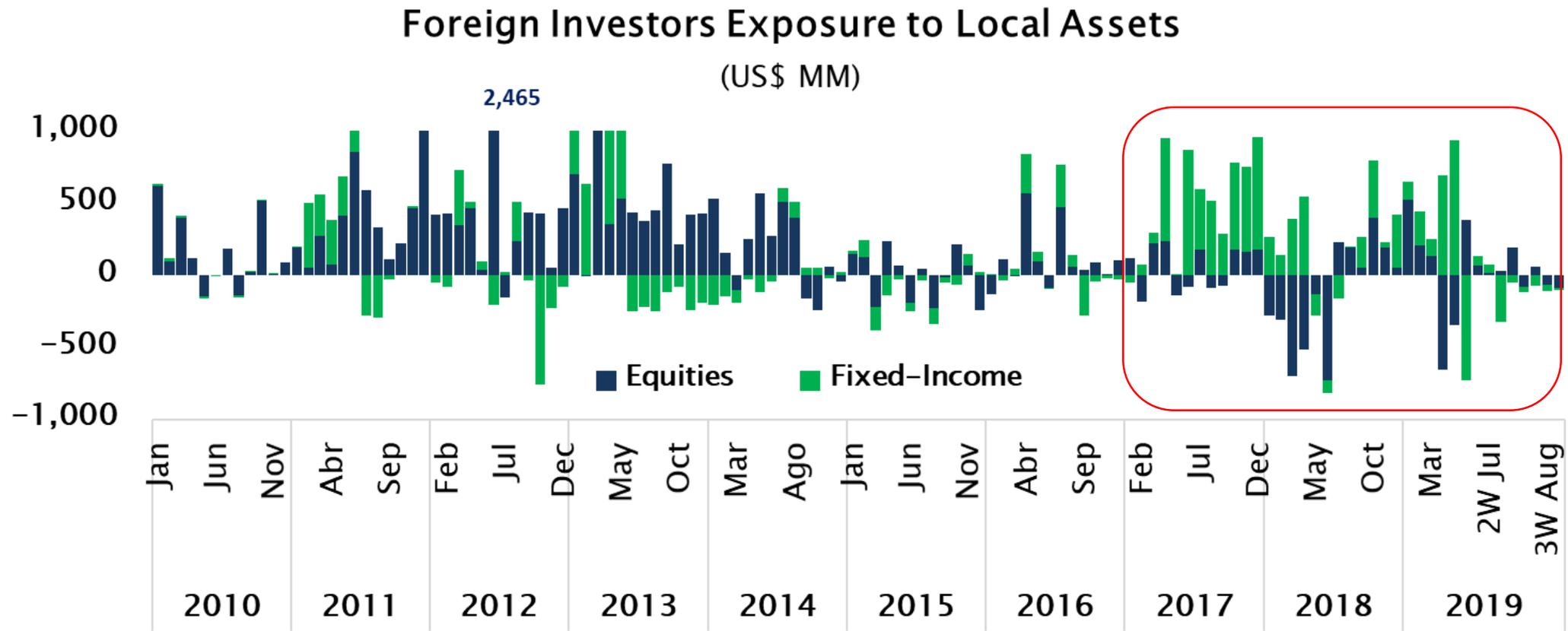


Source: Bloomberg, CBC. Inflation expectations based on inflation forward instruments. The CBC is committed to keep anual CPI inflation around 3% most of the time, with a tolerance range of plus or minus one percentage point. Inflation y/y (<https://si3.bcentral.cl/Siete/secure/cuadros/arboles.aspx>).

During recent periods of turbulences in emerging markets, the chilean peso had fluctuated in line with other emerging currencies



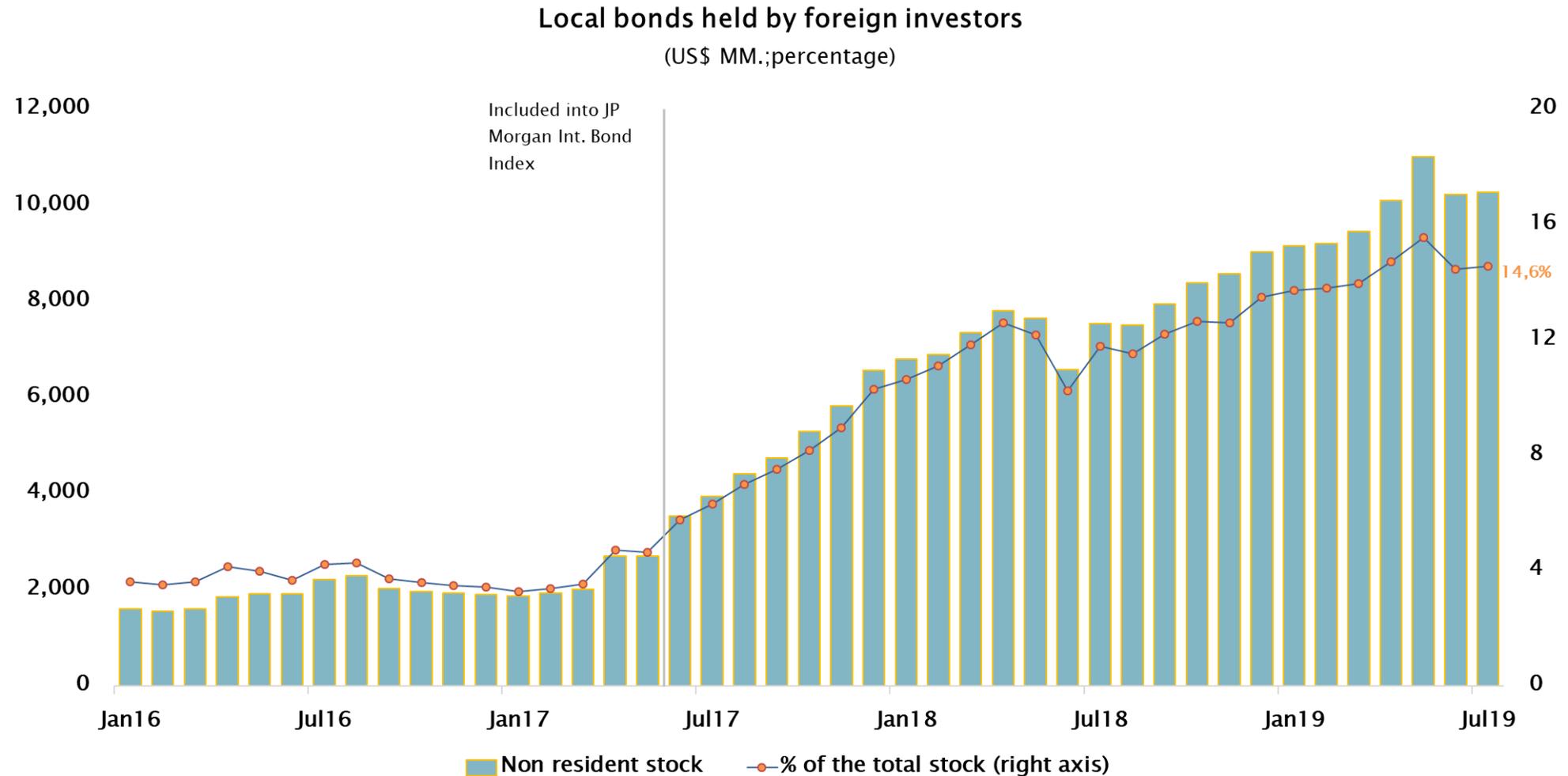
In fixed income market, local bonds enter Euroclear in 2017 and since then, flows from foreigners to local assets have been focused on these instruments



Note: Monthly data until June 2019, weekly data for July and August 2019.

Source: CBC.

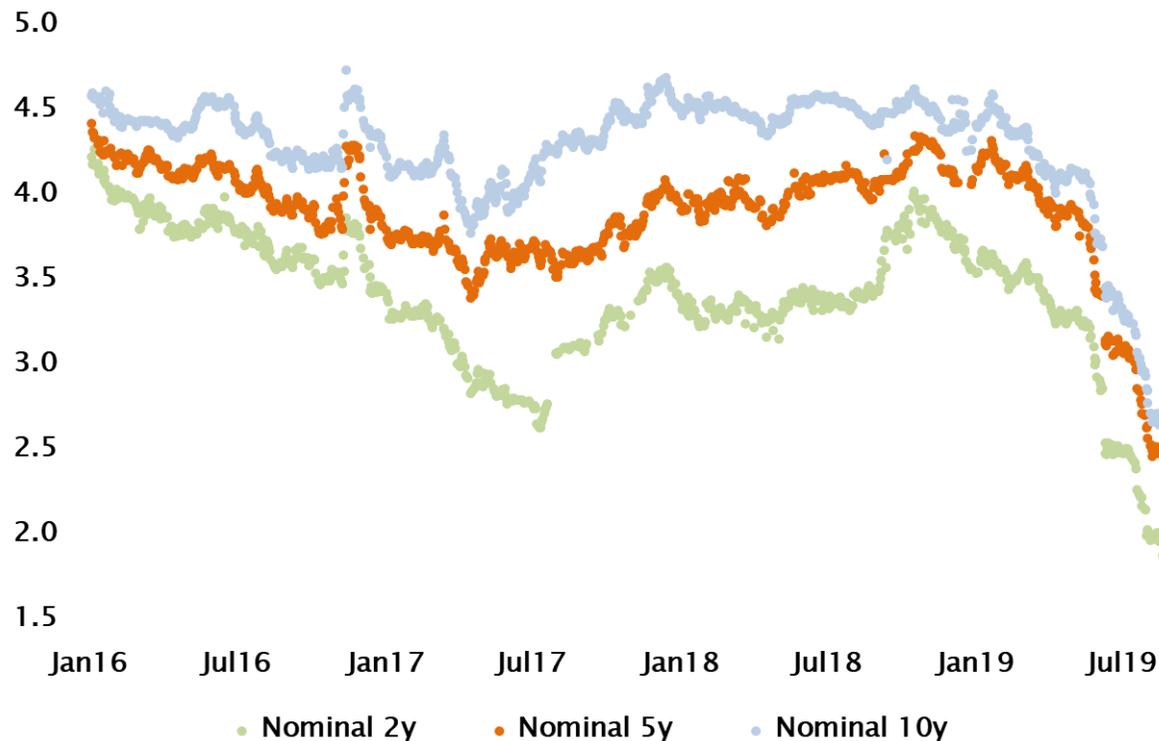
# Currently, Non-residents hold 15% of the total stock of government bonds



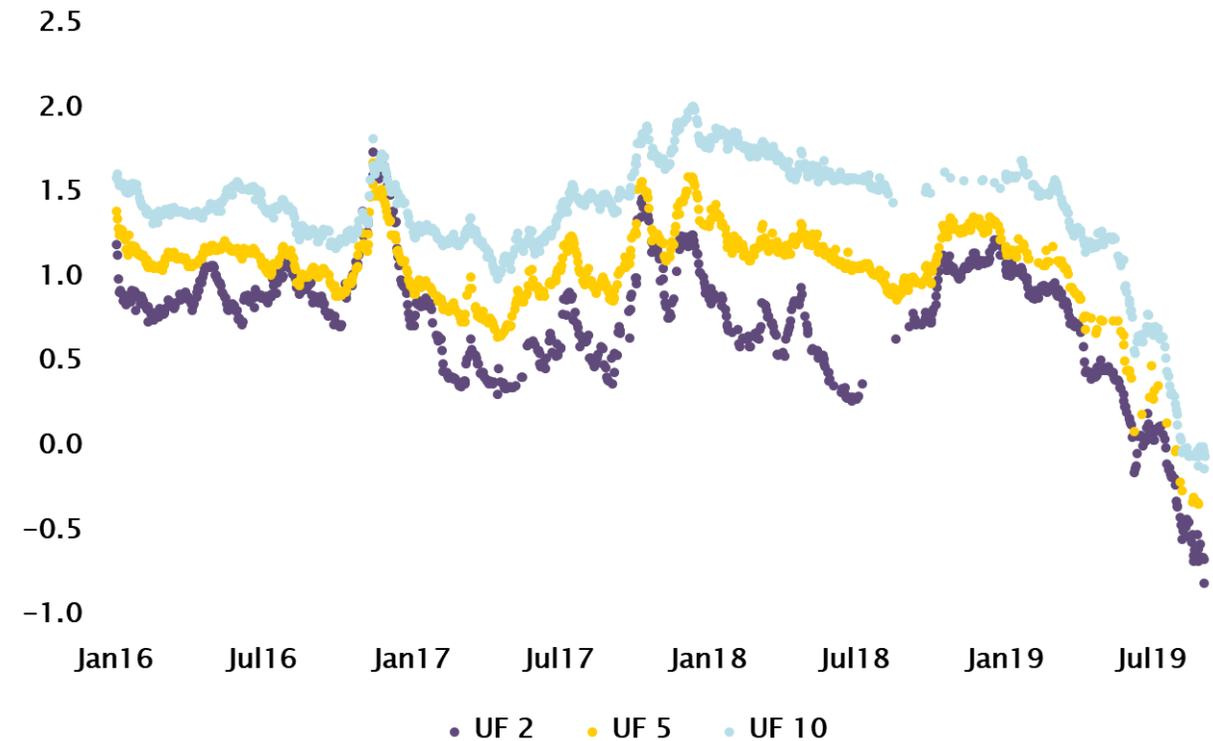
Source: Bloomberg, CBC, DCV.

The presence of non residents had no significant effects in rates. These fell during 2019 because of the uncertainty in economic growth and internal adjustments to structural parameters

Nominal rates traded in secondary market  
(percentage)



Inflation linked rates traded in secondary market  
(porcentaje)



# Experiences with Market Dislocations

## Central Bank of Chile



Liliana Cavieres O.  
Senior Economist in Financial Markets Division  
Central Bank of Chile

Regional Course on Financial Markets, CEMLA  
Nassau, The Bahamas, 10-12 September 2019