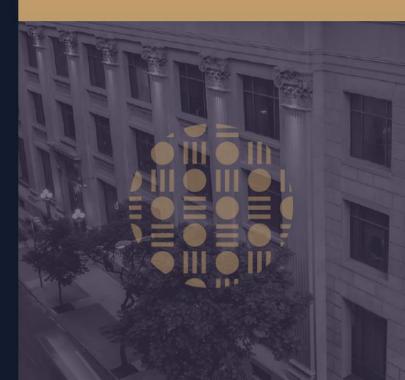
## SIID-TR

# New Information from the Chilean Derivatives Trade Repository

XI Financial Information Forum, Santiago, Chile, June 2025

José Villena, Manager Statistical Information Statistics and Data Division Central Bank of Chile



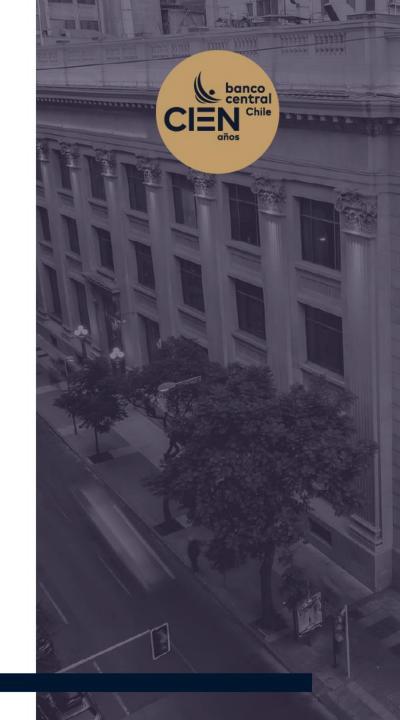


### Agenda



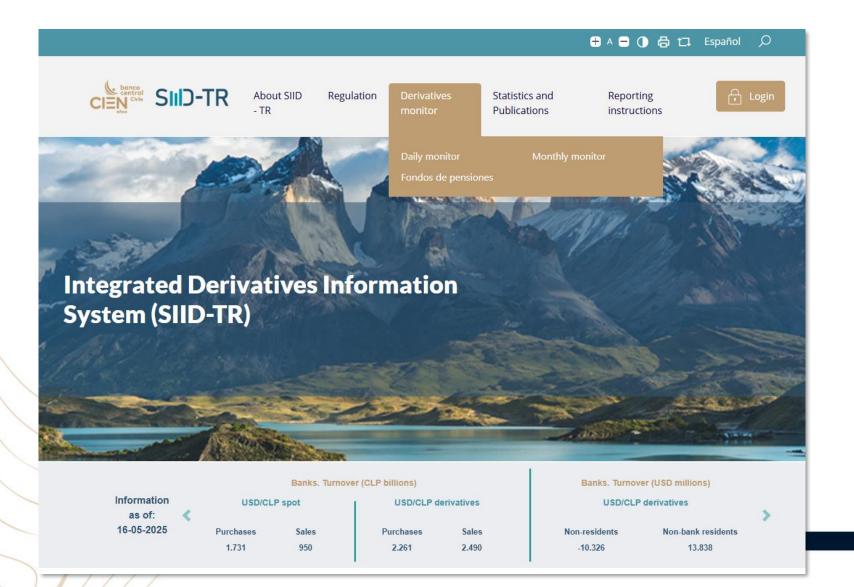
- Background
- ➤ New Statistical Data: Banks' USDCLP derivatives with foreign investors
- New indices: Banking derivatives market concentration
- Pension fund derivatives





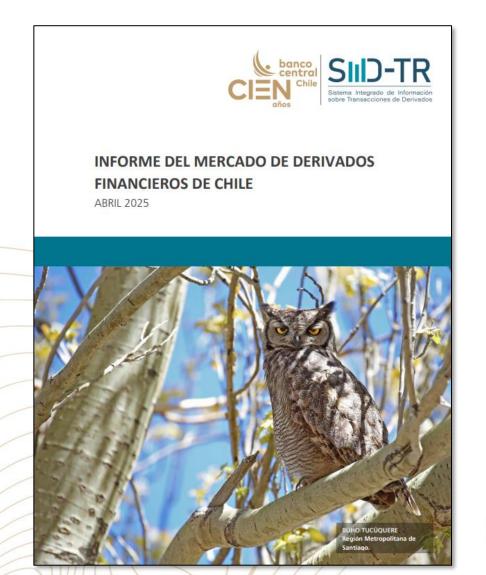
The SIID-TR publishes extensive banking derivatives data on a daily and monthly basis via its web portal as well as the statistical database, including API Access (www.siid.cl).

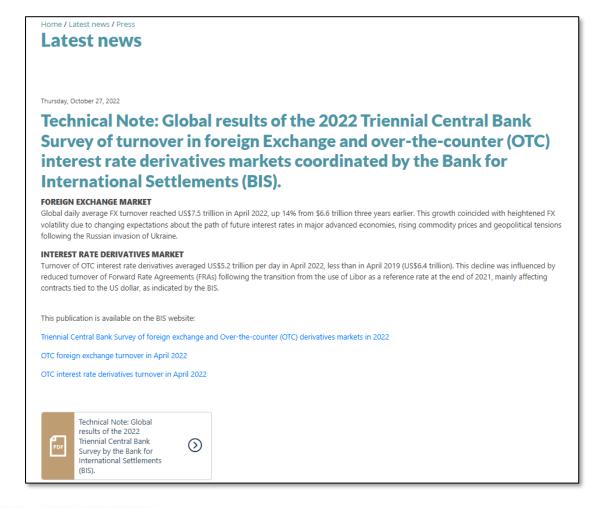




A monthly report shows trends in open positions and traded volumes for FX, interest rate, and inflation derivatives. In addition, documents and technical notes are published to provide more in-depth analysis of the derivatives market.





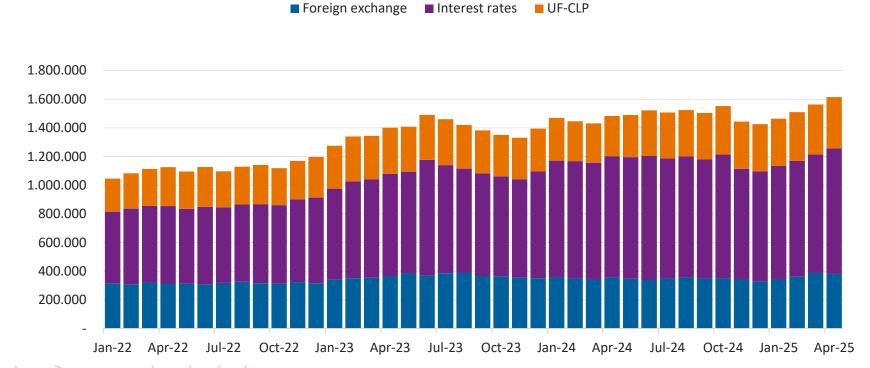


The size of the banking derivatives market: The banking derivatives market in Chile has grown significantly in recent months particularly due to the use of interest rate derivatives.



#### **GRAPHIC**

BANKS. TOTAL OUTSTANDING AMOUNTS IN DERIVATIVES, BY UNDERLYING ASSET (millions of dollars)





New statistical data:

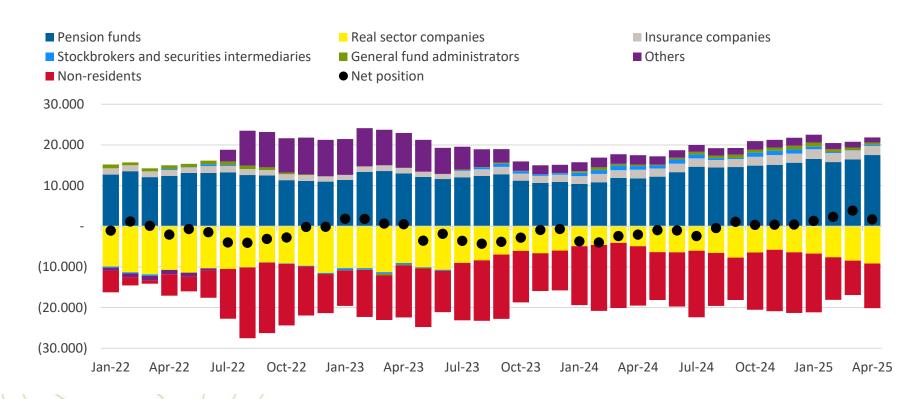
Banks' USDCLP derivatives with foreign investors



**Net Outstanding in FX Market**: Local banks intermediate the USD-CLP derivatives market by holding net long USD positions with institutional investors (who hedge their foreign investment FX risk due to their investments abroad) and net short positions with real sector companies and foreign investors.



### BANKS. NET OUTSTANDING AMOUNTS IN USD-CLP DERIVATIVES BY COUNTERPARTY SECTOR (USD millions)

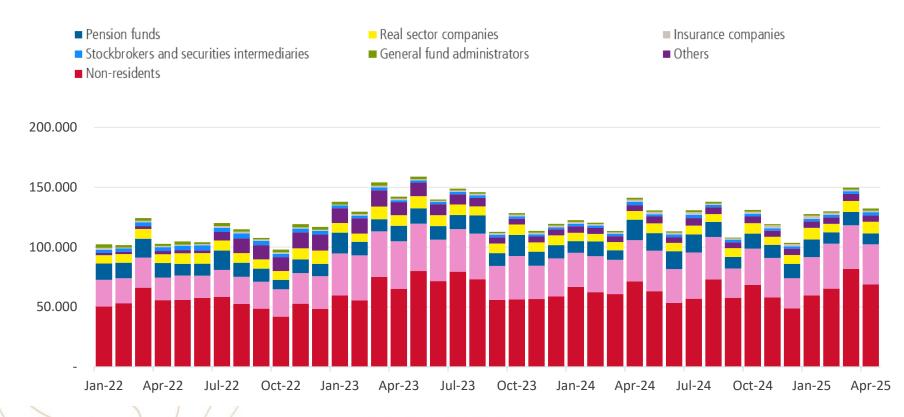


## **Open Interest in FX**: Non-residents account for a large proportion of banks' USD-CLP derivatives, reaching 54% of open interest.



#### BANKS. TOTAL OUTSTANDING AMOUNTS IN USD-CLP DERIVATIVES BY COUNTERPARTY SECTOR

(USD millions)

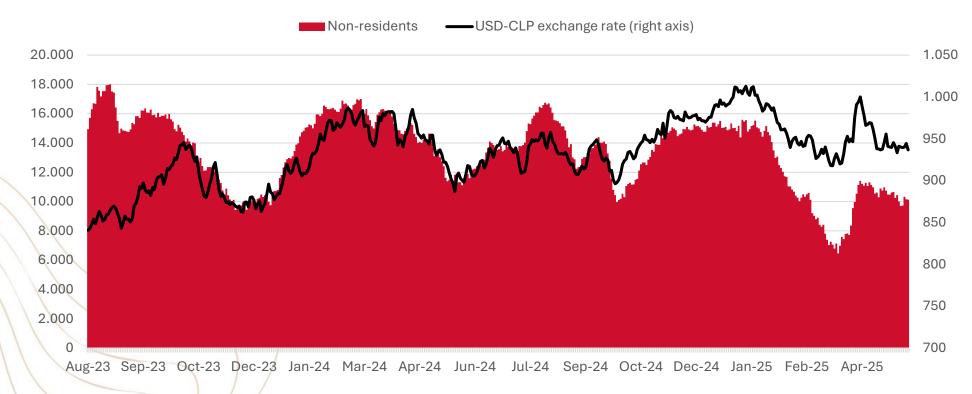


A correlation exists between non-resident net outstanding long positions in the USD-CLP market and the exchange rate. Increased purchasing positions of USD by foreign investors is generally in line with depreciations of the Chilean peso.



#### NON-RESIDENTS. NET OUTSTANDING LONG POSITION IN USD-CLP DERIVATIVES WITH LOCAL BANKS

(USD millions)





There is market interest in assessing whether foreign investors are taking positions in the Chilean peso for investment, arbitrage, or hedging reasons.

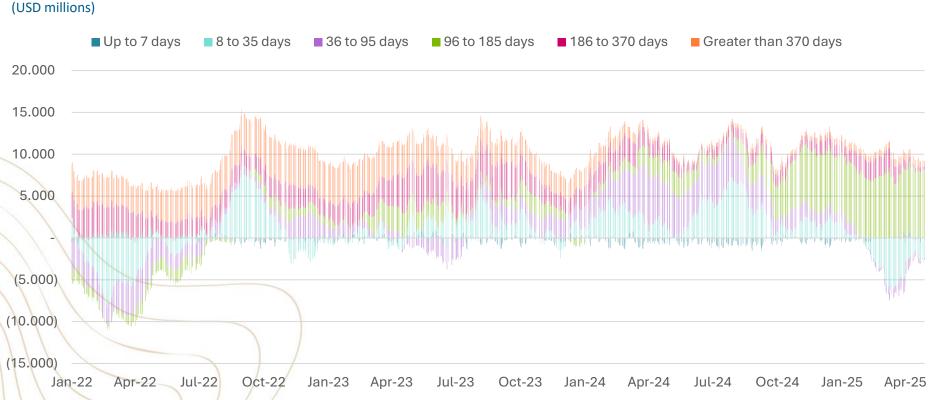




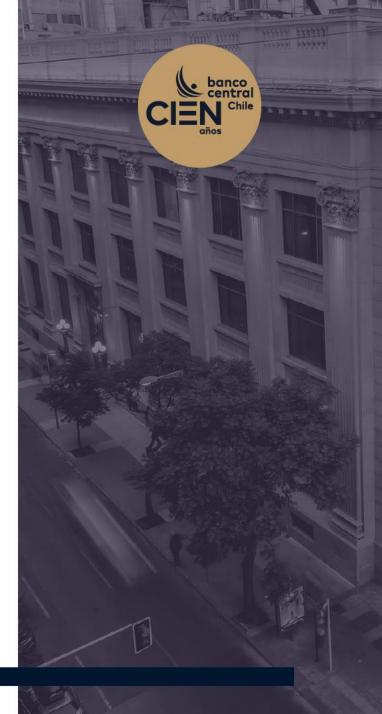
**New NDF statistics by maturity**: A daily breakdown by six contractual maturities of banks' USD-CLP NDF net positions with non-residents is published with a two-day lag. The maturity profile of these contracts serves as a proxy for the nature of foreign investors' positions (hedging, carry trade or investment).



#### NON-RESIDENTS. NET AMOUNTS OUTSTANDING IN USD-CLP NDF WITH LOCAL BANKS, BY CONTRACTUAL MATURITY







Financial market concentration indices are useful for identifying the structure of markets, as well as the available supply for companies and investors who need to hedge financial risk or make investments.



The derivatives markets studied were:

a) FX USD-CL

- b) Local interest rate swap
  - c) Inflation-linked forwards

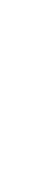
Counterparties were classified as: i.Interbank

- ii. Local non-bank entities
- iii. Foreign investors

The Herfindahl-Hirschmann methodology was used, which is widely applied internationally

Outstanding positions (amounts) at the end of each quarter was considered







This analysis was

published in a document

statistical studies series of

the Central Bank of Chile

from the economic and



## ESTUDIOS ECONÓMICOS ESTADÍSTICOS

Índices de Concentración del Mercado de Derivados Financieros en Chile

Ignacio Benavides Felipe Bustamante José Miguel Villena

N.°143 Diciembre 2024



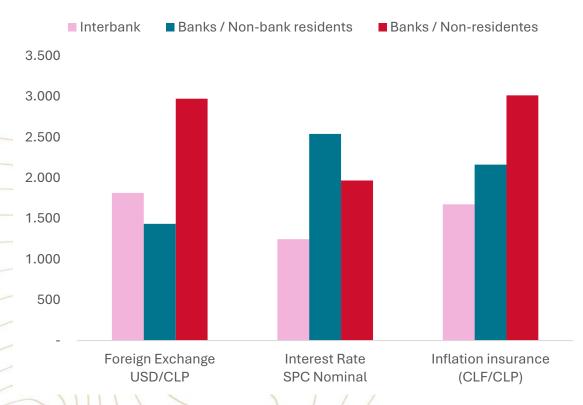


## Comparison of derivatives market concentration (FX, local interest rate swaps, and inflation) by counterparty sector.



#### BANKS. MARKET CONCENTRATION BY UNDERLYING ASSET

IHH, SEPTEMBER 2024



The interbank market for local interest rate derivatives is the least concentrated.

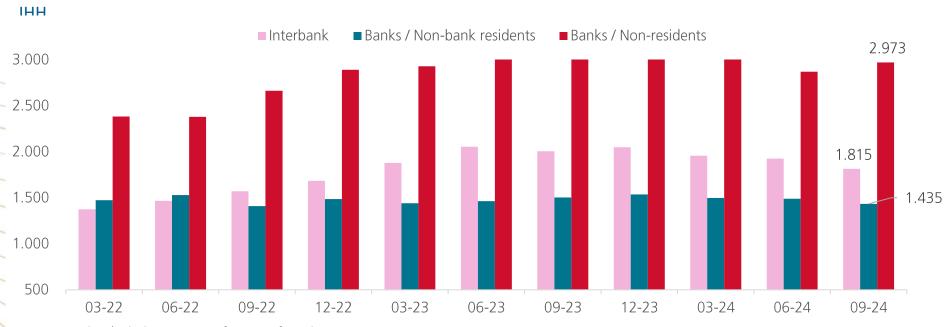
On the other hand, the most concentrated markets are those involving foreign investors trading USD-CLP and CLF-CLP (inflation-linked derivatives).



#### Concentration of the USD-CLP derivatives market

The segment of non-bank residents is the least concentrated, given that a significant number of exporters and importers participate in USD-CLP market, institutional investors also buy and sell USD a as result of their overseas investments. On the other hand, the market with non-residents is the most concentrated, as foreign bank subsidiaries primarily operate with their non-resident parent companies.

#### BANKS. CONCENTRATION IN THE FOREIGN EXCHANGE DERIVATIVES MARKET (USD/CLP)



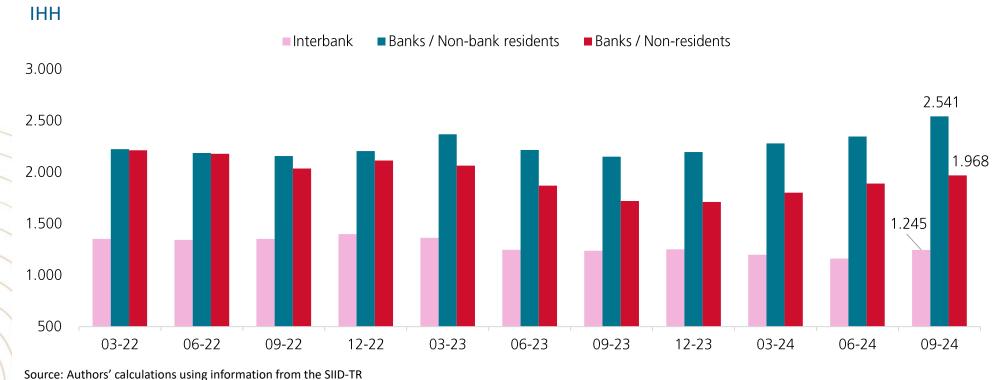
Source: Authors' calculations using information from the SIID-TR

#### Concentration of the local interest rate swap market



The interbank market is the least concentrated which is consistent with the higher familiarity of this product within this segment. In contrast, the highest concentration is found with other local counterparties, which are primarily six pension funds.

#### BANKS. CONCENTRATION IN THE INTEREST RATE DERIVATIVES MARKET (SPC-CLP)



#### Concentration of the Inflation-linked derivatives market

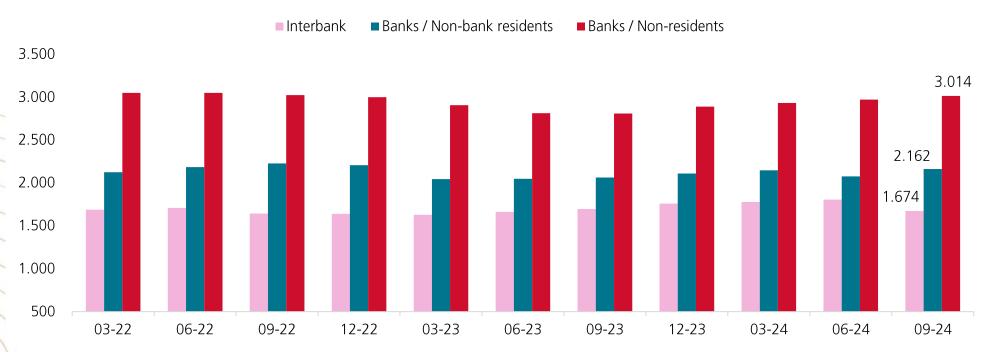


The least concentrated market is with local counterparties, while the most concentrated is with foreign investors. This is likely due to the fact that the *Unidad de Fomento* (UF), Chile's inflation-indexed unit of account, is not widely known among foreign investors.

#### BANKS. CONCENTRATION IN THE CLF-CLP DERIVATIVES MARKET

Source: Authors' calculations using information from the SIID-TR

#### IHH



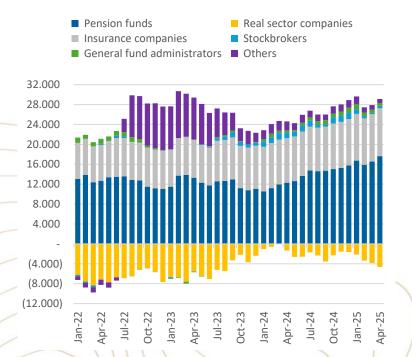




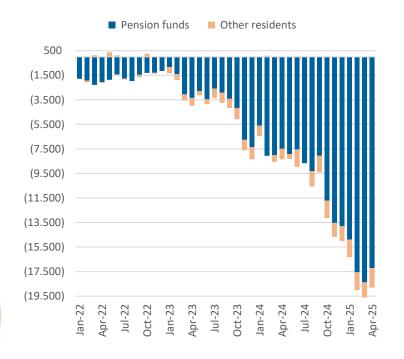
## **Net amounts outstanding**, pension funds are the main local counterparty of the banks in the FX, interest rate and inflation markets.



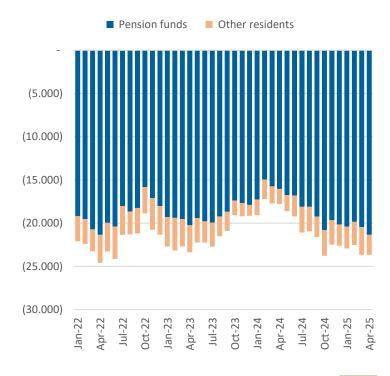
BANKS. NET POSITION: LOCAL MARKET EXCHANGE RATES (ME/ML) (USD millions)



BANKS. NET POSITION IN SPC-CLP FOR UP TO 2 YEARS IN THE LOCAL MARKET.
(USD millions)



BANKS. NET POSITION IN DERIVATIVES UF-CLP, IN THE LOCAL MARKET (USD millions)

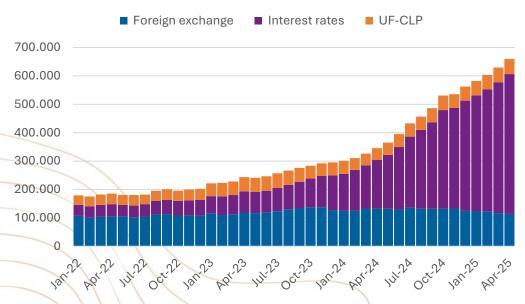




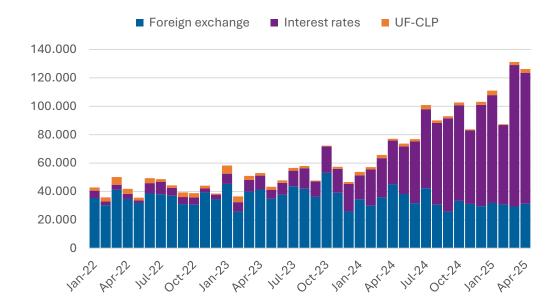
**Pension funds:** There is a significant increase in the use of interest rate derivatives by pension funds, both in their outstanding positions as well as in monthly turnover, mainly for investment purposes.







## PENSION FUNDS. DERIVATIVES TOTAL TURNOVER BY UNDERLYING ASSET (USD millions)



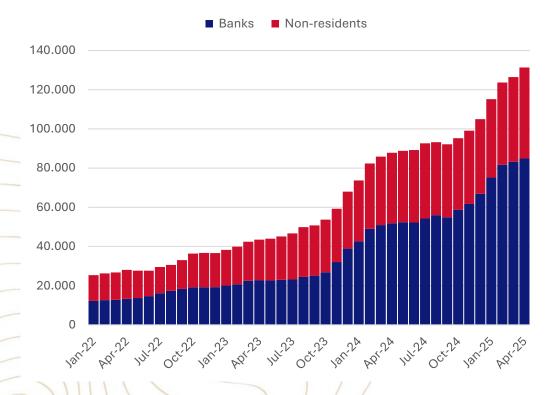


#### Pension funds: Local interest rates swaps (SPC CLP)

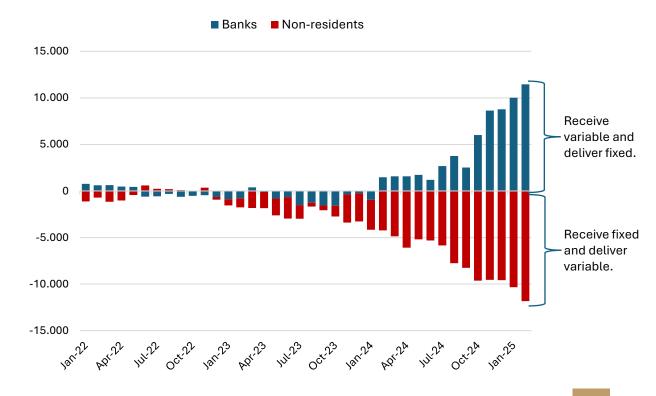
The publication of outstanding positions with non-residents in this market has contributed to market transparency. There has been growth in the use of this instrument, which is related to expectations of future movements in the Central Bank of Chile's monetary policy rate or to arbitrage opportunities.



### PENSION FUNDS. SPC-CLP OPEN INTEREST (CLP billions)



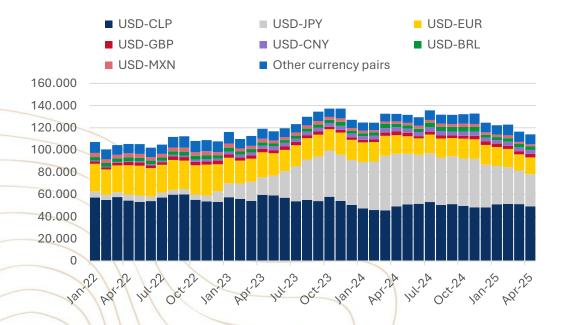
### PENSION FUNDS. SPC-CLP NET AMOUNT OUTSTANDING (CLP billions)



## **Pension funds, open interest in FX derivatives:** The data show that the principal currency pairs are USD-CLP and USD-JPY over the last two years.



#### PENSION FUNDS. DERIVATIVES OPEN INTEREST BY CURRENCY PAIR (USD millions)



PENSION FUNDS. CURRENCY PAIR OPEN INTEREST AT APRIL 2025 (%)

Currency pair	%
USD-CLP	43,2%
USD-JPY	25,3%
USD-EUR	13,4%
USD-MXN	1,8%
USD-BRL	2,7%
USD-CNY	3,1%
USD-GBP	2,7%
Other currency pairs	7,8%

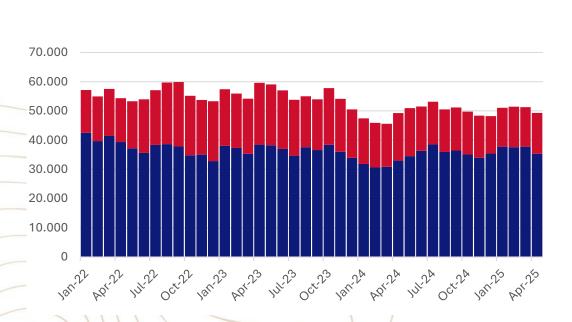


## **Pension funds, FX derivatives**: 37% of USD-CLP is with non-resident counterparties.



PENSION FUNDS. USD-CLP DERIVATIVES OPEN INTEREST (USD millions)

Banks

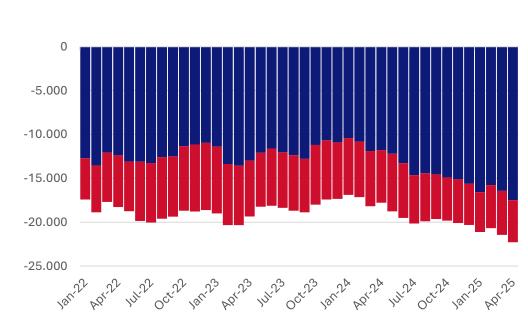


■ Non-residents

PENSION FUNDS. USD-CLP DERIVATIVES NET AMOUNT OUTSTANDING (USD millions)

■ Non-residents

Banks



#### Inflation-linked derivatives



The outstanding position has increased in recent months, primarily for the purpose of hedging liabilities and making investments. These transactions are mostly carried out with local banks.

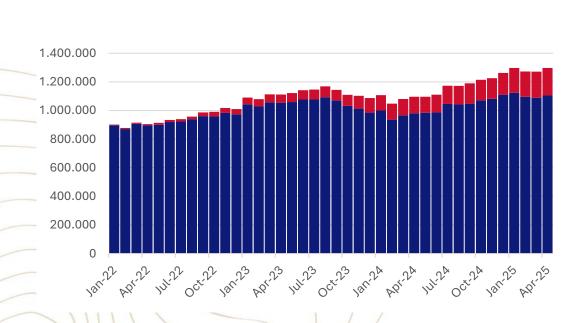
PENSION FUNDS. CLF-CLP DERIVATIVES OPEN INTEREST BY **COUNTERPARTY** 

Banks

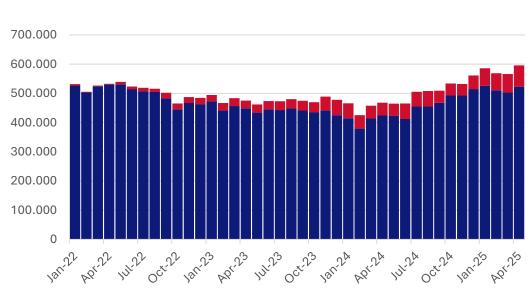
(UF thousands)



Banks



■ Non-residents



■ Non-residents

### **Concluding remarks**



- The SIID-TR plays a key role in enhancing transparency in Chile's predominantly over-the-counter (OTC) derivatives markets. It achieves this by frequently publishing (daily and monthly) reports through a centralized web platform, as well as documents pertaining to investigation and methodology.
- One of the main challenges for the repository is maintaining high data quality, given the complexity and high frequency of the information received. This requires highly automated processes for working with microdata.

