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***Uruguay: Practical
Implementation of a Sovereign
Asset and Liability Management
Framework***

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Organization of Presentation



1. Key features of SALM framework in Uruguay.
2. Identifying balance sheet exposures and coordination mechanisms across public sector institutions.
3. Practical examples of risk-mitigation strategies applied.
4. Lessons drawn and roadmap ahead.

Features of general SALM framework



- Risk management of a sovereign balance sheet is a crucial element underpinning robust economic performance and financial stability.
- Identifying and understanding the financial risk exposures of the public sector at the sub-portfolio balance sheets and at a consolidated level.
- Developing and implementing risk-mitigation policies.

...but practical implementation is fraught with difficulties



- It is complicated to identify financial characteristics of all the assets and liabilities of a government and to value them correctly.
- Managing exposures is often limited by capital market development.
- Individual institutions maintain their own legal requirements, public policy objectives, structures and delegated authority.

Key Strategic Features of SALM in Uruguay



- **Scope.** Broad perimeter of public sector consolidation for a comprehensive assessment of risks.
- **Risk-Quantification.** Overarching theme is currency exposure in sectoral balance sheets and how these risks are distributed across the economy.
- **Goals.** Reduce vulnerability to shocks at the aggregate level, while reaping efficiency gains by mitigating risk within the economy: improve credit quality and reduce cost of financing.

Design and practical implementation



- **Scope.** The public sector balance sheet comprises the Central Government, the Central Bank, the non-financial SOEs, and the state-owned insurance bank.

- **Risk-Quantification:**
 - Currency exposure based on **net balance sheet currency positions** and **cyclical properties of macroeconomic variables**.
 - Focus on different categories of flow and stock risks, as well as off-setting cash-flows (assets and financial hedges).

- **Strategy.** Identify opportunities to better distribute currency risk across different institutions in the public sector (cross-sectoral natural and financial hedging).

Coordination between Ministry of Finance and Central Bank



- The SALM operations evolved from an intuitive framework, to an institutional setting.
- First established a track record of cooperation, and in 2016 established a formal Public Debt Coordination Committee (PDCC), in line with international best practices.
- The adoption of a PDCC significantly improved the coordinated approach to a more systematic analysis of the public-sector balance sheet and management of overall exposures.

Perimeter of public sector consolidation



**1. GENERAL
GOVERNMENT**

**2. CENTRAL
BANK**

**3. STATE-OWNED
NON-FINANCIAL
ENTERPRISES**

**4. STATE-OWNED
INSURANCE
BANK**

Identifying Balance Sheet Currency Mismatches



GENERAL GOVERNMENT

➔ Short in Dollars

STATE-OWNED ENTERPRISES

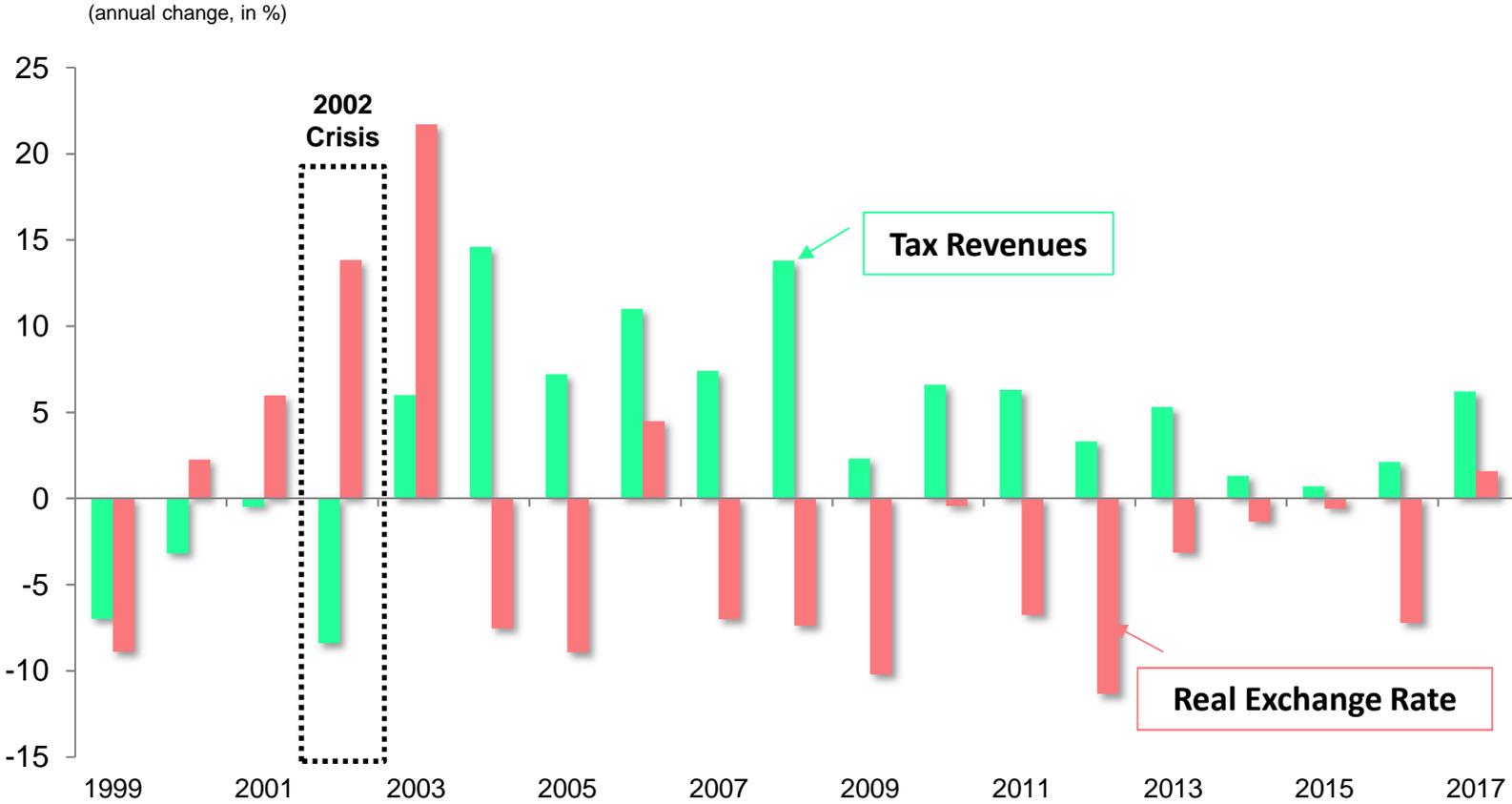
➔ Short in Dollars

- Despite public debt de-dollarization strategy, still half of it in FX currency.
- Main asset is ability to tax, denominated in pesos and tied to business cycle
- Among largest companies in the economy.
- Have stock and flow exposure to exchange rate devaluation.

Exposure to devaluation risk is compounded by cyclical behavior of real exchange rate



Cyclical Behavior of Real Exchange Rate and Real Tax Revenues



Source: Central Bank of Uruguay, General Tax Collection Agency

Identifying Balance Sheet Currency Mismatches



- Large stock of reserves (net of reserve requirements of commercial banks), well above prudential metrics.
- Sterilization policies has led to buildup of interest-bearing Central Bank bills (quasi fiscal costs).
- Net worth is sensitive to exchange rate fluctuations.



Central Bank **cannot** transfer to the Treasury any accounting valuation gains derived from holding reserve assets during periods of exchange rate depreciation.

Different type of currency mismatch in insurance companies serving retirement annuities



- Pension payments in Uruguay are indexed to past nominal wage changes, as established in the Constitution.
- Under the individual account pillar, insurance companies are required to serve retirement annuities.
- Their assets are mostly invested in CPI-linked government bonds, as there are no wage-linked market securities they can buy.
- Currency mismatch in state-owned insurance bank will tend to grow as pension system matures given ageing population, posing macroeconomic risks.

**STATE-OWNED
INSURANCE BANK**



Short in wage-
indexed assets

Balance Sheet Currency Mismatches across Public Sector Sub-Portfolios



GENERAL GOVERNMENT

➔ Exposed to Real Depreciation of Exchange Rate

CENTRAL BANK

← Exposed to Real Appreciation of Exchange Rate

NON-FINANCIAL SOEs

➔ Exposed to Real Depreciation of Exchange Rate

STATE-OWNED INSURANCE BANK

➔ Exposed to Increase in Real Wages

1. Joint issuance and liability management operation by MoF and Central Bank



ISSUANCE OF GOVERNMENT
TREASURY NOTES IN LOCAL
CURRENCY AT
INTERMEDIATE MATURITIES

GOVERNMENT
TREASURY
NOTES

SETTLEMENT OPTIONS

CASH

TREASURY NOTES
OF *SHORTER*
MATURITY

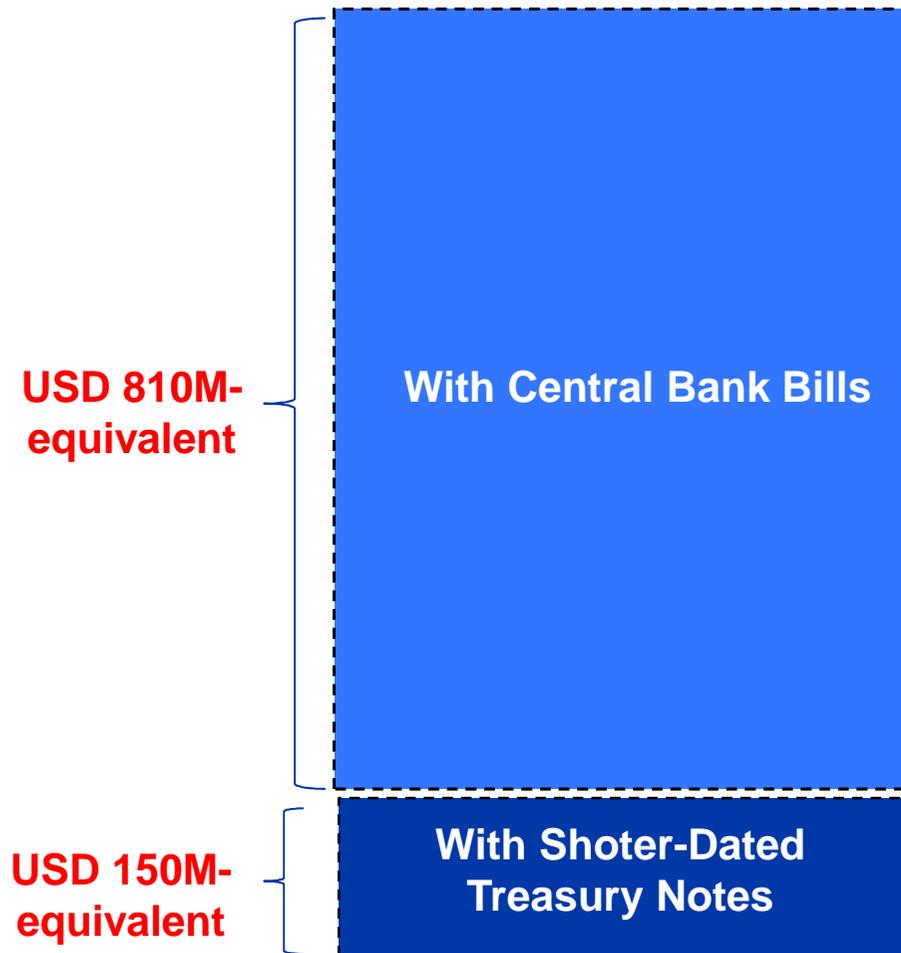
CENTRAL BANK
MONETARY BILLS

ALM transactions have been undertaken through coordinated actions between MoF and CB

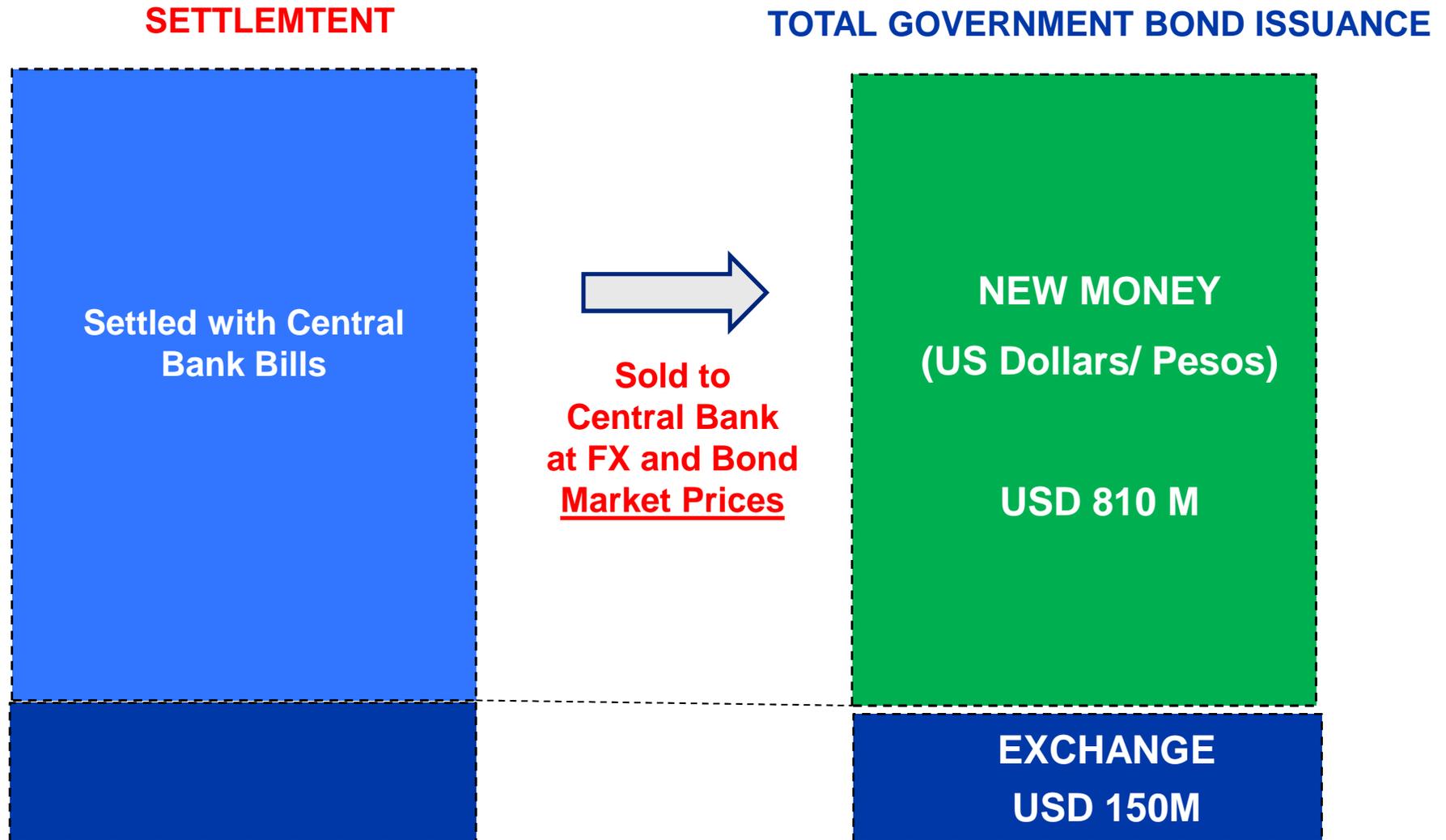


TOTAL GOVERNMENT BOND ISSUANCE

SETTLEMENT RESULTS:



ALM transactions have been undertaken through coordinated actions between MoF and CB



Net result of these coordinated transactions was to improve the ALM on both institution`s balance sheets



- **Central Bank:** A reduction in USD assets and local-currency liabilities ameliorated the balance sheet mismatches and cost of carry.
- **Government:** reduced its currency mismatches by operating on both sides of the balance sheet: funding in local currency, while increasing its dollar assets by cashing-on the exchanged securities from the Central Bank.
- **Consolidated Public Sector:** the operation increased the average time to maturity of the overall consolidated public sector debt.

2. Derivative transactions between CB and SOEs



- In Uruguay, hedging markets are limited, which constrains the ability of government-owned entities to optimally manage their own risks in the market.
- Central Bank signed forward peso/dollar contracts with each company at market prices, and with appropriate counterparty-risk clauses.
- This transaction re-distributed foreign exchange risk among those institutions with the best capacity to absorb it.

3. Government supply of wage-indexed debt market instruments



**GOVERNMENT INTENDS TO
ISSUE TREASURY NOTES IN
LOCAL CURRENCY AT
INTERMEDIATE AND LONG
MATURITIES**

**Treasury Notes
Linked to
Nominal Wages**

**POTENTIAL
DEMAND:**

**State-Owned
Insurance Bank**

**Private Annuity
Providers**

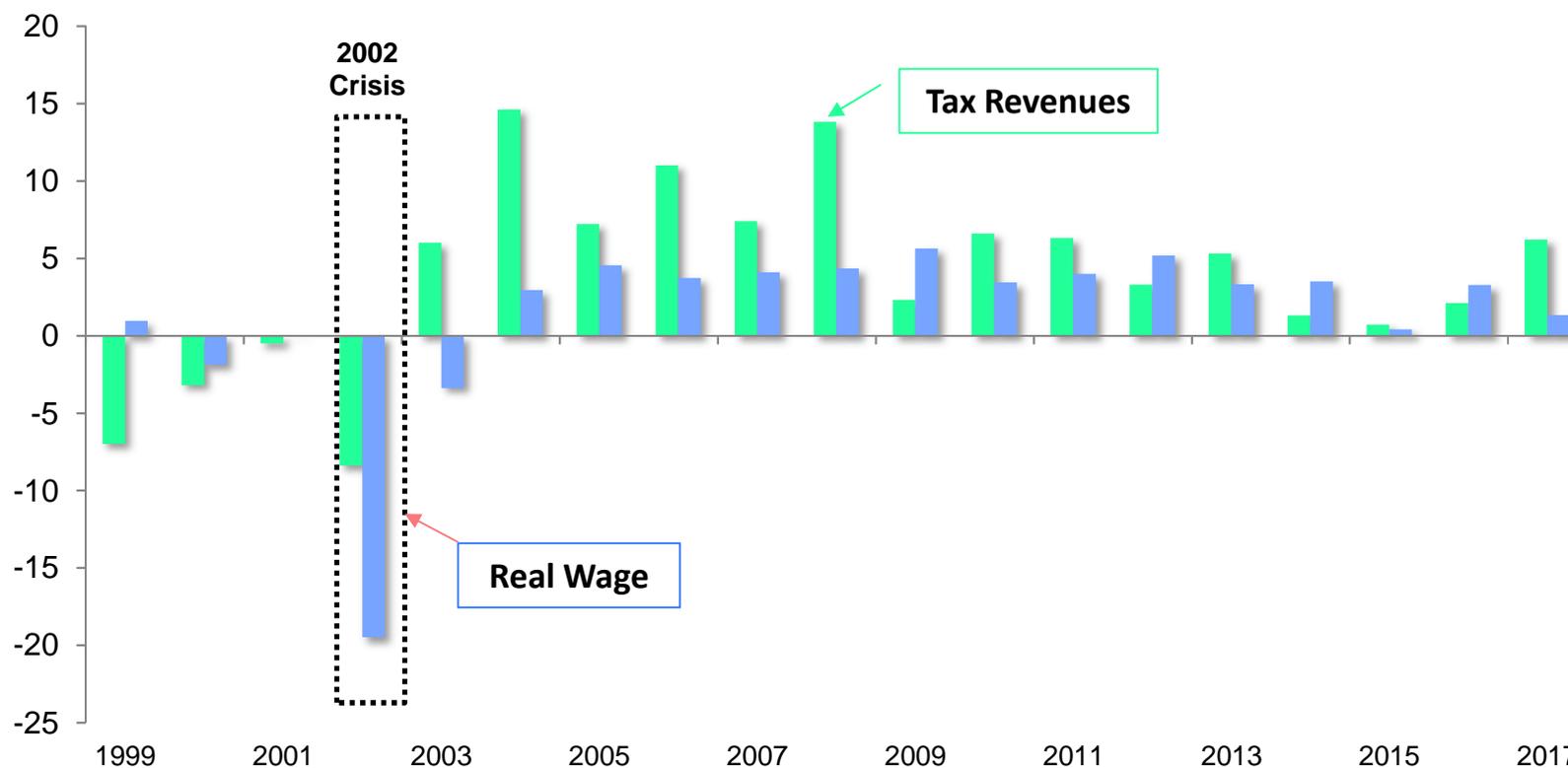
Other Investors

Government borrowing in wage-units is a hedge during downturns (countercyclical debt service)



Cyclical Behavior of Real Wage and Real Tax Revenues

(annual change, in %)



Source: Central Bank of Uruguay, General Tax Collection Agency

Lessons Learned (I)



- The government is a *de facto* residual risk manager: **all roads lead to the Treasury**. This calls for the analysis of the consolidated public sector.
- Different categories of currency mismatches: some features of a sovereign balance sheet may be overlooked in the sub-portfolio based analysis.
- Accounting principles and institutional constraints can affect incentives for SALM implementation.
- Lack of hedging markets is a challenge but also an opportunity.

Lessons Learned (II)



- In addition to portfolio-based cost-risk considerations and diversification benefits, SALM can involve completing markets through government intervention. This can imply policy trade-offs (i.e., market segmentation).
- Stepwise approach towards integrated risk management: coordination between CB and MoF can be gradual and halting at times, but establishing a well-functioning formal body has played a strategic role.
- TA technical assistance can be a catalyzer to jump-start analysis and provide impetus to implement SALM strategies.

Uruguay`s Roadmap



- Continue making progress on accurate identification, measurement and monitoring of risks, as well as developing and implementing strategies are essential for addressing a government's balance sheet exposure.
- Continuing de-dollarization and affirming the demand stability for the local currency (*peso*).
- Develop liquid yield curves in local currency and promote derivatives markets to manage FX risk.
- Increase the internationalization of local sovereign bond markets and diversify investor base