

The Chilean Experience in Capital Account Regulation

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Financial Market Integration

- International financial integration and liberalization of the capital account are desirable goals for a developing country. They increase efficiency in consumption smoothing and financial market liquidity; favor risk diversification and policy discipline.
- However, liberalization should proceed gradually over time, and only after minimum conditions have been met; premature opening could result in important costs.
- Informational problems and shortsightedness may result in excessive risk taking that weakens the financial system, creates macroeconomic instability and increases the vulnerability to crisis contagion.

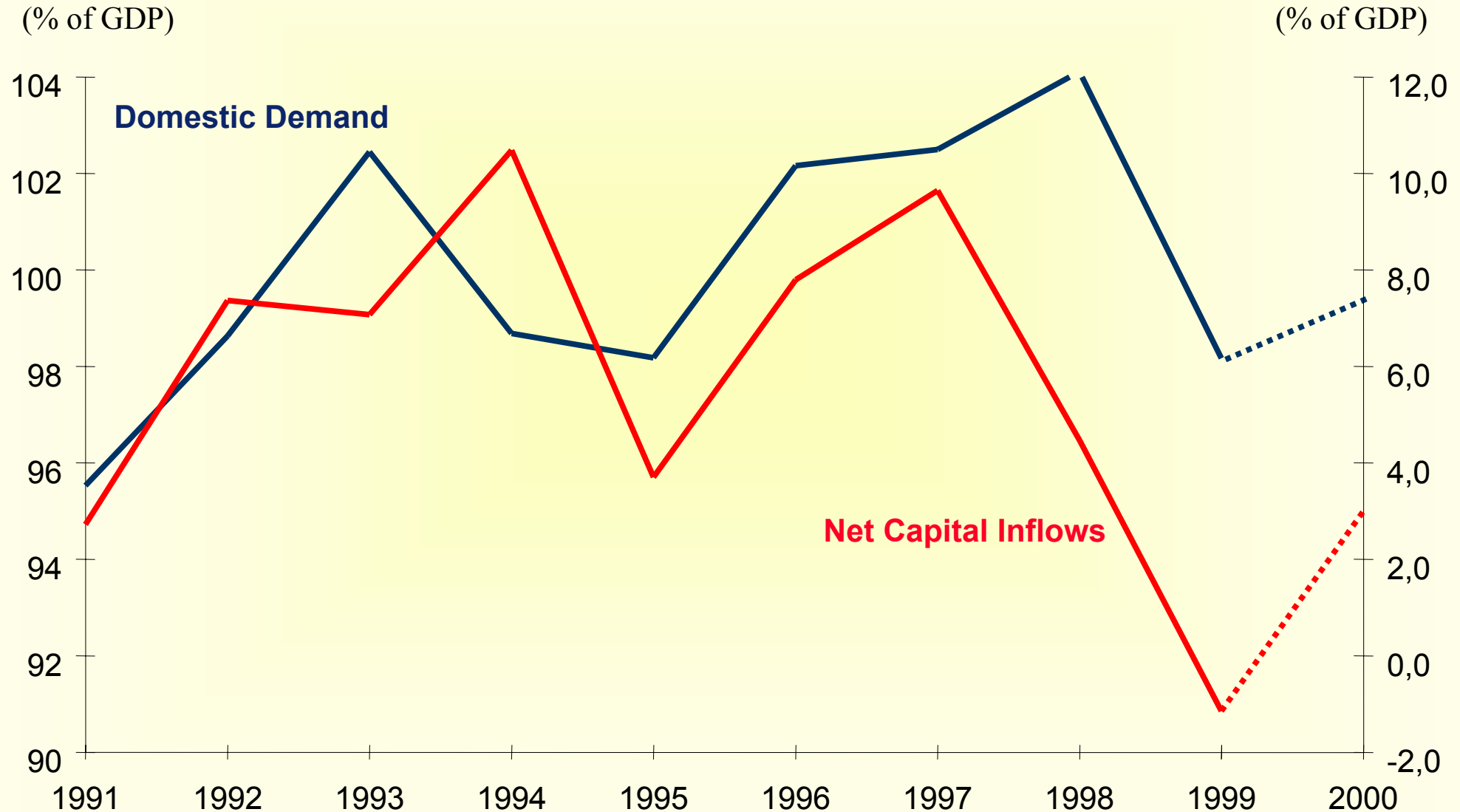
Requirements for International Financial Integration

- Intermediate (pegged) exchange rate systems conducive to “impossible trinity” problems should be avoided. A floating currency allows for an independent monetary policy.
- Solid external position showing robust indicators of international solvency and liquidity, including a sustainable current account deficit.
- Sound macroeconomic position, characterized by fiscal balance, low inflation, and real interest rate at international relevant levels.
- Healthy financial system, with appropriate prudential regulations.
 - Exchange rate and interest rate exposures of financial institutions must be limited.
 - Prudential regulations limiting credit risk should be widened to consider the foreign currency risks of bank debtors.
 - A reasonable institutional development and liquidity of local financial markets, bonds, foreign exchange spot and forward.

The Scenario of 1991 - 1997

- Massive net capital inflows, averaging 7.3% of GDP put pressure on the exchange rate, remaining close to the most appreciated end of the band and resulting in a large accumulation of international reserves.
- Private real domestic expenditure increased at an average rate of 10% p/a as external financing removed liquidity constraints.
- In order to limit capital inflows to manageable levels, the Central Bank established an unremunerated reserve requirement (URR) on capital inflows in 1991. But it was not comprehensive, leaving room for circumvention that weakened its effectiveness.
- Exchange restrictions were phased out, gradually unifying the market at a single exchange rate, while domestic financial regulations were adapted to the new conditions.

Chile: Net Capital Flows and Domestic Demand



Capital Flows in the 90s: The Chilean Experience

- Endogenous KI shock: Inconsistencies in domestic economic policies \Rightarrow higher domestic interest rate and widening spread that attracts KI.
- Exogenous KI shock: Increase in external financing supply \Rightarrow a reduction in domestic interest rate and in the spread and an increase in KI.
- The empirical results indicate that M< capital shocks had mainly an exogenous character, while short-term flows were endogenous: M< flows were negatively correlated to the domestic interest rate and to the spread between expected returns of domestic and foreign assets.

	Interest Rate	Spread
Short-Term Flows	15.5%	26.6%
Med-Long Term Flows	-19.7%	-31.5%

Domestic Spending and Capital Flows

*Response in “t+3” as a consequence of 1% change
in exogenous variables
(Error Correction Model)*

	Gross Capital Inflows	Private Real Expenditure
<i>Spread</i>	5.05%	0.61%*
<i>Domestic Interest rate</i>	-	-1.81%**
<i>Financial cost of URR</i>	-5.05%	-0.61%*
<i>National Income</i>	-	0.62%
<i>Gross Capital Inflows</i>	-	0.12%

*: Effect conducted by capital flows

**: Total effect that includes the fall in activity and National Income.

Source: Le Fort and Lehmann (2000)

Empirical Results for the URR period

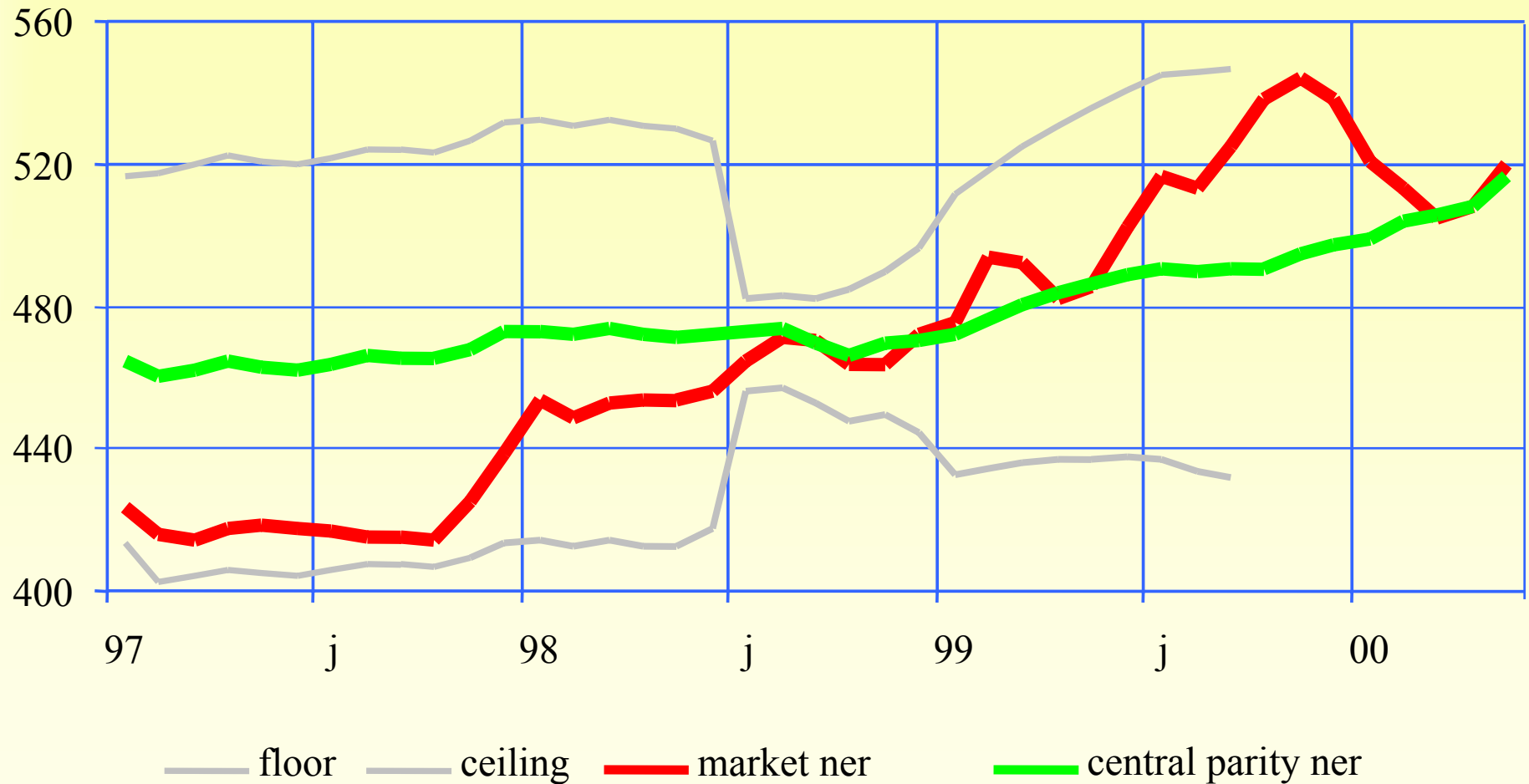
- 100 bp increase in the real interest rate (r) has a total effect on domestic expenditure of -1.81% after 3 quarters.
- When exchange rate movement is limited, increases in “ r ” do not modify the expected depreciation rate, thus increasing the spread between expected domestic and foreign asset returns. The resulting increase in capital inflows (KI) diminishes the effect of “ r ” on private domestic expenditure (E).
- An increase of 100 bp in the spread generates a 5% increase in KI. This produces a 0.6% increase in E .
- The URR may compensate the expansive effect of the interest rate on KI: 100 bp increase in URR related financial cost (reserve rate of 10%) determines reductions of 5% in KI and of 0.6% in E .

The Scenario of 1999 - 2000

- Since the Asian crisis, capital inflow pressures have disappeared.
- The exchange rate has been let free to float while remaining restrictions to international capital flows have been lifted. Monetary policy is directed at targeting inflation.
- The policy has evolved from volatility suppression to volatility adaptation, and to prepare for exchange rate volatility, prudential regulation and supervision have been adjusted:
 - Norms about exposure to currency risk and interest risk of financial institutions have been improved.
 - Financial institutions must take the currency risk of their clients into account for estimating credit risk.
 - The development of the exchange rate derivative market has been facilitated.

Nominal Exchange Rate

(chilean pesos per US dollar)



International Financial Integration Caveats

- Still, for extreme values of the exchange rate or of capital inflow pressures, Central Bank intervention in the foreign exchange market would be necessary.
- Intervention in the foreign exchange market should consist of modifying the arbitrage condition. With the existing degree of financial integration, sterilized intervention is not effective.
 - Interest rate policy is not always available to respond to external shocks.
 - The URR and similar instruments remain available for this purpose, however, special care must be taken to ensure effectiveness, which wears off with financial development and integration.
 - A comprehensive application is crucial for the effectiveness of the URR.

Concluding Remarks

- Over the last decade capital account and foreign exchange restrictions have been lifted gradually. There are no policy discontinuities in this regard.
- From 1991 to 1997, the Chilean economy faced a massive inflow of foreign capital, that pressured the exchange rate band and resulted in a large expansion in real domestic demand.
- In order to reduce the impact on the exchange rate associated to capital inflows, and to limit the current account deficit, the Central Bank established price based disincentives to capital inflows (URR) that complemented the exchange rate band.
- Our empirical results show that the URR on capital inflows made a significant contribution, although it exhibited increasing limitations in controlling the massive inflow.

Concluding Remarks

- During the last few years, capital inflow pressures have eased and consequently, exchange market regulations have been adjusted: from volatility suppression to volatility adaptation.
- The exchange rate was allowed to float freely and remaining restrictions to international financial integration were removed.
- To improve the system's ability to deal with exchange rate volatility, strict prudential regulation has been established on currency and liquidity mismatches, and the markets for coverage against exchange rate and interest rate risk have been developed.
- Still, extreme values of the exchange rate or other extreme conditions may prompt the Central Bank to intervene in the foreign exchange market.

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