

## Working Paper

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Stiftung Wissenschaft und Politik  
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# The Chilean Experience with Capital Controls and the Current Approach to Confront External Variability

Conference Paper, prepared for the Third FES-SWP North South Dialogue. Global Governance Challenges. Reshaping Globalisation: A new order for financial markets. Berlin, May, 2003.

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# 1. Main sources of foreign financing in Latin America

- 79% of long term resources is Foreign Direct Investment, which has become the largest source of foreign financial resources.
- The bulk of long term foreign resources (over 80%) goes to the richer (and bigger) countries: Argentina, Brazil, Mexico and Chile.
- Short term flows go also to the richest countries.
- But poorer countries in the region depend to a larger extent upon foreign financing
  - Net long term foreign resources as % of GDP, 1995 – 99
    - Lower income countries 12.6%
    - Middle income countries 6,7%
    - Higher income countries 6.5%

## 2. Aspects of financial volatility

- Only 4 countries: Mexico, Chile, Brazil and Argentina (or 3 if Argentina is left out) are exposed to short term external financial volatility to a significant extent.
- In Latin America, most of financial volatility is of domestic origin: macro imbalances, domestic firms bankruptcies, financial crises, natural disasters, political crises, and policy reactions to confront these factors.
- Domestic agents are more prone to “panic”. They are comparatively more exposed to internal consequences of volatility, don’t have enough mechanisms to hedge and, in some cases, have hidden interests (strategic behavior).
- Foreign investors tend to react more “cautiously”, since they are better hedged and due to special laws, frequently have privileged access to foreign exchange. In addition, their exposition in countries which, by international standards, are risky, may reflect moral hazard and excessive risk taking.

### Two types of excessive foreign inflows subject to potential reversal

- Demand driven: Due to excess demand for foreign resources, typically attracted by high domestic interest rates which reflect domestic disequilibria. Typically the authorities refuse to recognize basic imbalances until an external crisis is triggered either by changes in the external environment or an internal crisis that makes over indebtedness evident. Examples: Latin America crises during the eighties and, most recently, Argentina.
- Symptoms: domestic rates and spreads do not fall, most of foreign flows is debt, real appreciation due to domestic inflation
- Solution in this case are well known and highly resisted, since they involve macroeconomic adjustment and regulatory changes.
- Supply driven: A positive change in the country’s creditworthiness or a lowering in external rates which create an influx of resources and also increase demand for foreign debt. Serious imperfections in the financial system which pose obstacles to effectively channeling domestic savings towards investment, induce firms to get financing from abroad.
- Symptoms: Domestic rates and spreads fall. Appreciation occurs, but this time some nominal appreciation may be observed. A larger part of foreign inflows is portfolio investment.

- Possible factors which may aggravate this: Implicit guarantees to foreign investors. Regulatory failures which do not limit foreign exposures of local debtors (banks and conglomerates). Tax regulations which induce excessive foreign indebtedness (treatment of interest payments in the tax code).

### 3. Brief description of the Chilean experience with the Reserve Requirement , 1990 –1998

In the context of high external liquidity during early 1990 Chile confronted the following dilemmas:

- Promoting exports development, which required a high real exchange rate
- Control of inflationary pressures required higher interest rates, but that could induce capital inflows and currency appreciation.
- Previously an exchange rate “band” had been established, but consistently the market determined rate was very close to the bottom.
- Efforts at sterilized intervention proved increasingly fruitless and created important operational losses for the Central Bank.

In order to reconcile inflationary control and avoid exchange rate appreciation, the following measures were adopted:

- A non remunerated reserve requirement was established, initially at 20% and later was raised up to 30%. Longer terms flows were not required to comply with this requirement.
- The period to submit exports proceeds was increased from 90 to 180 days and later to one year.
- An increasing number of flows was included in the reserve requirement
- Limitations on the ability of domestic companies to issue debt in foreign markets (ADRs) were imposed.
- The width of the exchange rate band was increased in order to instill some uncertainty on incoming capital flows.

#### Results (macro)

Did the reserve requirement reduce the overall capital influx?

- The evidence is not conclusive, but most experts agree that the overall amount of capital inflows did not change dramatically. It has to be taken into account that the real objective of capital controls is not to close the capital account, but to create space for monetary policy, in order to affect short term interest and exchange rates.

Did foreign inflows become more stable?

- The answer is a qualified yes. Longer term flows gained importance since the introduction of the reserve requirement. To a great extent that could be attributed to the effects of the reserve requirement, which lowered profitability of short term inflows. On the other hand, others argue that the observed phenomenon is part of the general tendency in Latin America which exhibits an increasing importance of FDI and other long term funds.

Did it affect the interest and exchange rate?

- Since the reserve requirement creates a wedge between domestic and foreign rates (in addition to currency and sovereign risk), it effectively allowed some breathing space to monetary policy. The Central Bank gained some control over interest rates.
- The same is true for exchange rates, which to some extent and in the short run, did not converge towards the bottom of the fluctuation band.
- However, in both cases, long term tendencies do not seem to have been affected. That may be explained by the increasing ways that financial agents discovered to circumvent the reserve requirement, in spite of the frequent increases in the scope of flows included in the reserve requirement and in its rate (from 20 to 30%).
- Besides the decreasing return of this type of policy, a reserve requirement cannot neutralize the incentive of significative appreciation expectations.

## Results (micro)

How did controls affect the structure of domestic liabilities?

- This point is important, since the reserve requirement induces firms to switch away from foreign financing in favor of domestic funds. The net effect, from the point of view of the ability of the economy to confront macroeconomic variability, depends on the degree that the reduction in foreign financing translates into changes of the domestic structure of liabilities in favor (or against) more stable sources of funding.
- A recent study, based on microdata for 76 firms sheds some evidence:
  - Firms with access to the financial system reduced their short-term debt financing
  - Firms replaced external financing reducing the leverage, using retained earnings
- It may be argued (in a friction free world) that these changes are welfare reducing, but in a second best world, the reduced exposure to short term fluctuations has to be considered as a net gain.
- Caution has to be exerted in extrapolating these results to other countries since:
  - The Chilean financial system is very deep compared to other less developed countries, with an important presence of long term funds. These were key factors in allowing firms to substitute foreign financing with domestic long term financing.
  - These results refer to firms with access to the financial system. Since the reserve requirement increases demand for domestic credit, some firms (especially small businesses) may be crowded out.

## 4. A different approach to confront macroeconomic variability: Chile 2000- 2003

The reserve requirement strategy is a passive one, and although very useful (especially under extreme circumstances), it does not aim at confronting the many sources of macro variability.

The main objective of the new approach is to reduce risk, as perceived by domestic and foreign investors, and at the same time, create space for countercyclical policies.

The main macro risks are:

- Policy reversal risks
- Currency risk
- Inability to access the foreign exchange market

To reduce these risks economic agents need very clear signal and strong commitments on they key factors of

external solvency. To the extent that solvency is clearly perceived, agents will be willing to finance short term deviations from full macro equilibria, hence making countercyclical policies feasible.

Additionally, a consistent set of policies helps to strengthen the quality of the country's assets, thus making them less vulnerable to sudden changes in the external financial environment (contagion is thereby reduced).

## A framework to cohabitate with external financial volatility

The goals are (besides the already well known benefits of stability):

- To create confidence and thus lower the country risk perception, thus creating incentives for a longer term structure of domestic and external financial funds.
  - To create space for anti cyclical policies, which also reduce risk, especially the risk of policy reversals
- a) A credible intertemporal framework for the public finances (and hence for the public sector financial resources requirement).
- b) A Central Bank committed to maintain inflation under control and a sustainable exchange rate regime (Need to invest in credibility in both cases)
- c) Regulation and supervision standards of financial intermediaries similar to international ones.
- d) Self insurance against volatility
- Financial regulations to prevent terms and currency mismatches and overexposure. (Weakness: slow progress in consolidated supervision)
  - Multi annual public budget and buffer funds for key exports and imports, to actually develop countercyclical fiscal policies and cushion foreign prices fluctuations which usually go together with financial volatility
  - Need to maintain more reserves than under a stable (imaginary) case, especially for LDCs
- e) Avoiding implicit guaranties and moral hazard
- Flexible exchange rate regimes help in avoiding implicit guaranties and as a mechanism to internalize exchange risks, thus reducing overexposure and mismatches dangers, but, in order to reduce the effects of variability on exports, an adequate coverage system needs to be established.
  - Limits to deposit guaranties, to reduce moral hazards, especially when banks have an easy access to foreign financing, implicit guaranties may lead to overlending.
- f) Stabilizing assets price signals
- Benchmarks needed for the whole term structure of assets, since agents need a better basis to form expectations about future returns.
  - Issuing indexed papers with ample liquid markets.
- g) Emergency mechanisms to stop capital outflows when subject to speculative attacks
- With established trigger clauses which make them a last resource which do not substitute for sound macro policies.
  - Temporary, to buy time to calm down panic behavior and force the authority to adopt measures beforehand.

## How has it fared so far?

- Although it has not yet faced a period of high capital inflows as it was observed during the 90's, in general, this framework has proved very successful in confronting external shocks during 200-2003,
- Even during the height of uncertainty before the war on Iraq, the Brazilian election and instability in Argentina, Chile was able to issue sovereign bonds for US\$1.000 million with a spread of 120 bps, which is by far the lowest in the region.
- Average spread of the sovereign bonds during 203r even fell to 150 bps, from 170bps in 2002.

- According to ECLAC, Chile has been the only country of the region able to carry out countercyclical fiscal and monetary policies, without affecting external equilibrium during 2002.
- More recently, due to oil price increases before the Iraq war, inflation in one month reached 1,2% (the year before annual inflation was 2,7%). With an annual interest rate of 2,75% the prospect for negative real interest rates was quite possible. But, in spite of that, there was no major flight to the dollar, although the exchange rate rose 5% in two weeks. After the uncertainty went away, the peso appreciated 10%, reversing much of the devaluation that occurred during a whole year. At the same time, the sovereign risk decreased by 20 bps. Both are signals of the agent's confidence in the ability of the Central Bank to control inflation and on the solvency of the public sector.
- In summary, this set of policies has been able to confront external variability quite successfully, at the same time that growth, although lower than in previous years, has remained above the average for the region. However, since major future shocks are not discarded, the reserve requirement remains and other capital control measures still are part of the toolbox to confront emergency situations.

## References

Gallego, Francisco and, Hernandez., 2002., Leonardo. Microeconomic effects of capital controls: The Chilean experience during the 1990s. Central Bank of Chile Working Papers Nr. 203. Santiago, Chile.

Budnevich, Carlos and Le-Fort, Guillermo. Capital account regulations and macroeconomic policy: Two Latin American experiences. Central Bank of Chile Working Papers (draft). Santiago, Chile.

Le-Fort, Guillermo and Lehmann, Sergio., 2000. El Encaje, los flujos de capitales y el gasto: Una evaluación empírica. Le-Fort, Guillermo. Central Bank of Chile Working Papers 64. Santiago, Chile.

Eyzaguirre, Nicolás., 2003. Learning to live with volatile capital flows. A view from Chile. Sixth ÑAC meets the Market. Washington D.C.

Jiménez, Luis Felipe , 1996. Políticas para el control de los movimientos de capitales financieros. CEPAL, Naciones Unidas, Santiago, Chile.

CEPAL. 2000. Crecer con estabilidad.. Documento presentado a la Cumbre Mundial sobre Financiamiento del Desarrollo, Monterrey México. CEPAL, Naciones Unidas, Santiago, Chile.