Issues in Domestic Petroleum-Pricing: The Chilean Experience with Stabilization Funds

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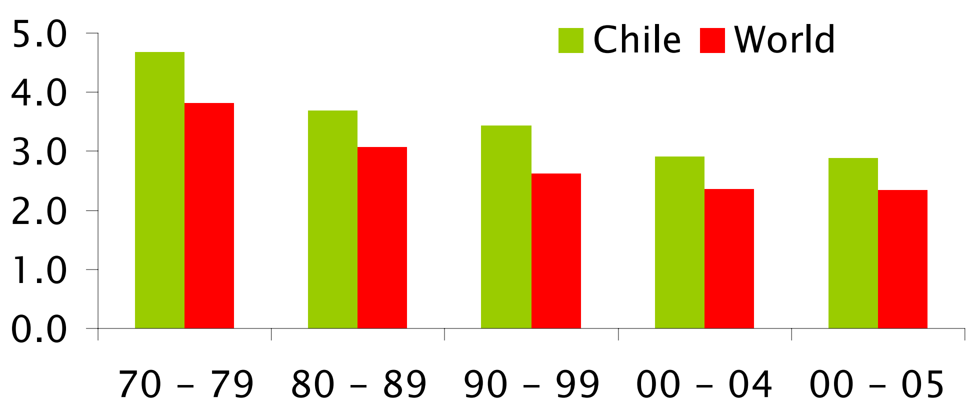
Background

- Chile: Small open economy- pop. 16 mill., PPP per capita GDP US$11.500.
- Oil market structure: ENAP is the only fuel refining company in Chile (state owned), and direct imports are permitted.

Intensity of oil use
(thousands of barrels per day/ GDP in US$ billion 2000)



Sources:
World Bank's Wold Development Indicators 2005.
British Petroleum, Statistical Review of World Energy, June 2005
Concensus Forecast, November 2005

Crude Oil for refining	
Imported	97%
Domestic production	3%
Refined Oil (2005/06)	
Imported	12% - 15%
Domestic production	85% - 88%

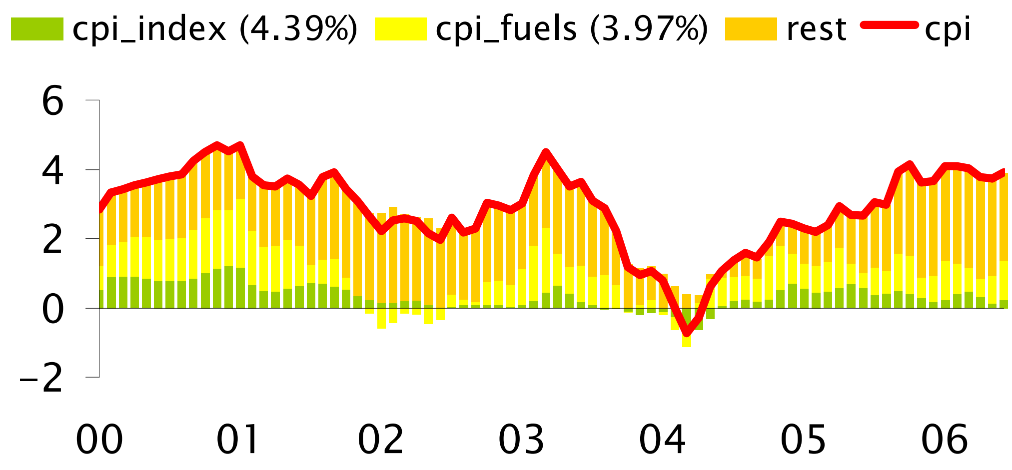
2005	
Fuel Imports/GDP	5.4%

Background

Gasoline price (Ch$/lt)	
Parity (includes FEPCo)	300
VAT (19%) Fixed tax Markup	57 199 56
subsidy/tax	s/t
End Consumer	612 + s/t

Factors Influencing annual CPI inflation: 2000 - 06

(percentage points)



Sources:

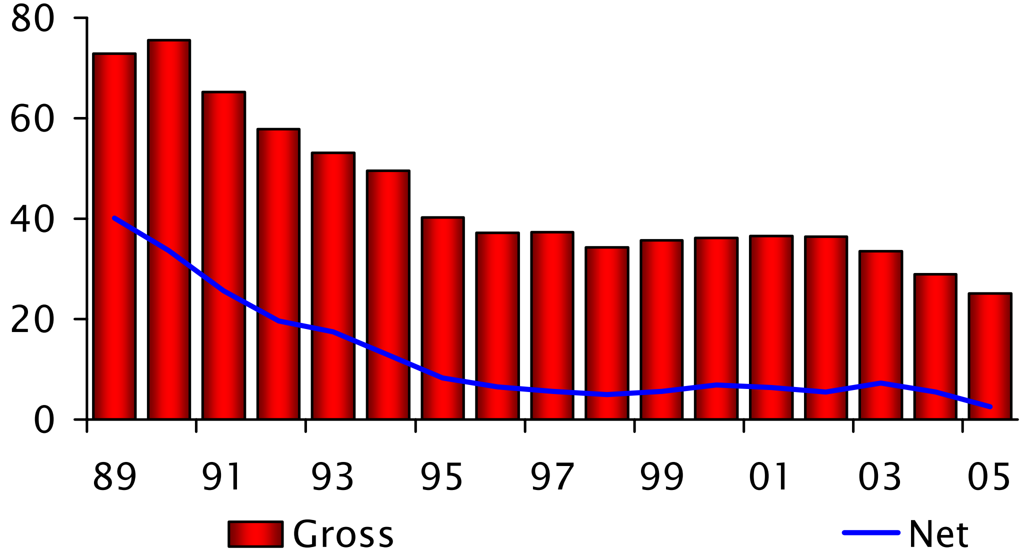
Central Bank of Chile

National Statistics Bureau

- Full pass through to fuel prices (besides oil stabilization fund), while public transportation and electric power follow index formulae.
- Fuel prices have both direct and indirect impact on CPI dynamics. Direct effect explains more than 50% of y-o-y inflation variance.

Background

Chile: Public Debt 1989-2005
% GDP



- History of strong fiscal responsibility.
- In 2006 the Central Government became net creditor.
- Fiscal surplus in year ending in July 2006 = 6.4% of GDP.
- Fiscal policy: structural surplus rule equivalent to 1% of GDP since 2000.

General policy principles

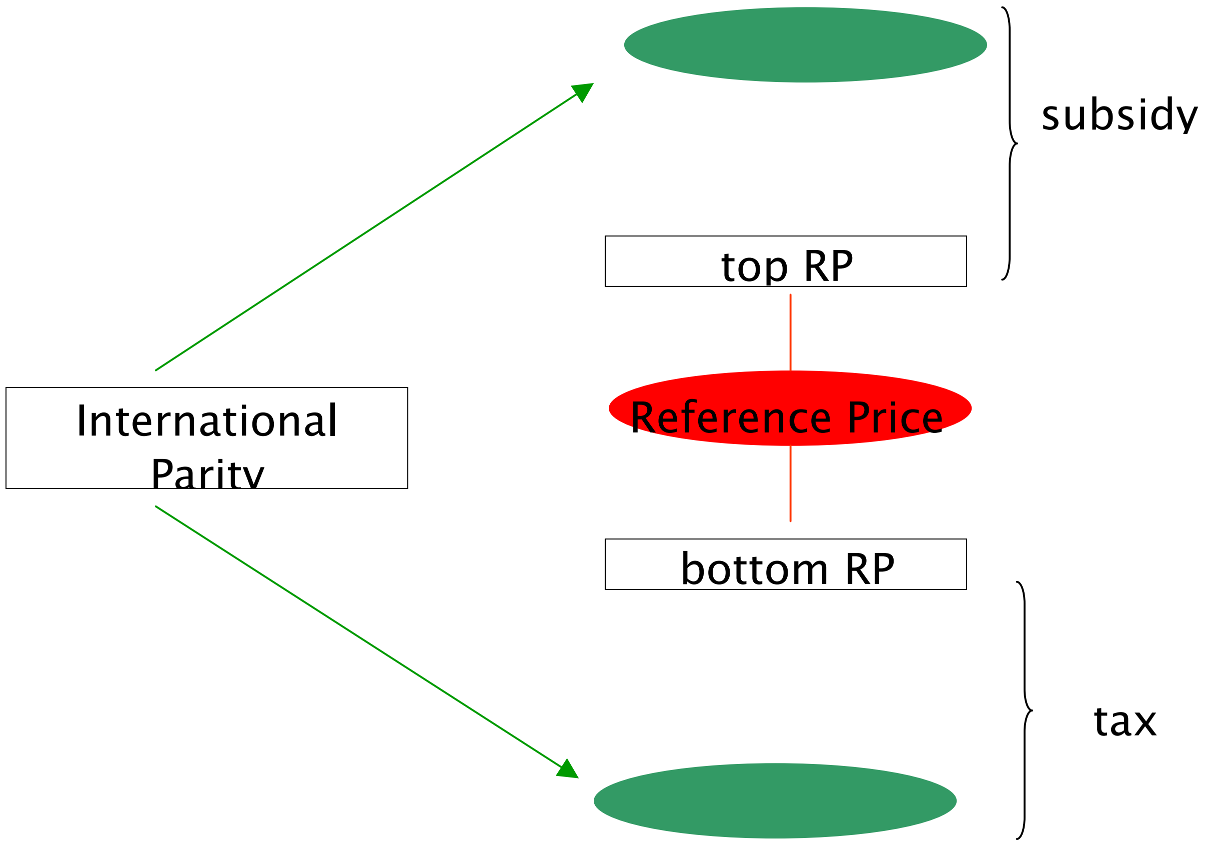
- Desire to limit volatility and cushion sudden international oil price changes.
- Without hindering relative prices and “correct” long run incentives.
- With limited fiscal cost.
- Without excessively depending on ad-hoc systems.
- Without deterring the possibility of direct imports.

Three issues to analyze

- Issue 1: Rules vs discretion in managing the stabilization fund.
- Issue 2: Fiscal cost.
- Issue 3: Broad intervention vs subsidies targeted to particularly vulnerable groups.

Issue 1: Rules vs discretion in setting reference price

Fund's Mechanics:



Issue 1: Rules vs discretion in setting reference price

Three vintages since the fund started:

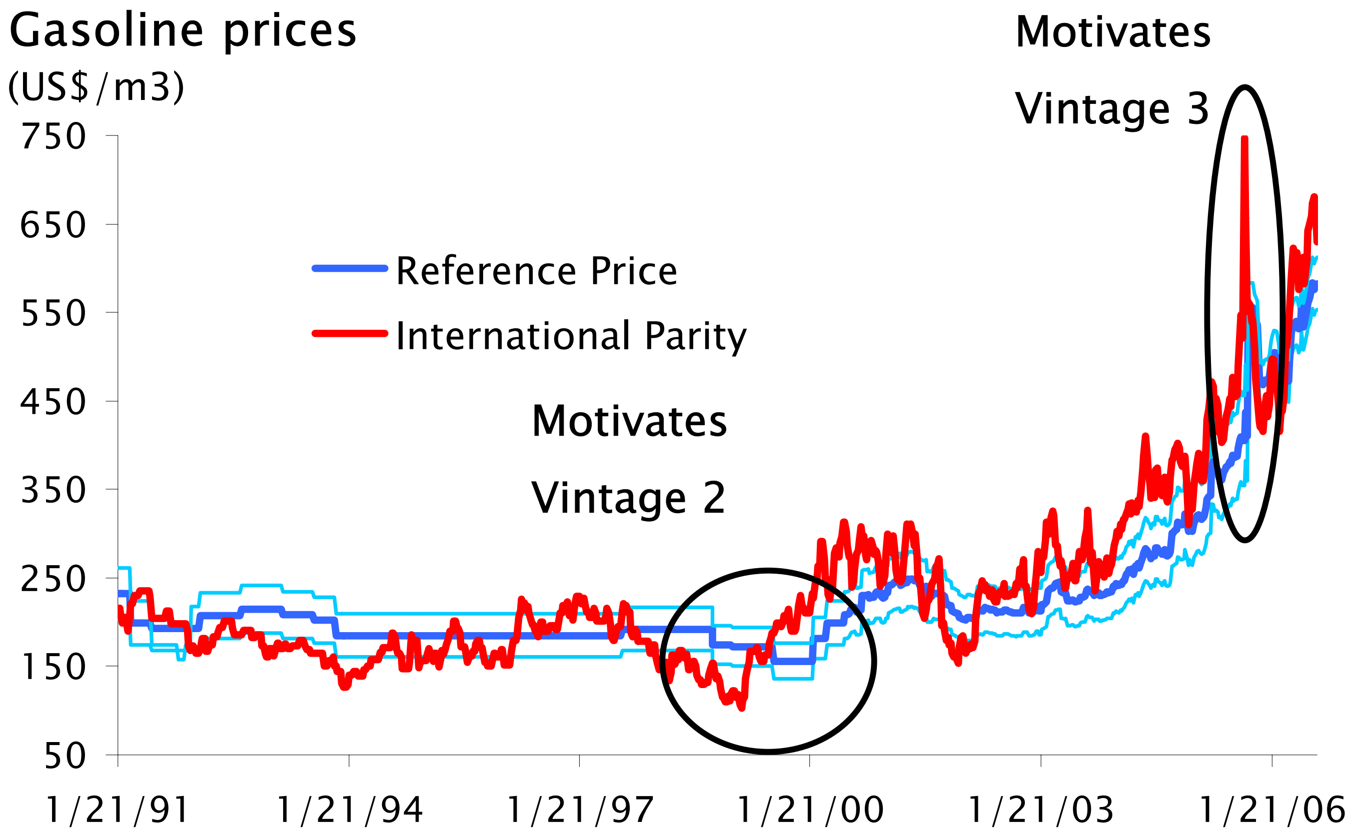
	1991	2000	2005/06
Adjustment Frecquency	Ad - hoc	Weekly	Weekly
Formula	Implicit (historic price + expected long term price)	Public, inputs by energy comission	Public, average of past and future WTI plus adjustable refinery differential
subsidy/tax	Fixed	Contingent to fund resources	Fixed

Substantial discretion

Strong rule

Restricted discretion

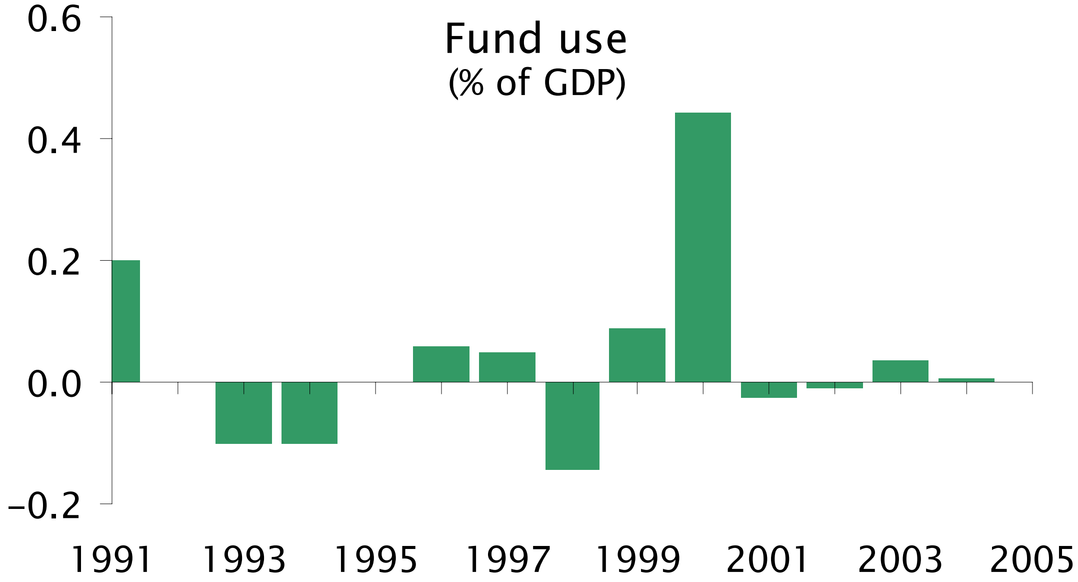
Issue 1: Rules v/s discretion in setting reference price



Source: CNE

Issue 2: Fiscal cost

- Cumulative to date: under US$500 mill.
- Average (1991–2005): 0.03% of GDP per year.



Issue 2: Fiscal cost

- No easy solution to limit fiscal cost.

- Stop-loss mechanisms:
  - Vintage 1: No mechanism.
    - Problem: the fund can suddenly run out of money.

  - Vintage 2: Subsidies had to be adjusted such that fund is enough to finance 12 weeks at current prices.
    - Problem: after a persistent shock, no protection to new shocks

  - Vintage 3: Reference price should be truly contingent to persistent price changes. Direct ENAP accounting.

Issue 3: Targeted subsidies

- Direct money subsidies help to overcome two fund shortcomings:
  - Allow prices to convey correct signals (reflect relative scarcity)
  - Targets more vulnerable groups

	Expenditure Structure (%)					
	total	1	2	3	4	5
Gasoline	2.39	0.68	1.18	1.89	2.57	3.09
Public Bus	2.55	5.6	4.94	4.5	2.81	0.66
Propane	1.22	1.86	1.69	1.58	1.29	0.84

- Direct subsidies to poorest families (out of 4.7 million), identified by the social security net. Total = US$ 79 mill.
  - 2004: 965,000 beneficiaries, US$18 ea.
  - 2005: 1,470,000 beneficiaries, US$29 ea.
  - 2006: 570,000 beneficiaries, US$33 ea.

In a nutshell

- Issue 1: No easy solution to balance rules vs discretion. It is important to have some rules such that persistent shocks get reflected.
- Issue 2: Fiscal situation is key in ability to limit shock's effects. Stop-loss mechanisms help.
- Issue 3: Targeting can be done and is efficient.

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