

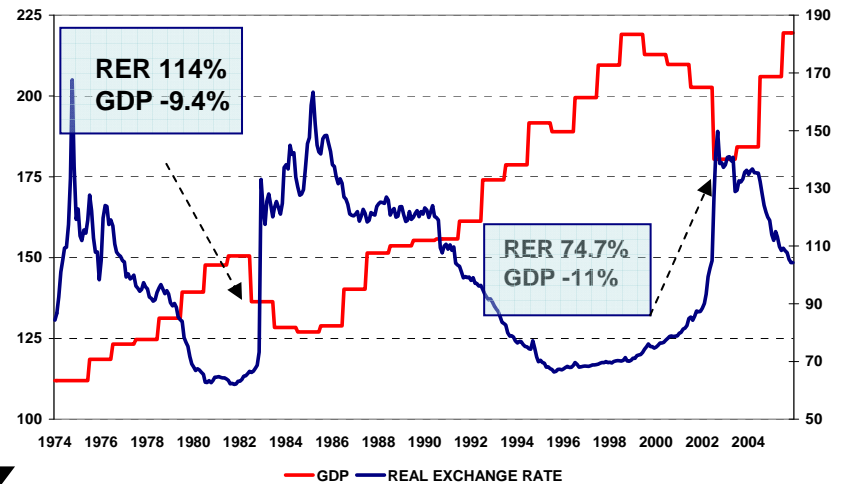
# Uruguay: policy responses to deal with challenging liquidity conditions

Daniel Dominioni  
Central Bank of Uruguay  
**Lima, march 16<sup>th</sup> 2009**

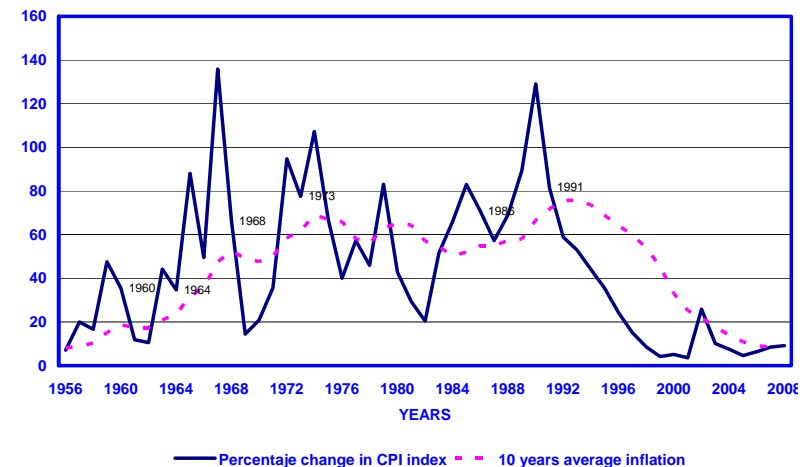
# Characteristics of Uruguayan economy

- Small economy
- Free capital markets
- Shallow markets
- Tradition of fixed exchange rates (until 2002)
- High degree of dollarization
- High exposure to external (and regional) shocks
- Great degree of volatility in GDP and RER
- Repeated financial crisis
- Inflationary history (until the late nineties)

REAL EXCHANGE RATE AND GDP

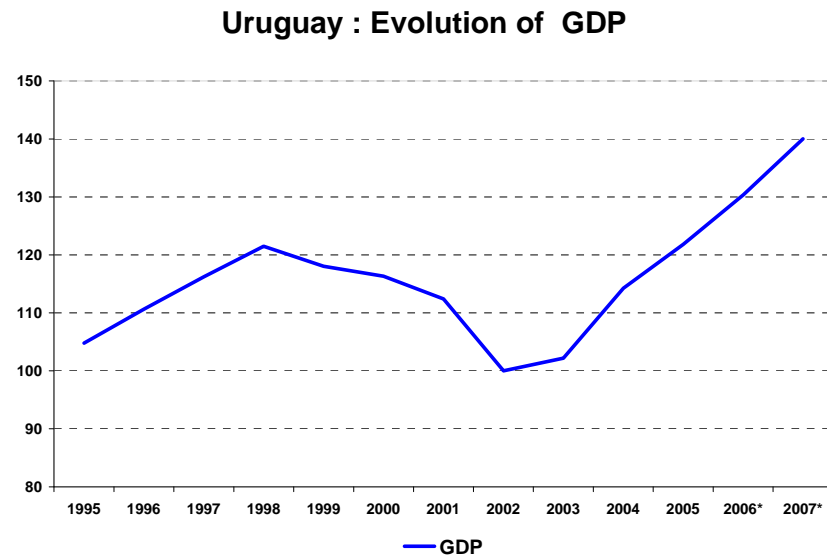


INFLATION IN URUGUAY



# After 2002 crisis (1)

- **Strong recovery**
- **Financial stabilization**
- **Floating (managed) exchange rate and monetary policy based on monetary aggregates**



# After 2002 crisis (2)

## De-dollarization policy (remonetization)

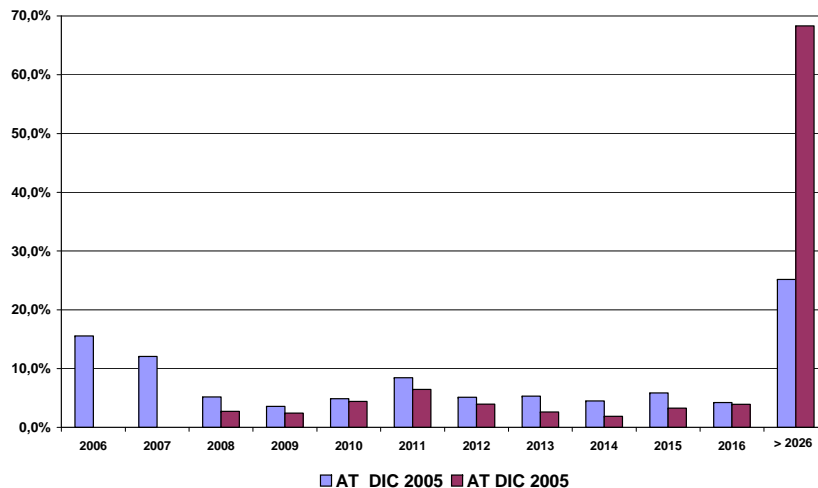
- Regulatory framework
- Introduction of “unidad indexada” (unit of account indexed to CPI).

- Debt policy (more proportion of long term debt)

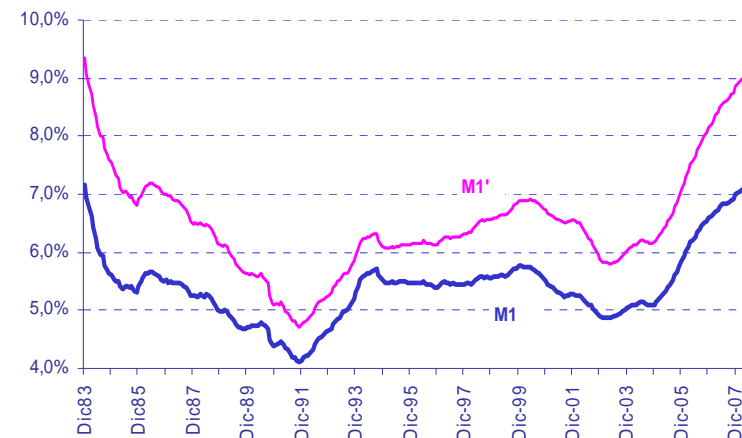
SOVEREIGN DEBT CLASSIFIED BY CURRENCY

	FOREIGN CURRENCY			PESOS	INDEXED
	TOTAL	T-BILLS	BONDS		
1999	99,8%	17,5%	82,3%	0,0%	0,2%
2000	99,9%	15,7%	84,1%	0,0%	0,1%
2001	99,9%	8,5%	91,4%	0,0%	0,1%
2002	94,9%	4,7%	90,2%	1,8%	3,2%
2003	87,8%	7,1%	80,7%	6,0%	6,2%
2004	85,3%	7,4%	77,9%	3,2%	11,5%
2005	79,2%	4,9%	74,4%	4,9%	15,9%
2006	77,0%	3,4%	73,6%	5,4%	17,5%
2007	70,8%	0,6%	70,2%	9,3%	20,0%
2008 sep	68,4%	0,0%	68,4%	9,6%	22,0%

URUGUAY: distribution of maturities



M1 to Gdp ratio

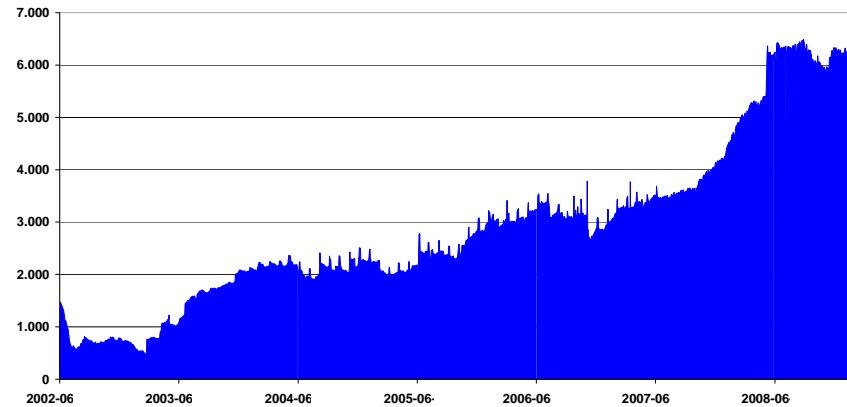


# After 2002 crisis (3)

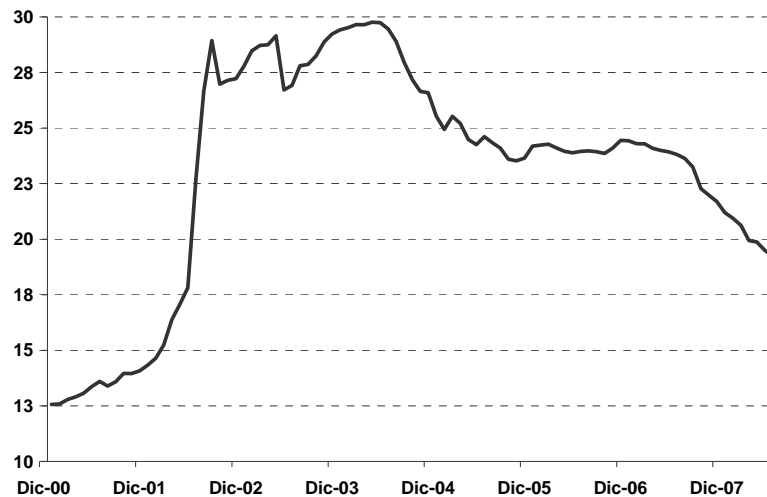
**International reserves increase**

**Peso appreciation (nominal and real)**

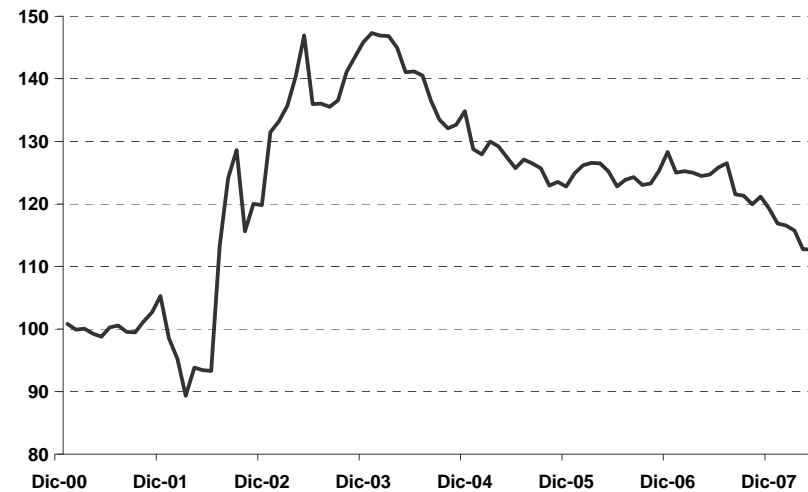
**Uruguay: International reserves**  
(millions of \$)



**Nominal exchange rate (pesos per \$)**

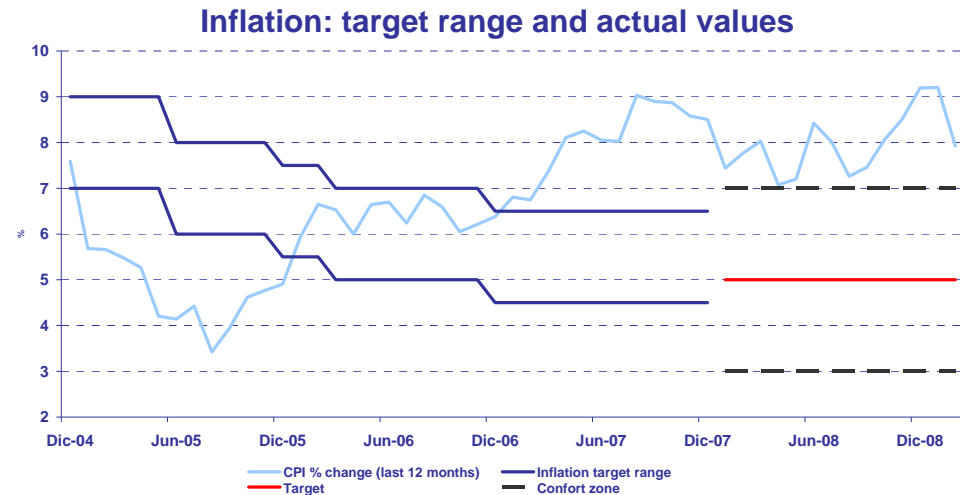


**Real exchange rate index**



# After 2002 crisis (4)

- **Commodities price shock**



- **Inflation rose since the end of 2005**

# From september 2007

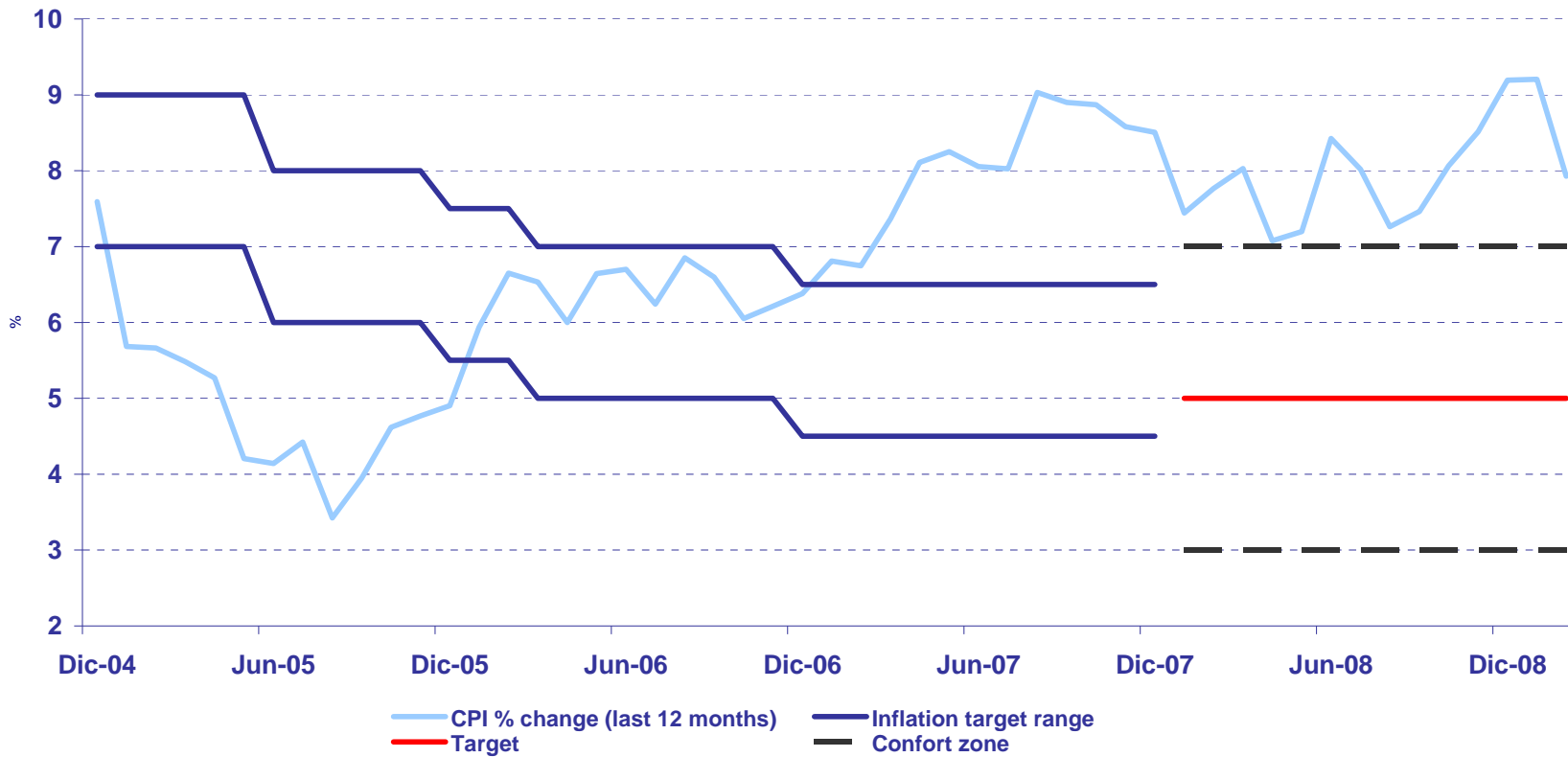
- **Monetary policy became a regime based on the management of interest rates**
  - **“lite” inflation targeting**

# Situation before the crisis

- Inflation above the target and dangerously close to 10%
- Economy growing very fast (10% in 2008)
- Moderated public deficit (around 1%)
- Balance of payments deficit (4%)
- Unemployment at its lowest level in years (7.5%)



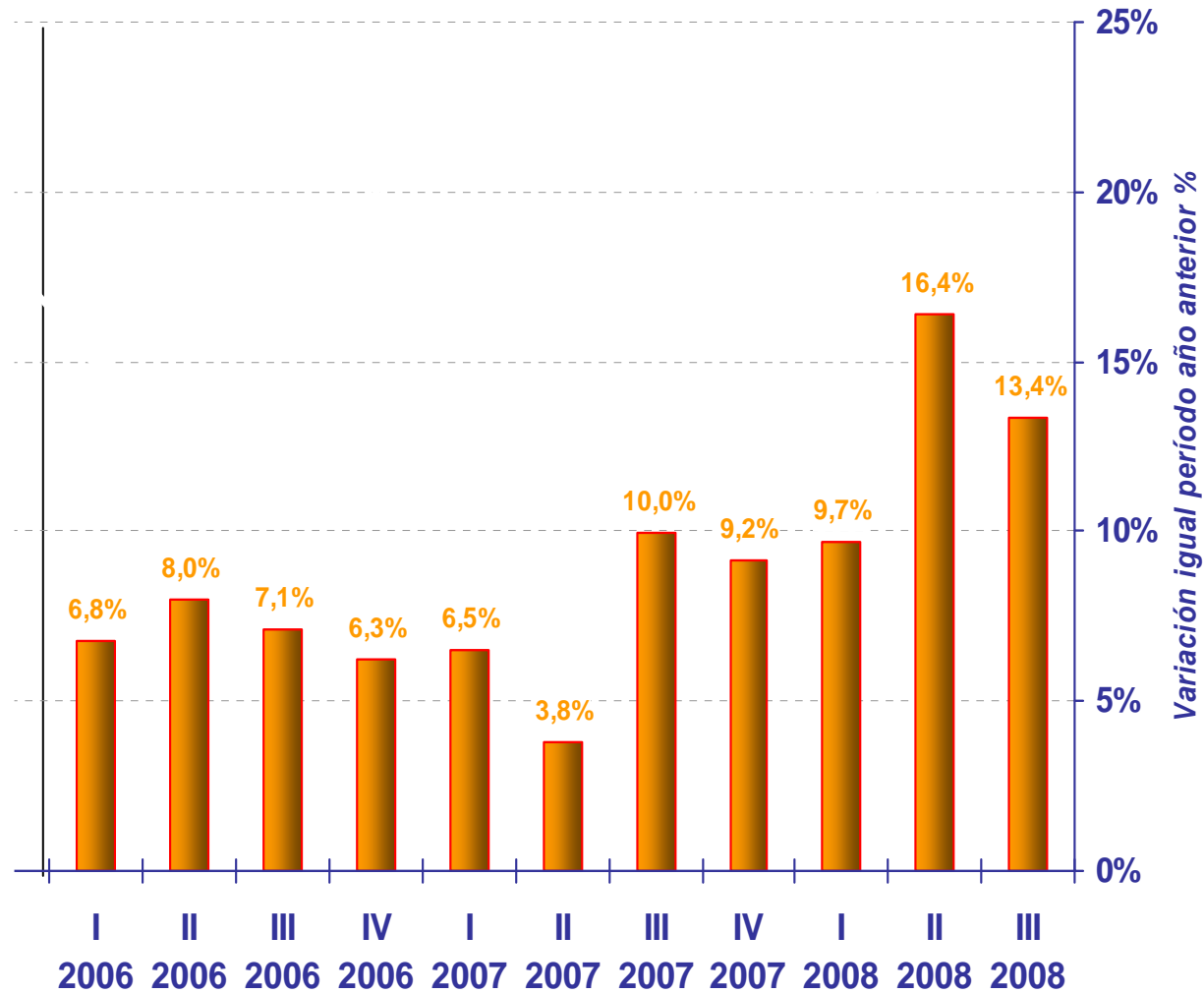
## Inflation: target range and actual values



# Situation before the crisis

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# GDP growth (interannual)

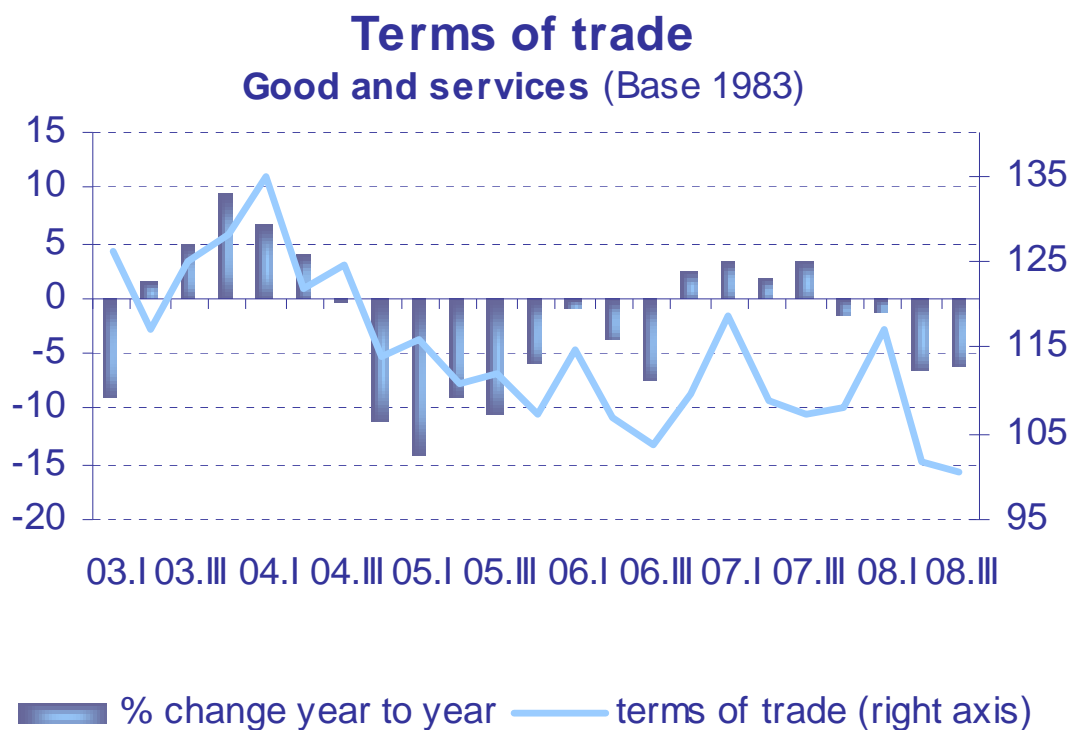


# Situation before the crisis

- Inflation above the target and dangerously close to 10%
- Economy growing very fast (10% in 2008)
- Moderated public deficit (around 1%)
- Balance of payments deficit (4%)
- Unemployment at its lowest level in years (7.5%)
- Sound financial sector

# The effects of crisis (1)

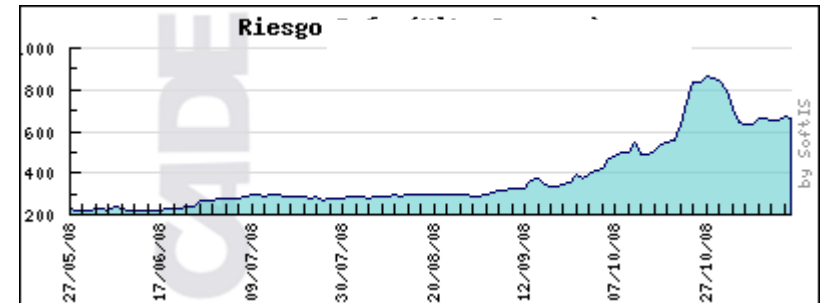
- **Drop in commodity prices**
  - with not much loss in terms of trade



# The effects of crisis (2)

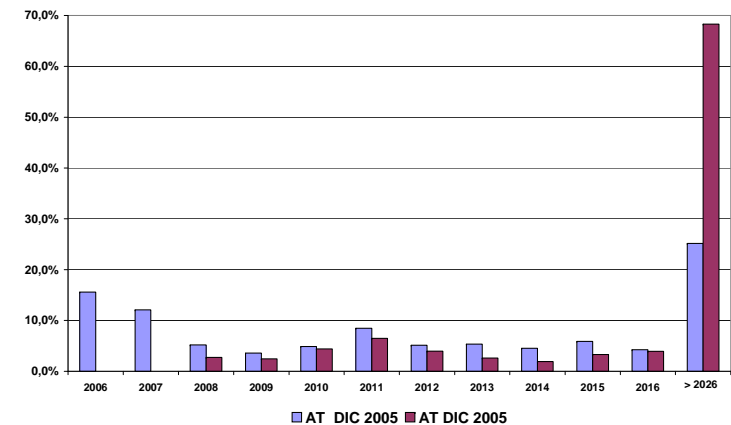
- Rise on sovereign risk.

Sovereign risk



- Due to debt policy there is no urgency to issue new debt

URUGUAY: distribution of maturities

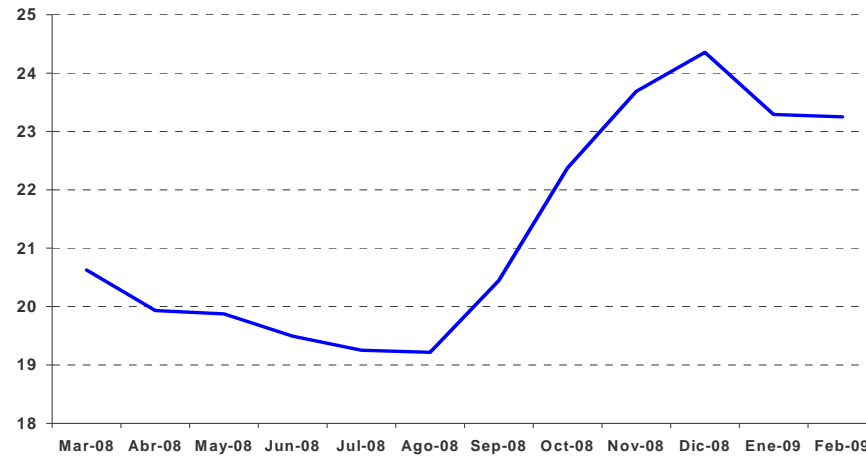


# The effects of crisis (3)

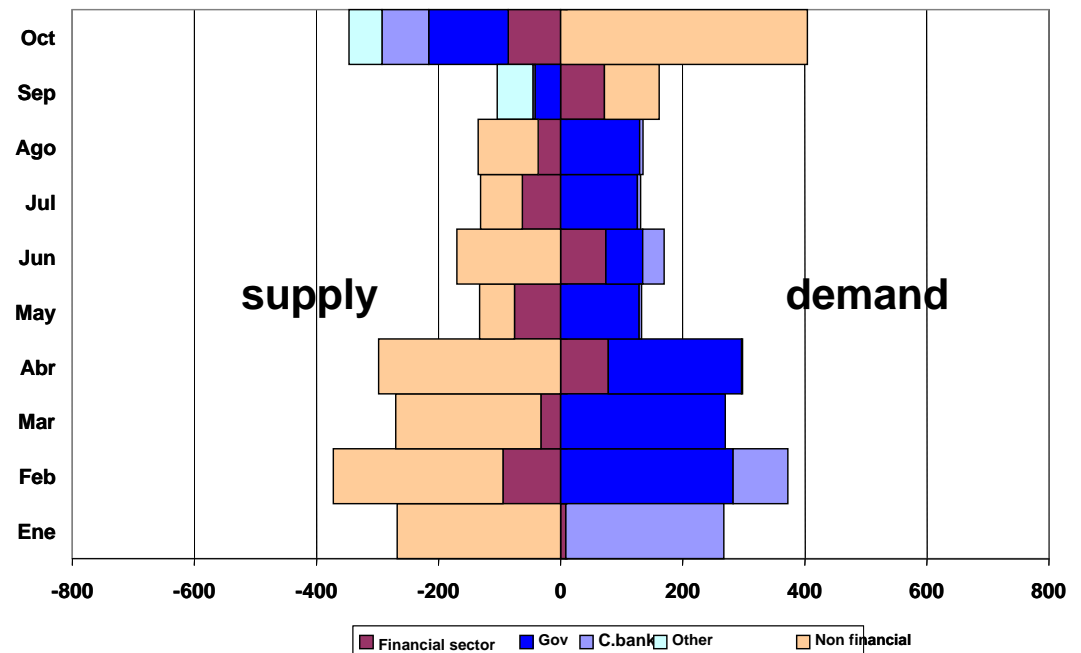
- Pressures on exchange rate due to:

- A change on relative prices ?
- Portfolio adjustment?
- Expectations ?

Nominal exchange rate (pesos per \$)



Supply and demand of foreign currency



# **Expected increase in fundamentals real exchange rate**

- **Negative wealth effect**
- **Drop in aggregate expenditure**
- **Productivity losses**
- **Interruption of capital flows**
- **Current account deficit**



# **Restrictions on the monetary policy response (1)**

- **Transmission mechanisms not well identified**
- **Dollarization**
- **Shallow markets**
- **Segmented markets**
- **Shortage of liquidity**
  - **How to manage it in a shallow market ?**
- **Difficult to tell one shock from another**

# **Restrictions on the monetary policy response (2)**

- **10% threshold**
- **Exchange rate volatility can trigger bad expectations about the health of financial sector**
- **If there is a nominal shock free floating conducts to a rise in inflation**
- **Due to nominal rigidities a change on relative prices can rise inflation**

# Change in relative prices and inflation

$$TCR = \left( \frac{P_T}{P_{NT}} \right) = \frac{P^* \cdot E}{P_{NT}}$$

$$IPC = P_{NT}^\alpha P_T^{(1-\alpha)}$$

$$IPC = P_{NT} \left( \frac{P_T}{P_{NT}} \right)^{(1-\alpha)} = P_{NT} (TCR)^{(1-\alpha)}$$

$$\pi = P_{NT}^\bullet + (1-\alpha) TCR^\bullet$$

# The policy response: main guidelines

- Priority: preservation of financial sector health.
- Prevent exchange rate volatility from becoming a financial crisis.
- Supply of liquidity
- Protection of peso markets

# The policy response: implementation

- **Exchange rate: more management, less free float**
- **Selling of reserves**
- Interest rate: holidays to the policy interest rate
- Repurchase of peso and UI nominated instruments
- Heterodox instrument: REPE
- Transitory interruption on issues of middle term instruments

**Exchange rate management**

**Some increase in  
exchange rate**

**Some reserve  
losses**

**Way**

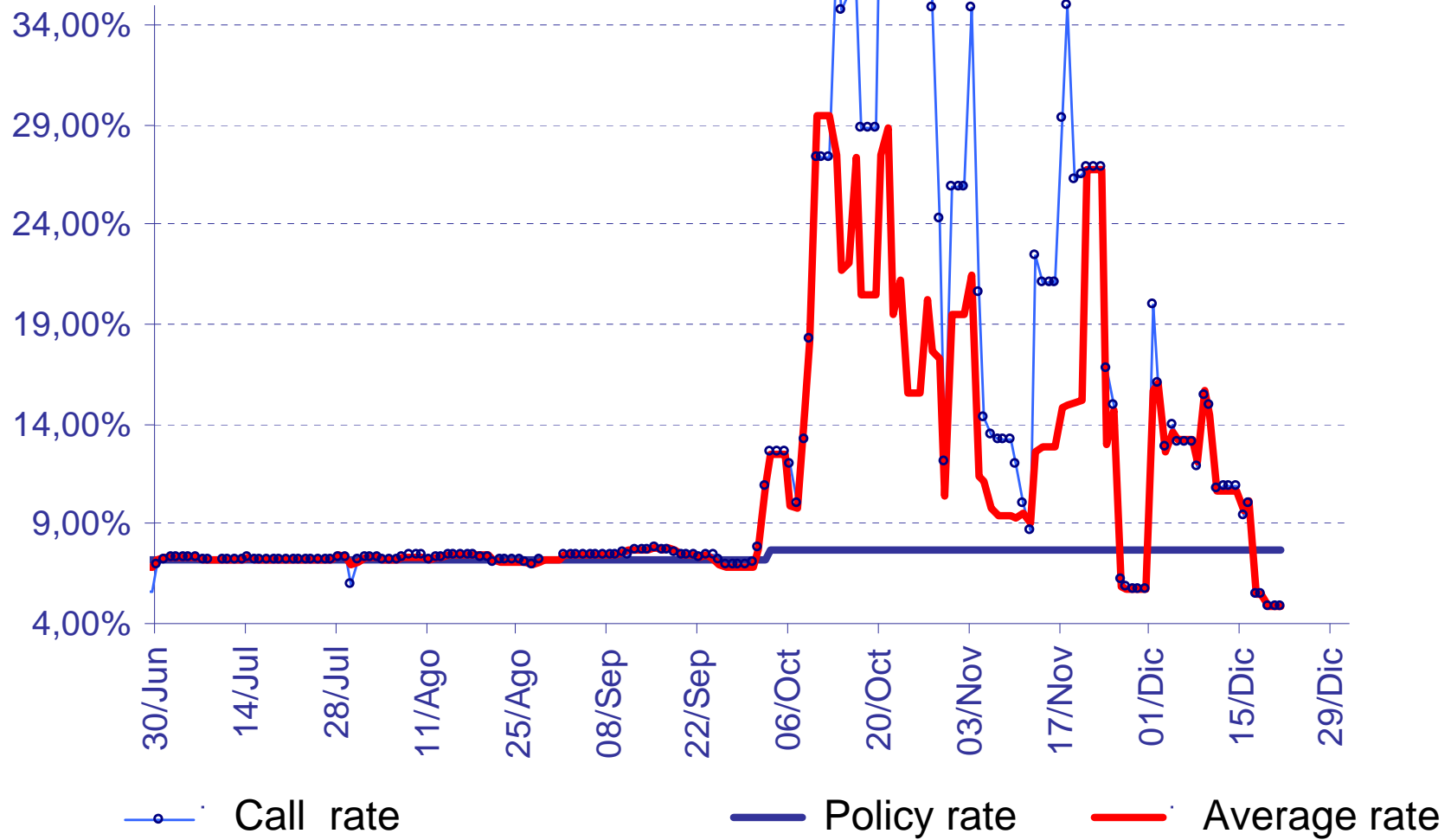
**Crawling peg” style  
Sudden jump  
Random**

**Little by little  
Sudeen loss  
(repurchase)  
Communication  
strategy**

# The policy response: implementation

- Exchange rate: more management, less free float
- Selling of reserves
- **Interest rate: holidays to the policy interest rate**
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# Interbanking interest rates





# The policy response: implementation

- Exchange rate: more management, less free float
- Selling of reserves
- Interest rate: holidays to the policy interest rate
- **Repurchase of peso and ui nominated instruments**
- **Heterodox instrument: REPE**
- **Transitory interruption on issues of middle term instruments**

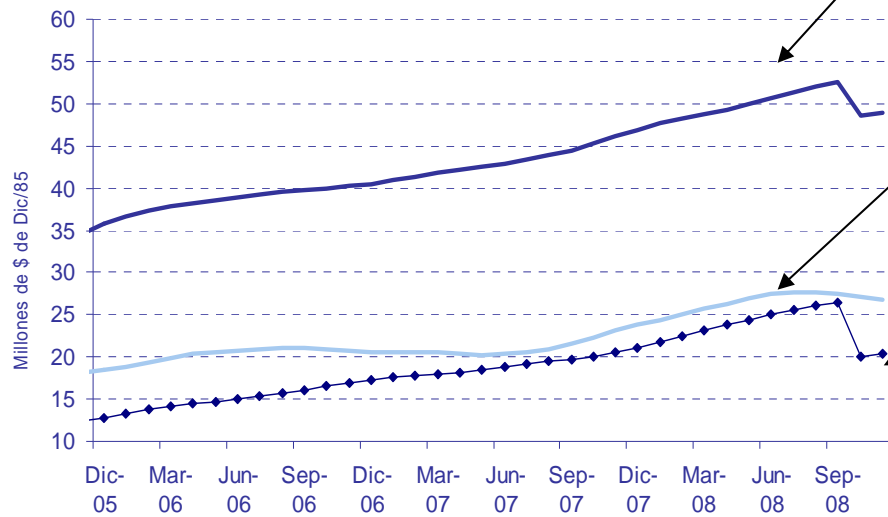
# Characteristics of the repurchase

- Eligible set: all Central Bank bills nominated in pesos or UI with maturities ranging from two months on.
- Options: liquidity in pesos or US dollars
- Total repurchased: 210: US dollars
  - Us dollars: 150
  - Pesos: 60

# After the repurchase

## Deposits in local currency

(In pesos of 1985)

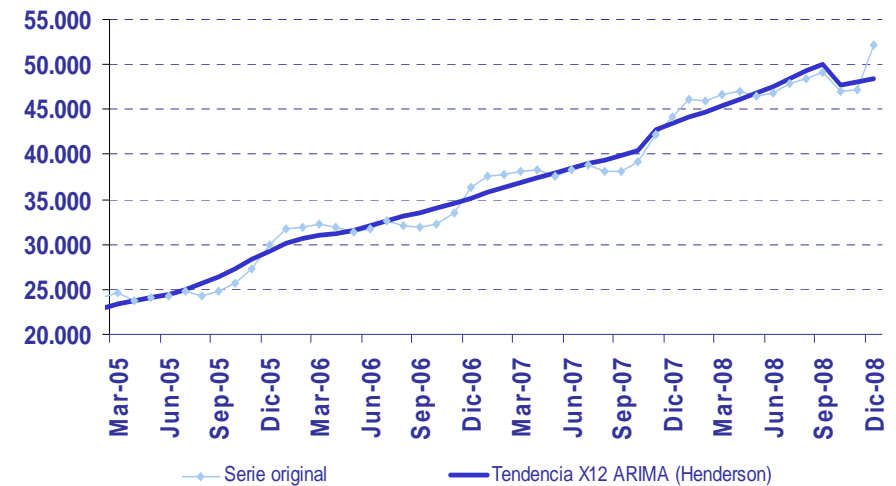


Demand deposits

Time deposits

Saving accounts

M1



# The policy response: implementation

- Exchange rate: more management, less free float
- Selling of reserves
- Interest rate: holidays to the policy interest rate
- Repurchase of peso and ui nominated instruments
- **Heterodox instrument: REPE**
- **Transitory interruption on issues of middle term instruments**

# Final reflexions

- **Management of monetary policy should be pragmatic during a crisis.**
- **Monetary policy should react differently depending on the nature of the shock.**
- **What should be the weight of inflation in the social loss function during a crisis ?**
- **Is there room for inflation targeting for a country that receives permanent shocks ?**

Thank you