Monetary and Exchange Rate Policy Responses to the Global Financial Crisis: The Case of Colombia

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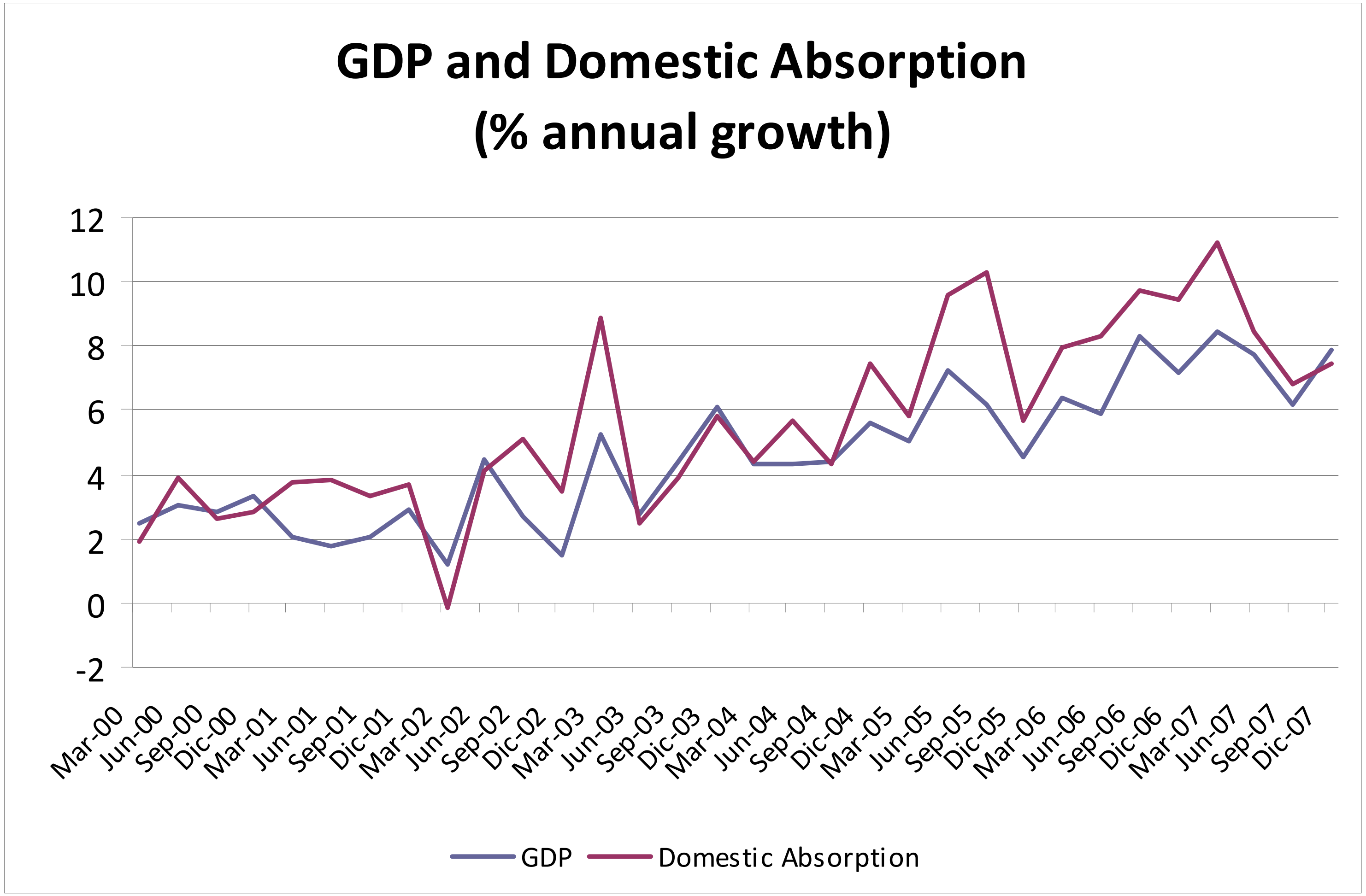
I. The State of the Colombian Economy at the Time of the Crisis

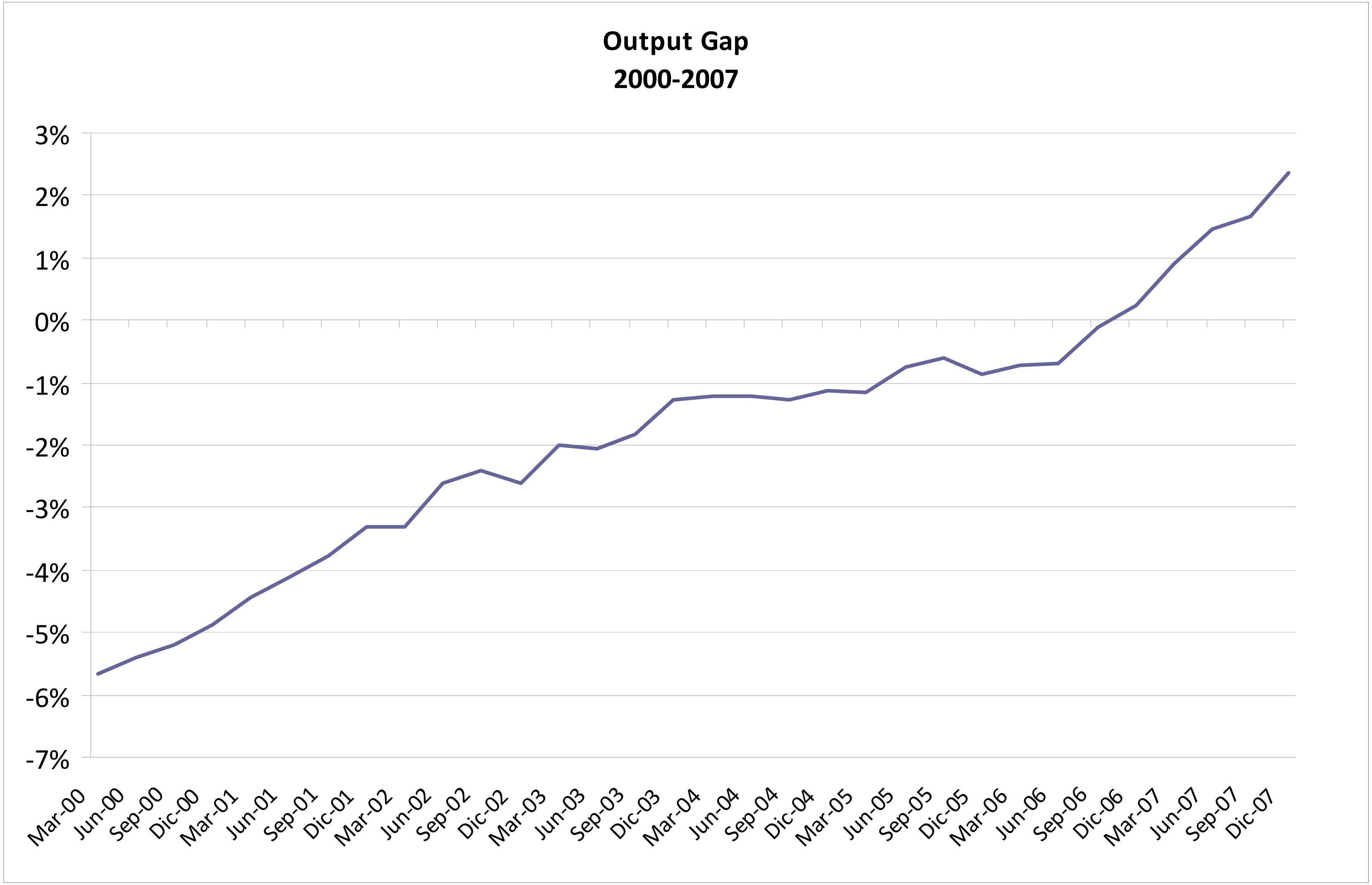
A. The Macroeconomic Situation

Three years of strong aggregate demand and output growth driven by favorable external and domestic conditions

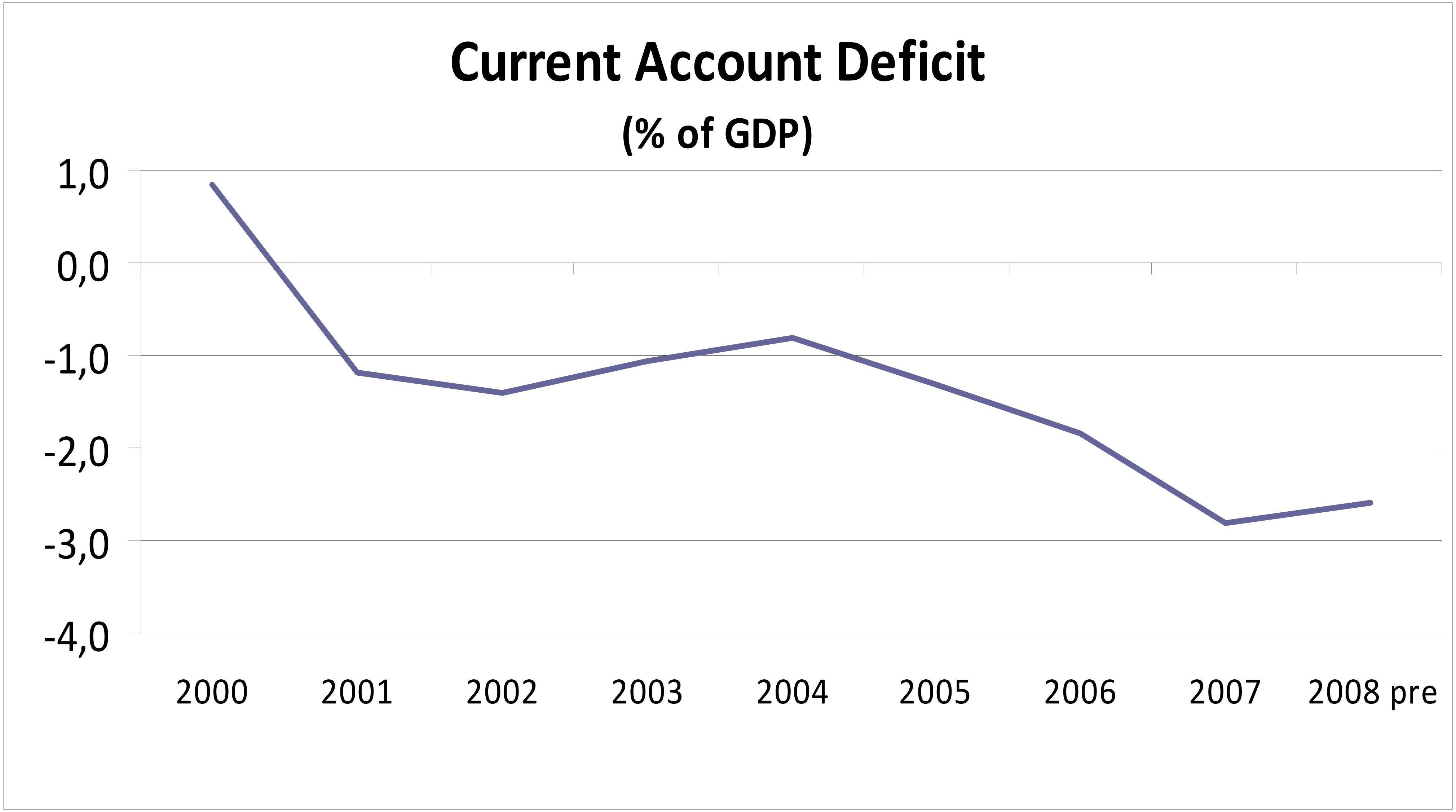


Improvements in security, fiscal consolidation, favorable TOT, expanding external demand, remittances, large FDI flows, abundant external liquidity

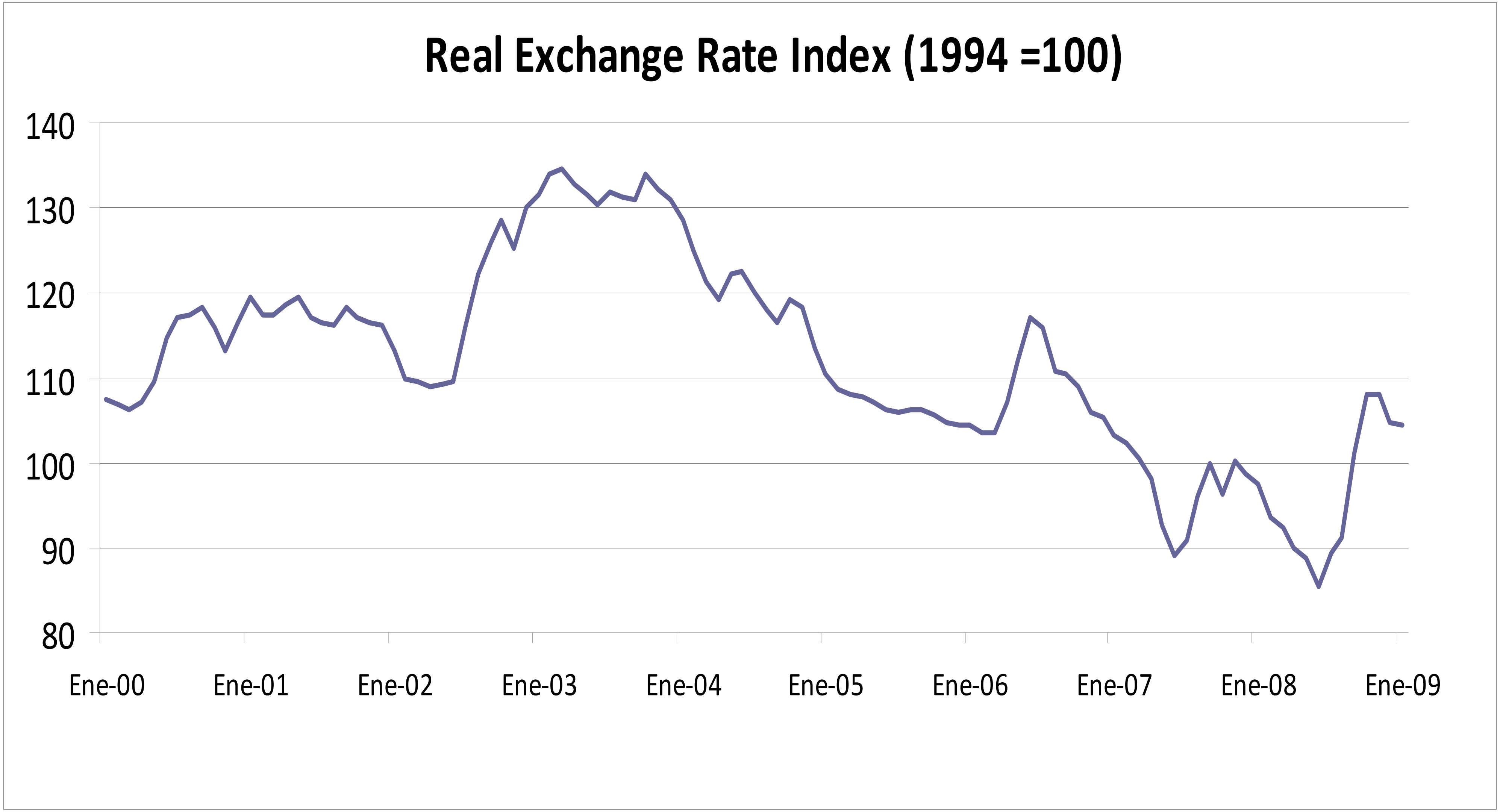
➔ An increasingly positive output gap…



… And a moderate current account deficit…



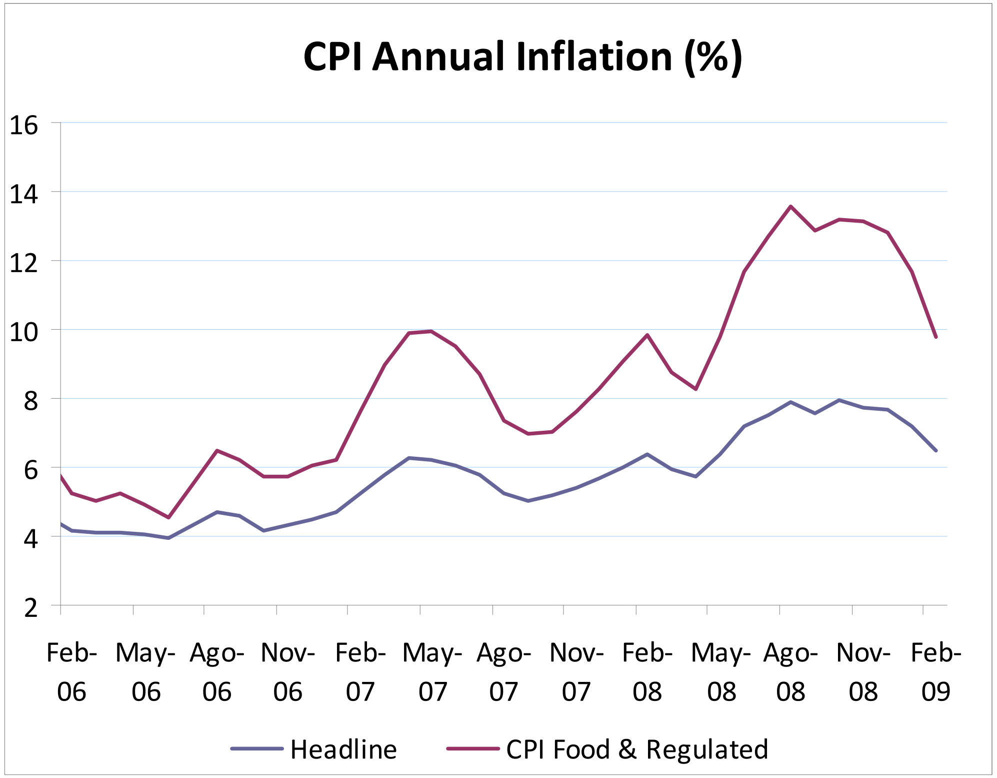
…That came along with a real appreciation of the currency

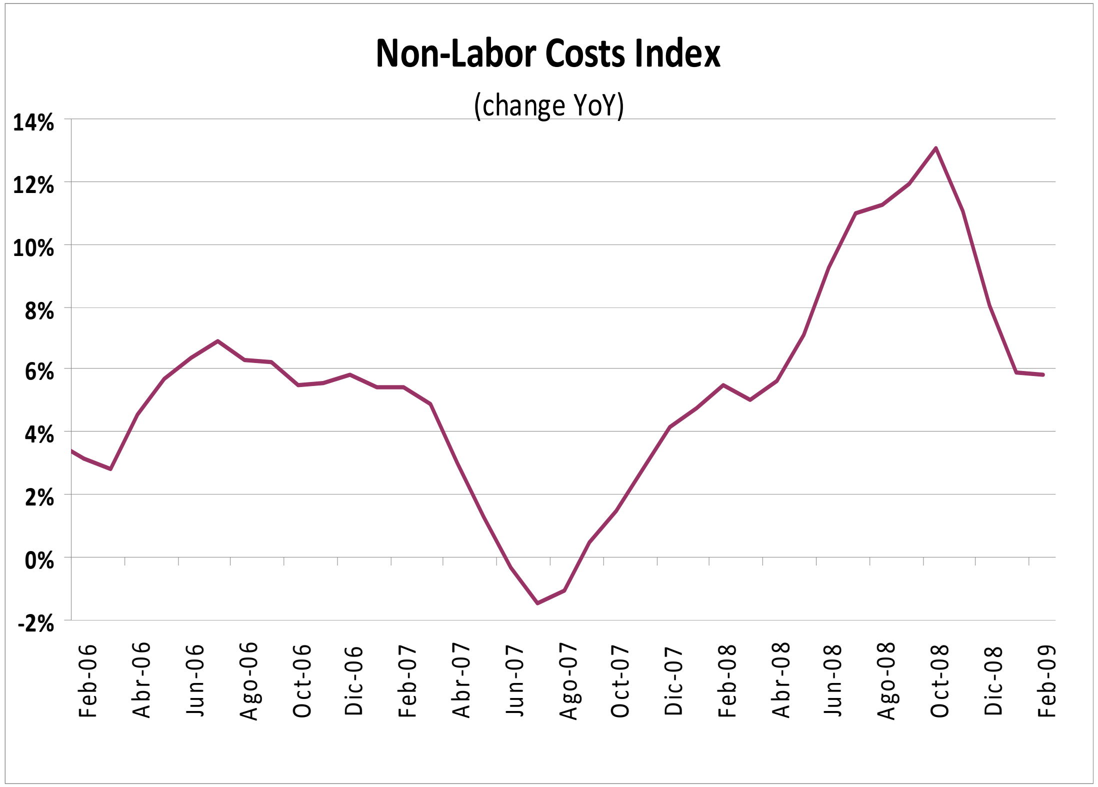


The economy was hit by a variety of "supply" shocks in 2007-2008:

- International energy/food prices
- Climate-related food price shocks

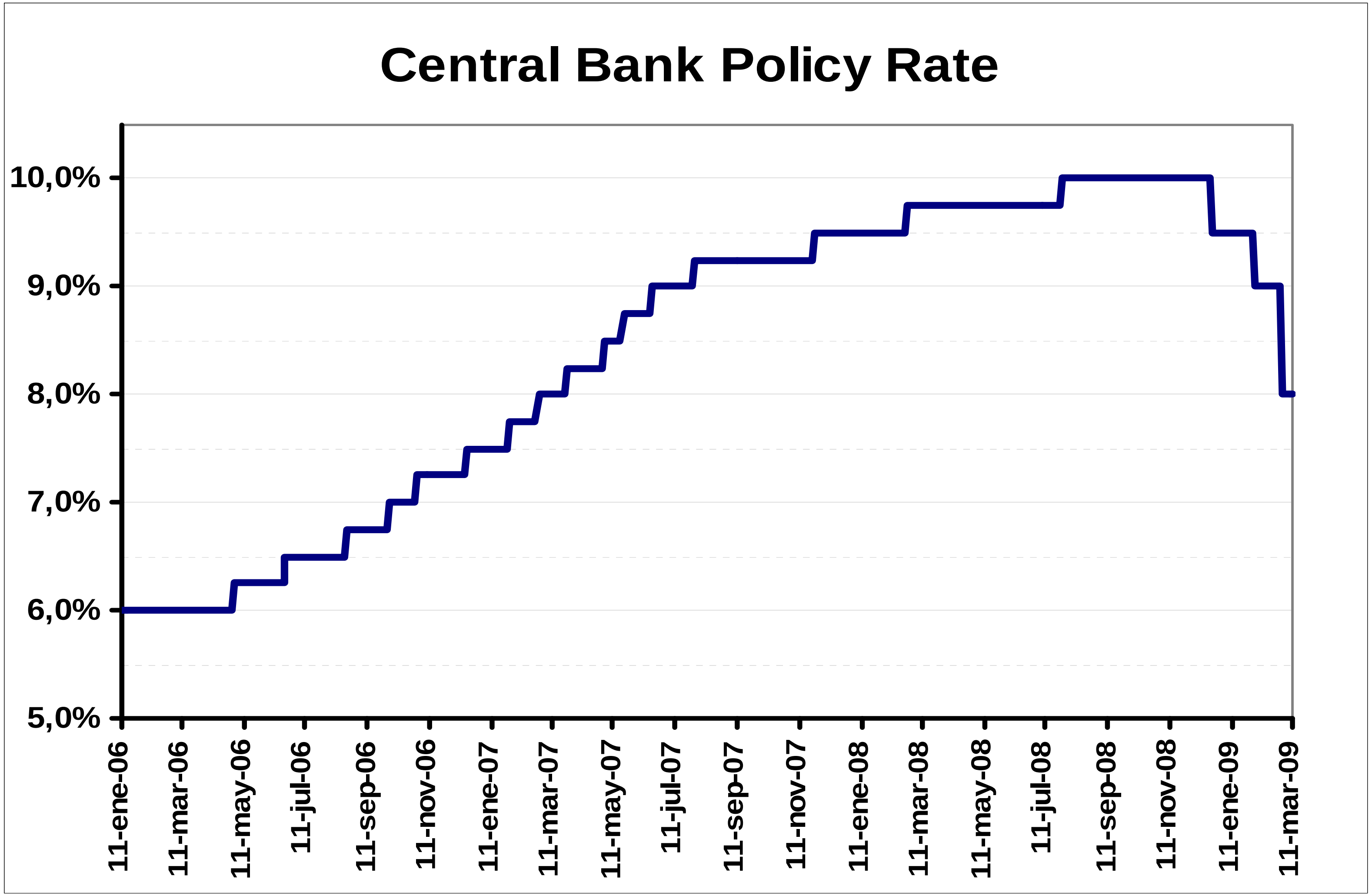
With clear effects on prices and output





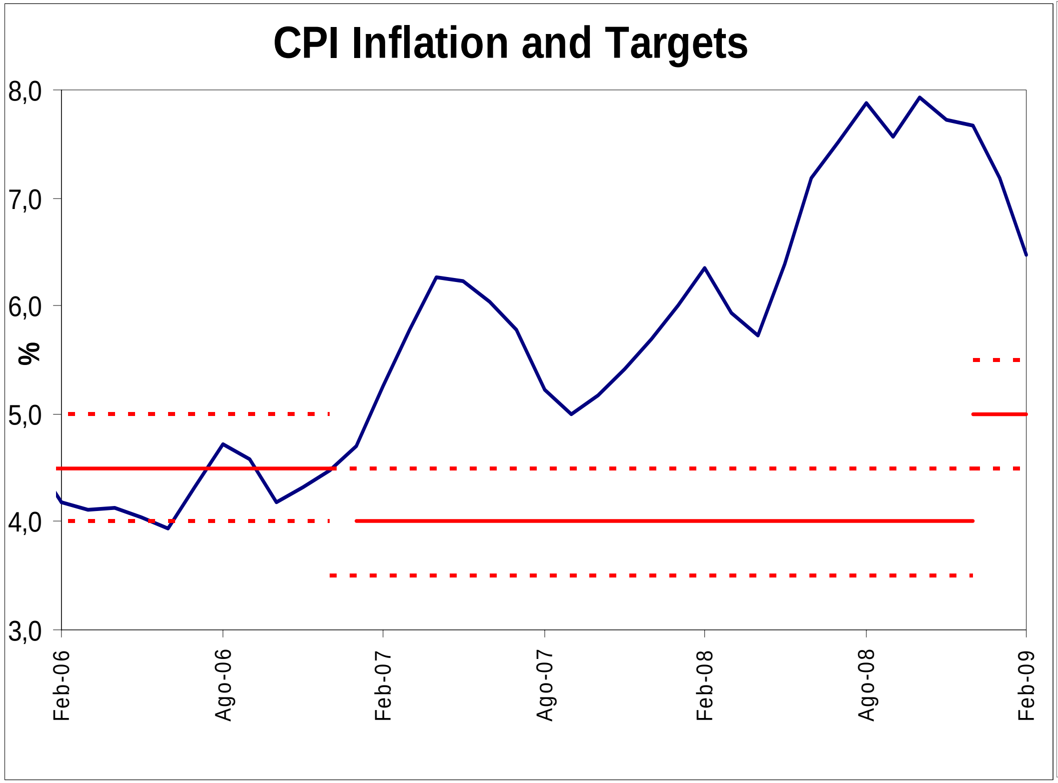
In this context, monetary policy was tightened:

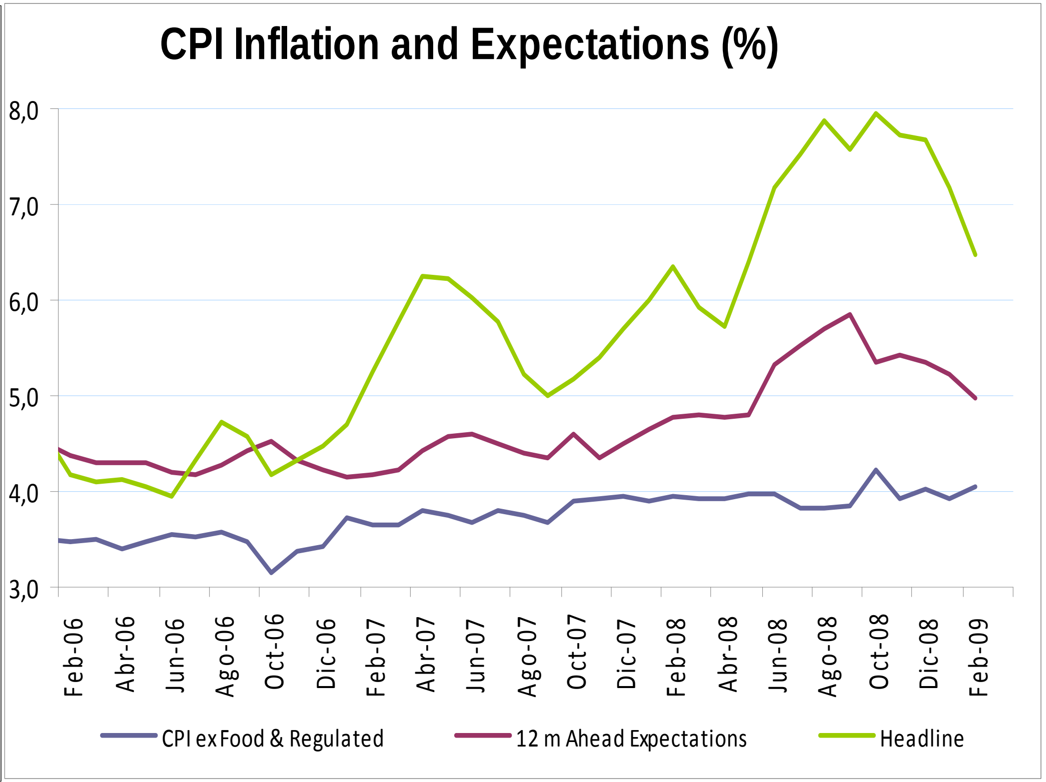
- To curb increase in inflation derived from the expanding aggregate demand (2006-2007)
- To control inflation expectations after the “supply shocks” (2008)



Results:

- Inflation rose and the targets were missed
- However, core inflation remained stable (some measures) and expectations increased less than headline (partial anchoring)

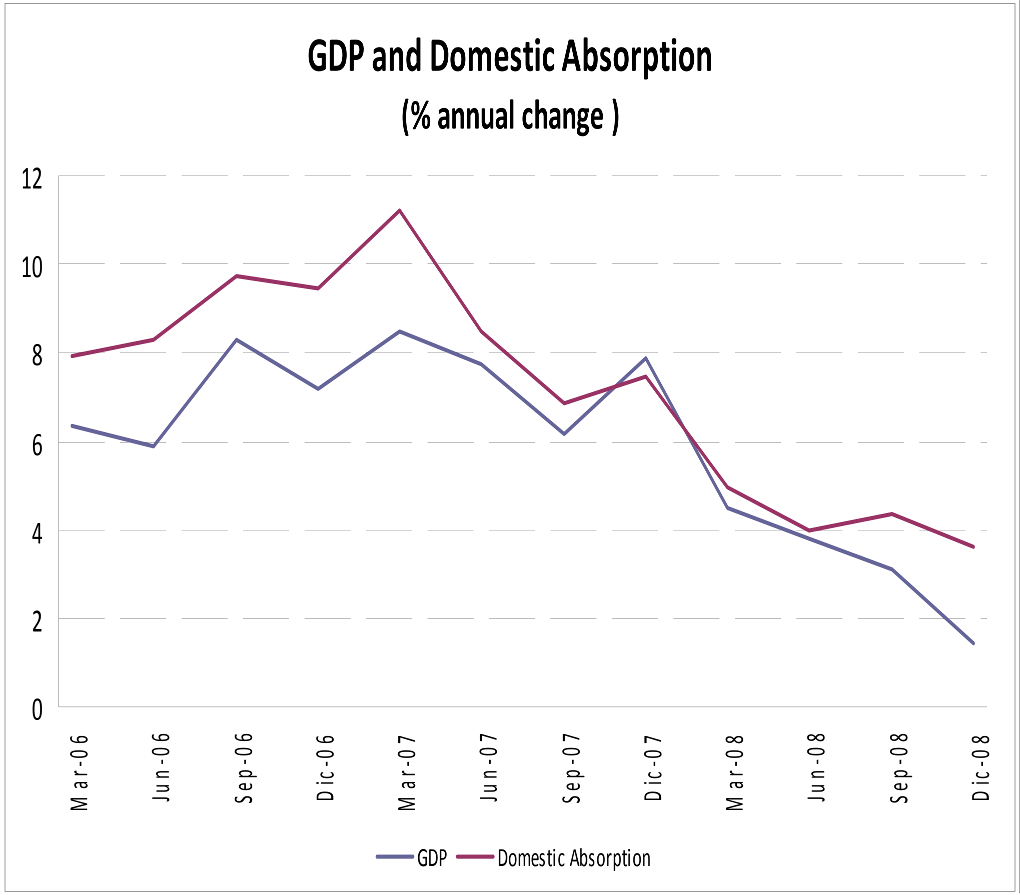


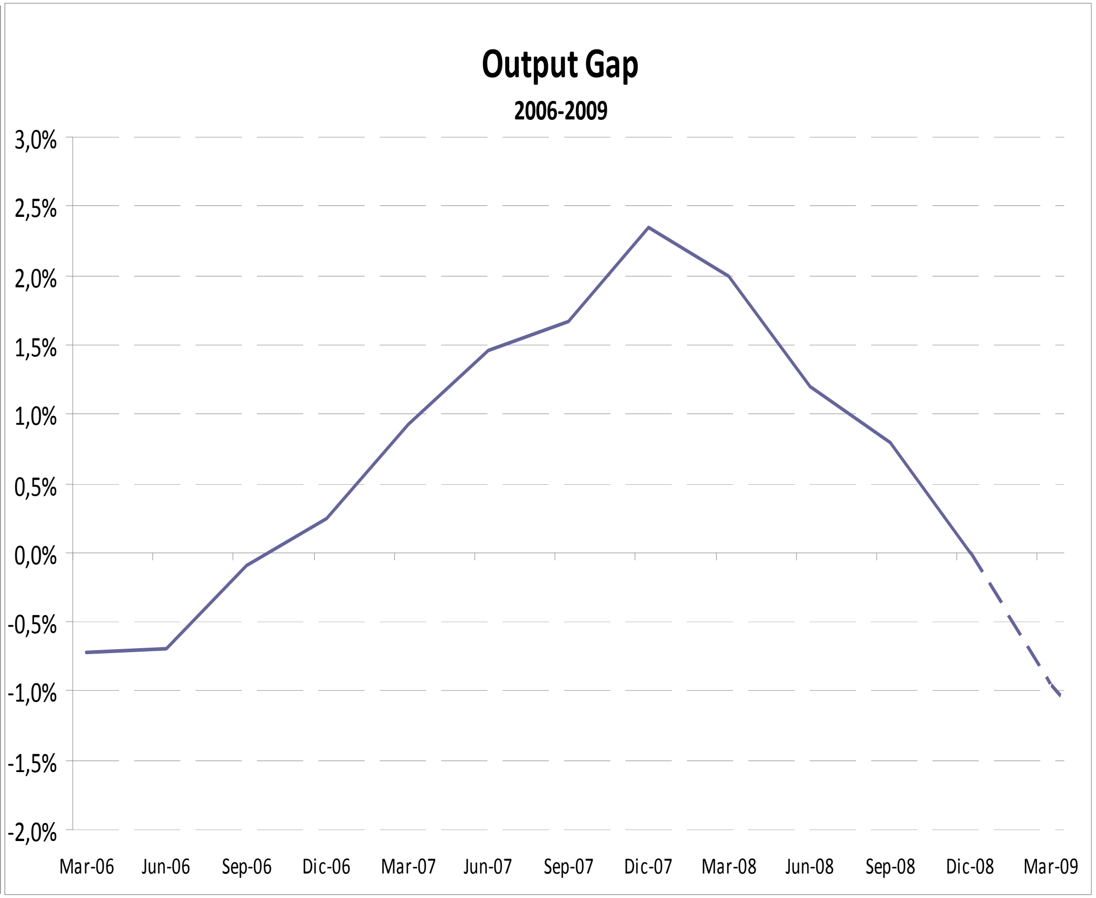


Results:

Slowdown in 2008:

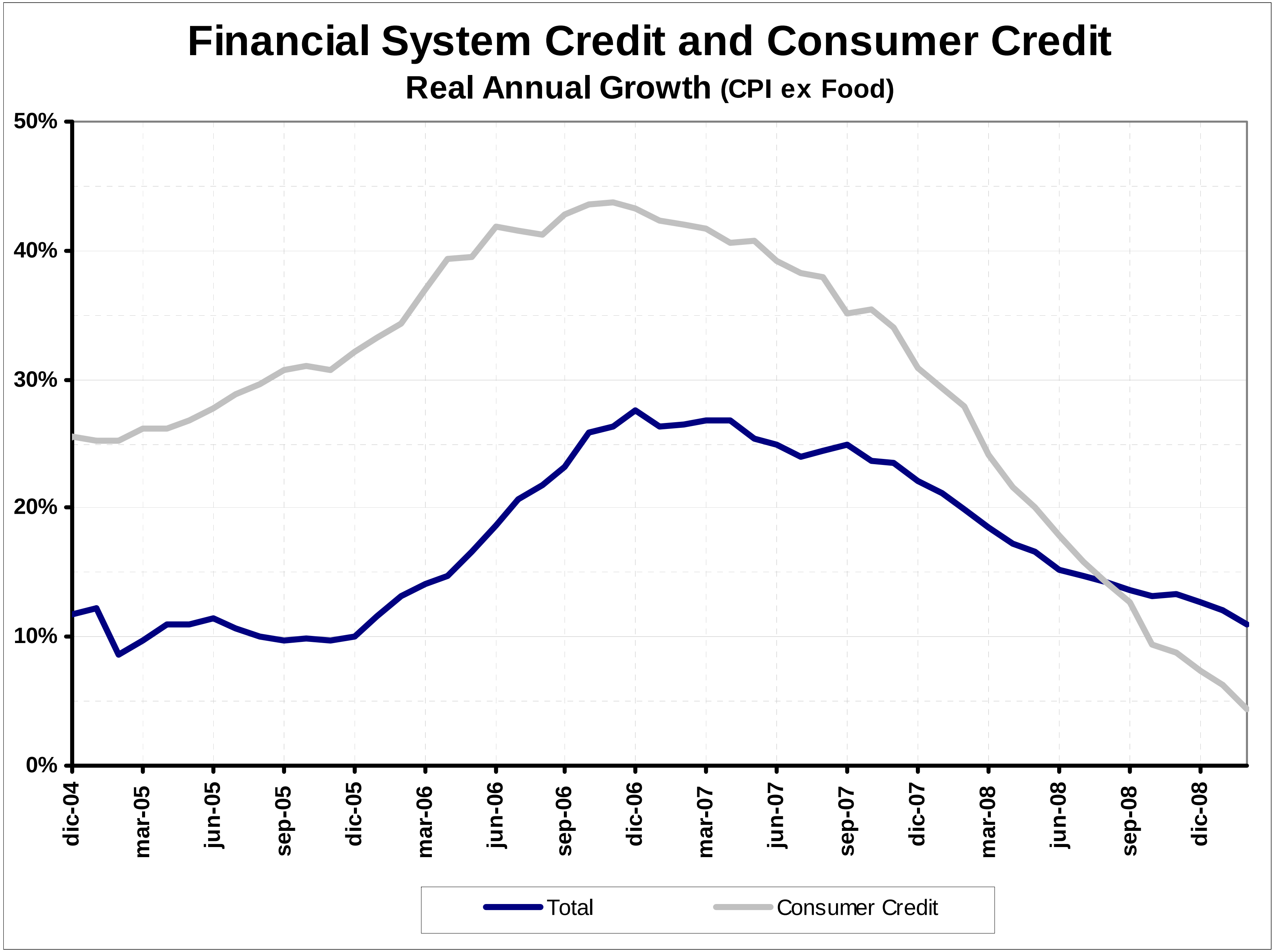
- Response to monetary policy tightening
- Effects of the “supply shocks” (real disposable income of households, firms´ costs)
- Trade restrictions imposed in Venezuela





B. Financial Stability

Strong credit growth in 2006-2007 (especially consumer credit) …

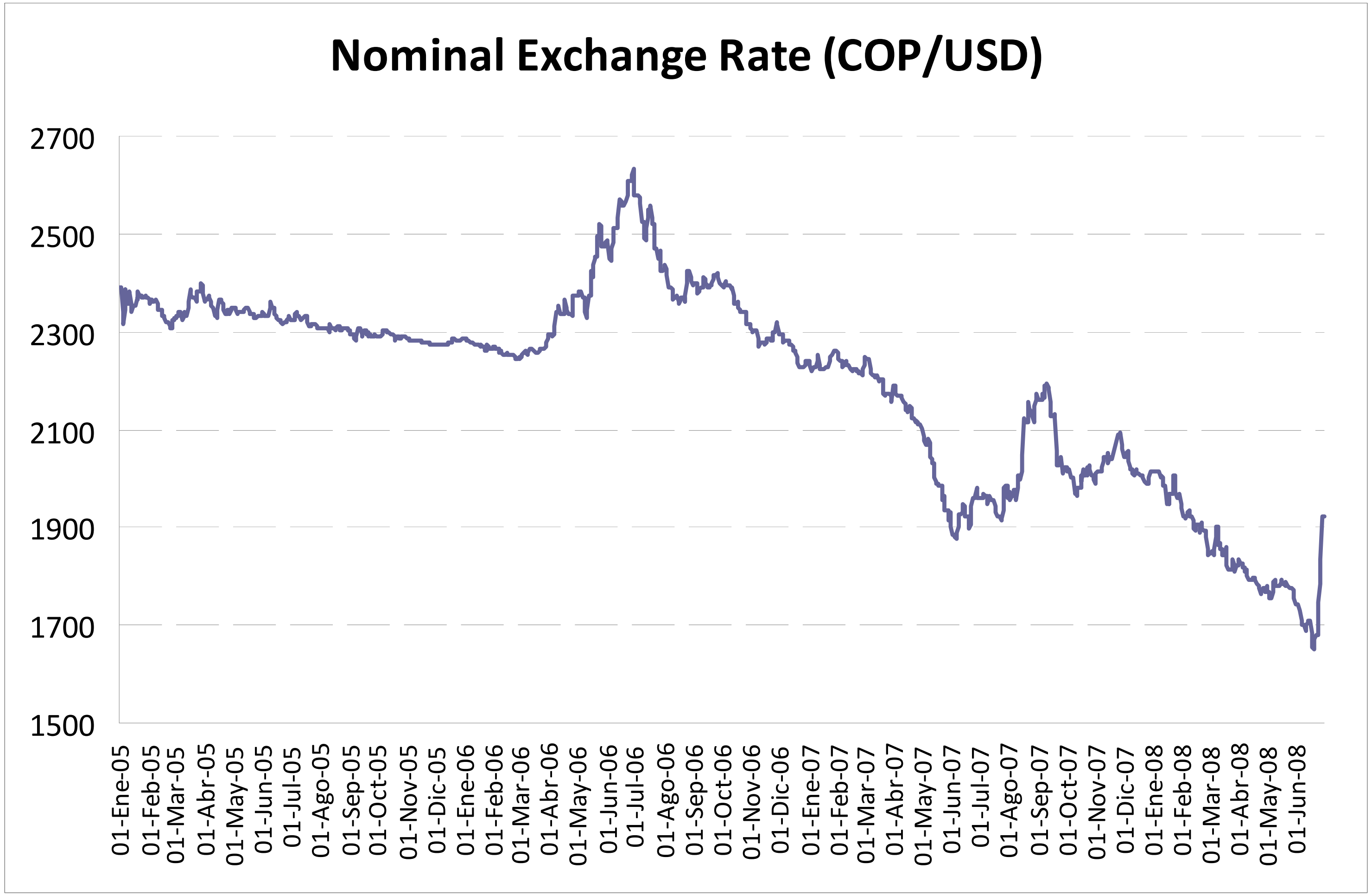


… Despite exchange rate flexibility:

Monetary policy regime stabilizes short term interest rate ➔ Money supply follows money demand

+

Large increases in domestic asset demand during the appreciation period



Policy makers´ concern not only for inflation and current account deficit sustainability,…

… but also for financial stability (bitter memories of the nineties)

➔ “Macro-prudential” measures:

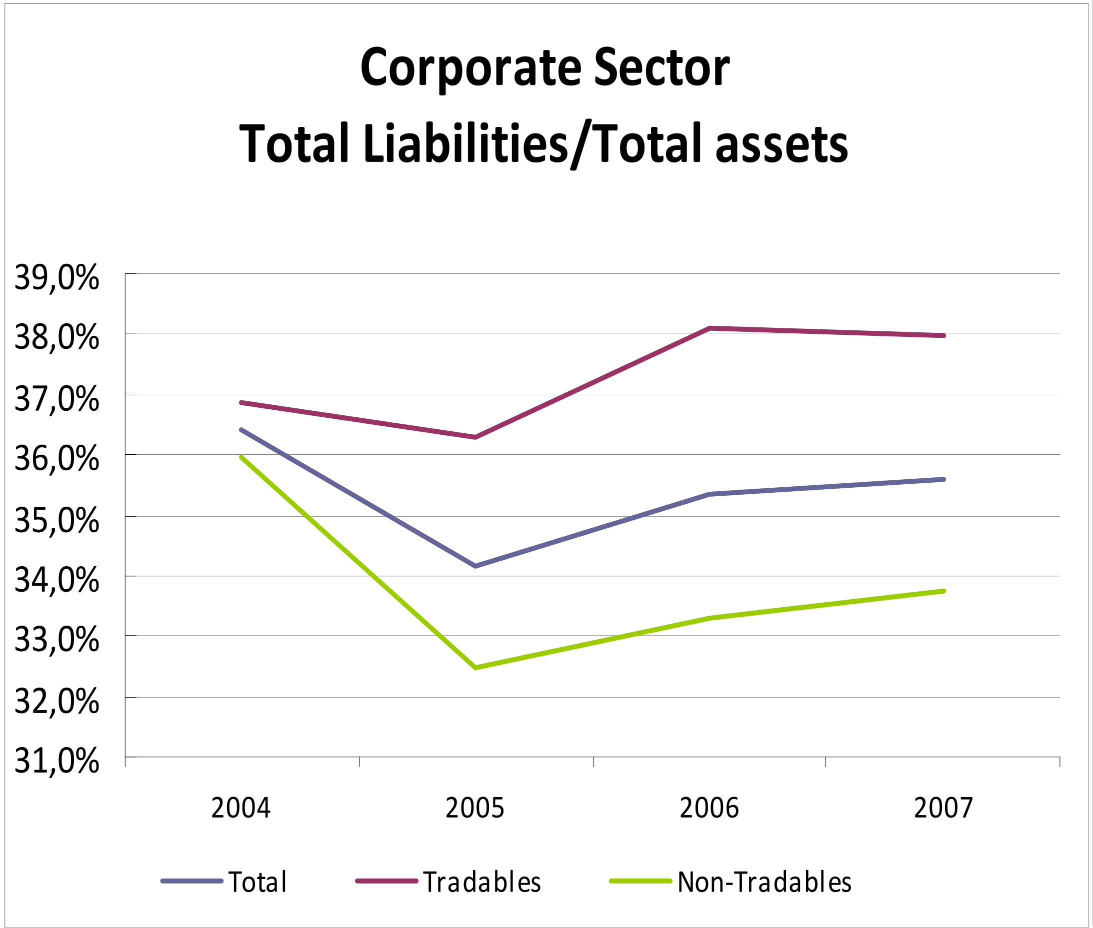
- Reserve requirements (rapid credit growth and slow transmission of policy rate hikes)
- Capital controls (appreciation, control of leverage)
- Increased provisioning requirements (rapid credit growth and exposure of banks to household sector)
- Counterparty risk limits in FX markets
- International reserves purchases (appreciation, perception of temporary favorable external conditions)

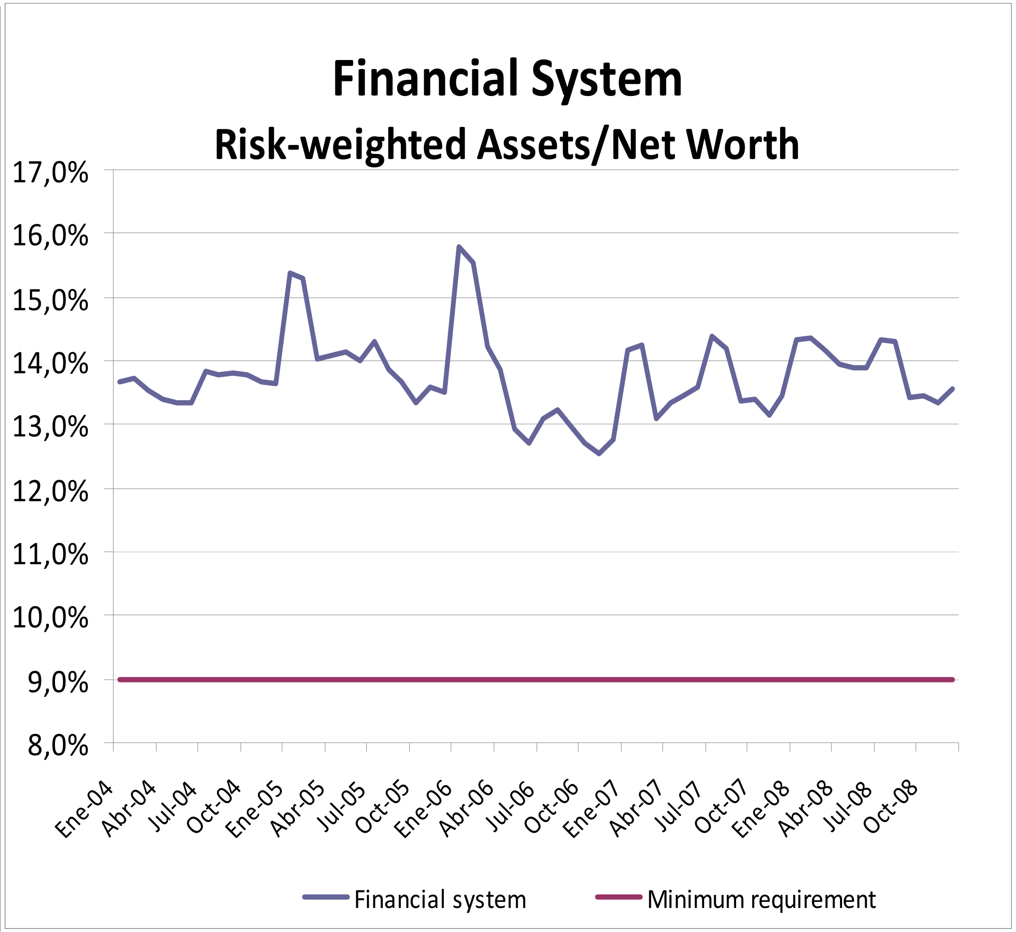
This in addition to:

- Permanent regulation on FX and FX maturity mismatches of banks (no domestic FX interbank loan market)
- Flexible exchange ➔ FX risk contains excessive foreign indebtedness

Results:

- Low corporate sector leverage
- Low currency mismatches
- Control on household indebtedness
- Solid banks
- Low probability of FX liquidity problems



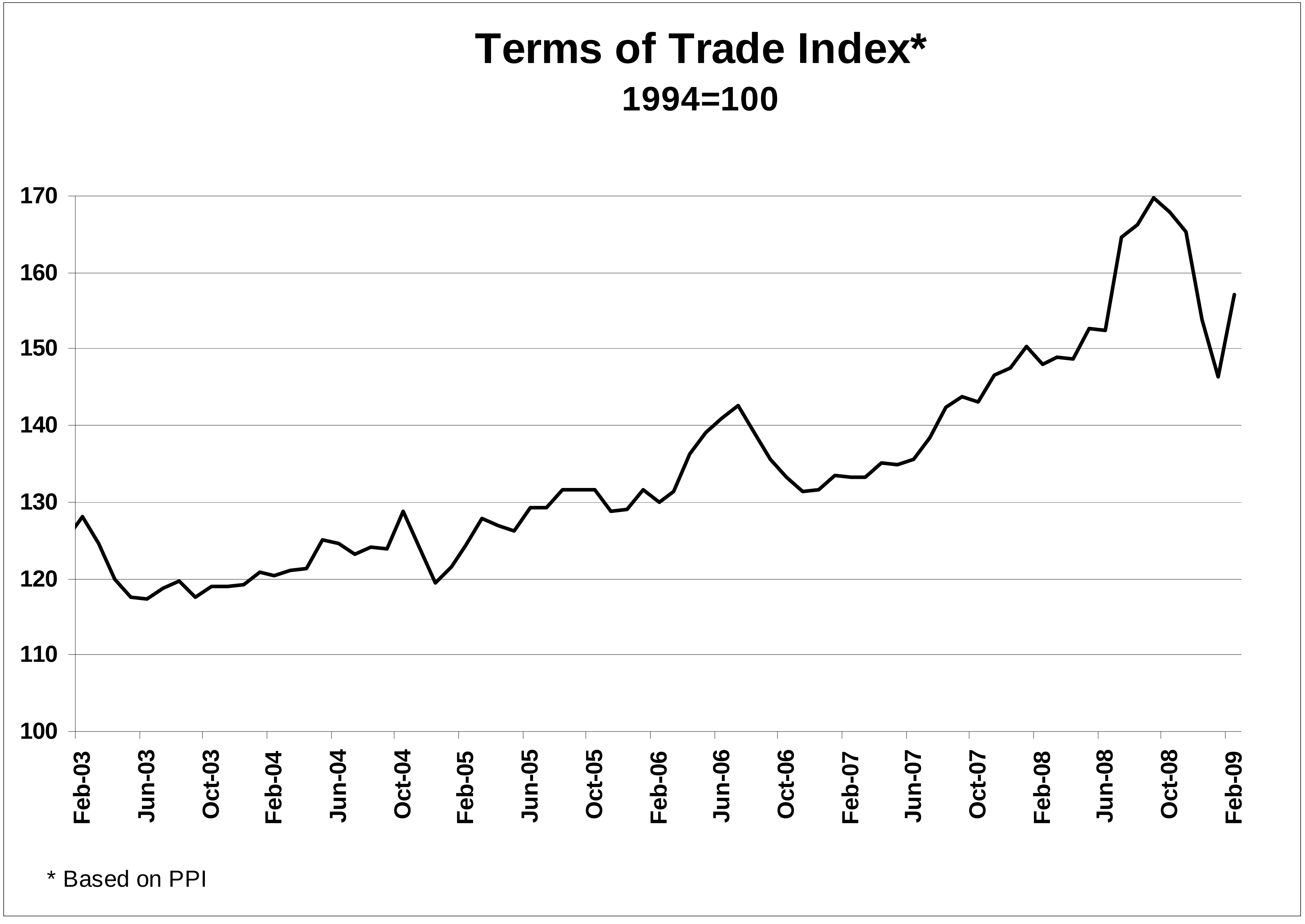


In sum, when the crisis hit, the Colombian economy was characterized by:

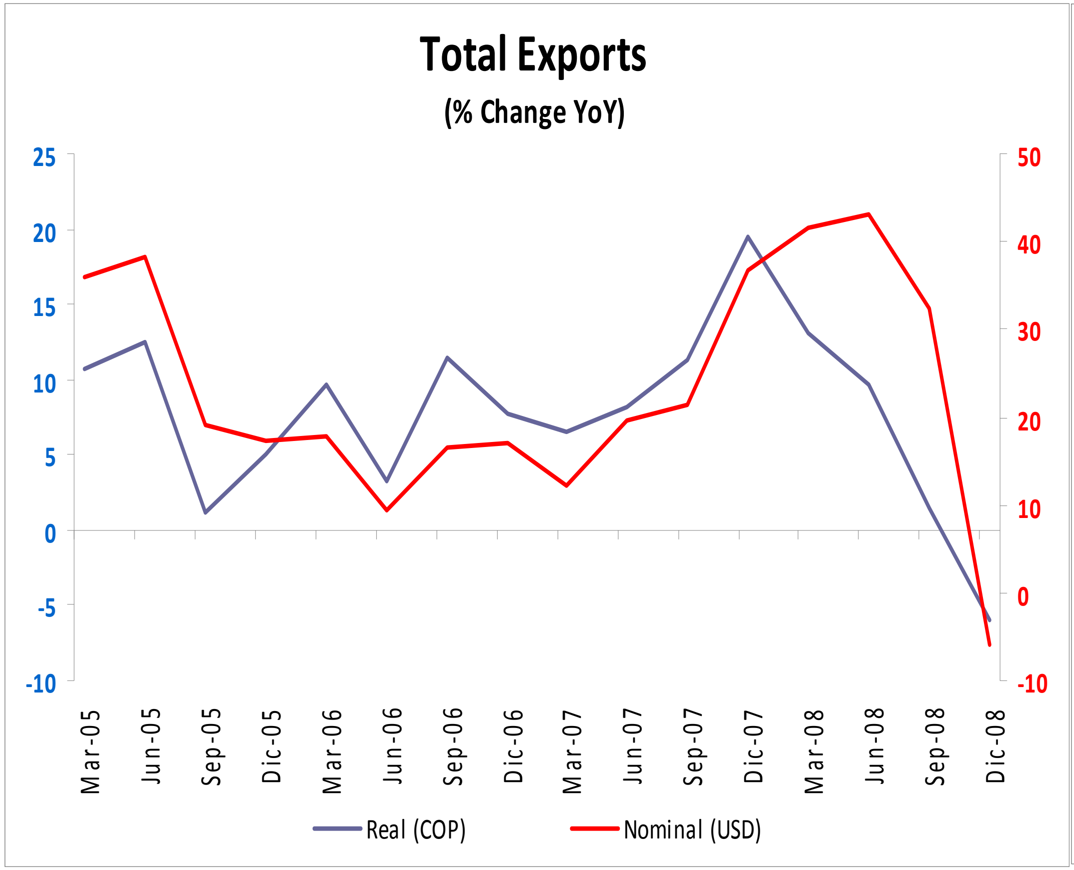
- A slowdown of output growth as a result of monetary policy tightening and the supply shocks
- An increase in inflation, with the targets being missed, as a consequence of the supply shocks
- A slowdown of credit expansion as a result of monetary policy tightening and other measures to control credit growth
- Healthy financial positions of firms, households and banks thanks to contained credit expansion and small mismatches in balance sheets

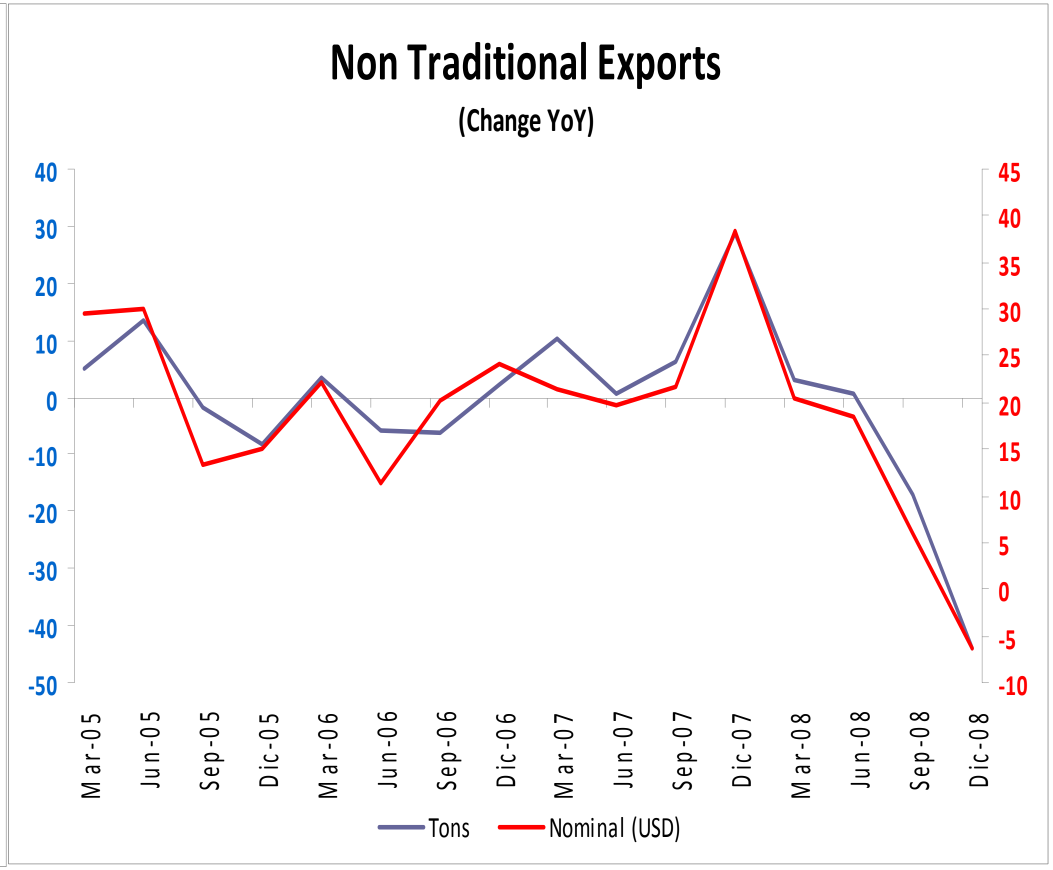
II. The Effects of the International Crisis

TOT deterioration



Export growth decline



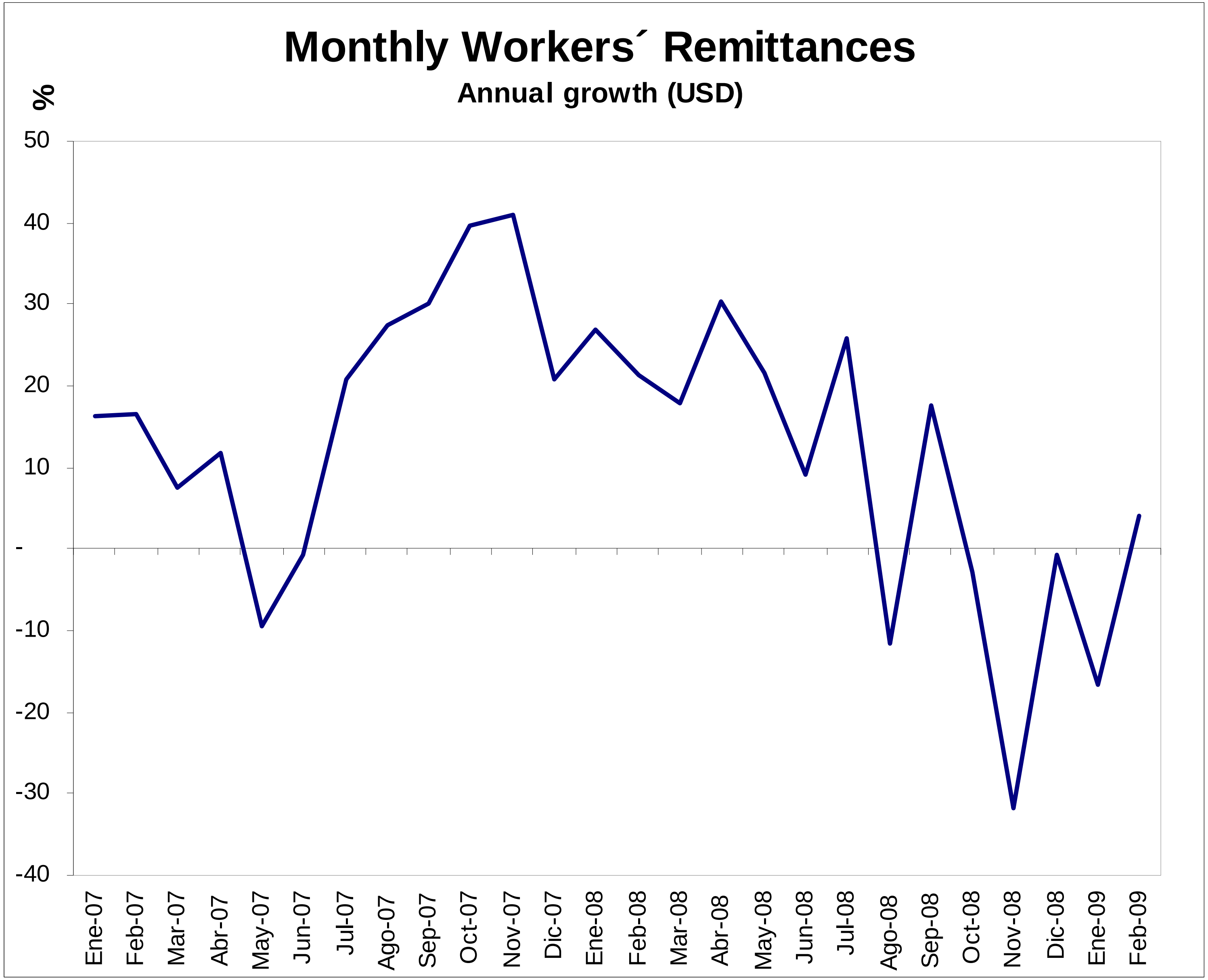


Vulnerability: Main trading partners: The US, EU, Venezuela, Ecuador

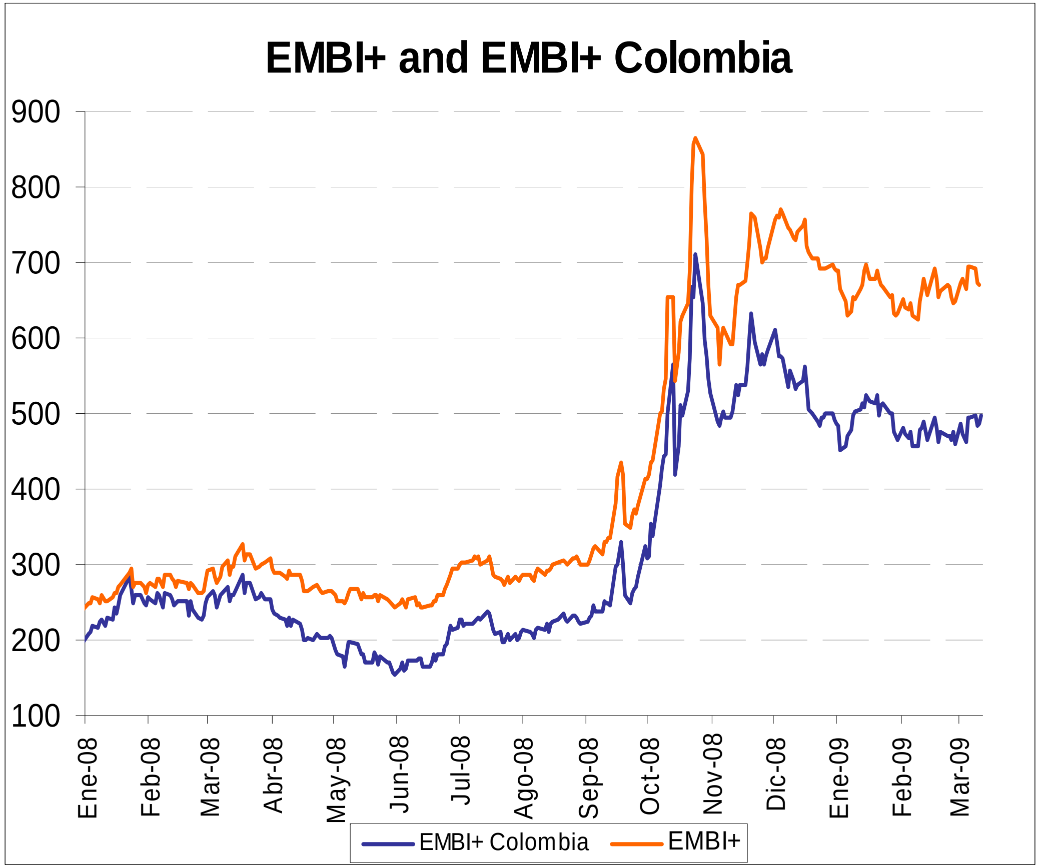
Nontraditional Exports to the US very weak already

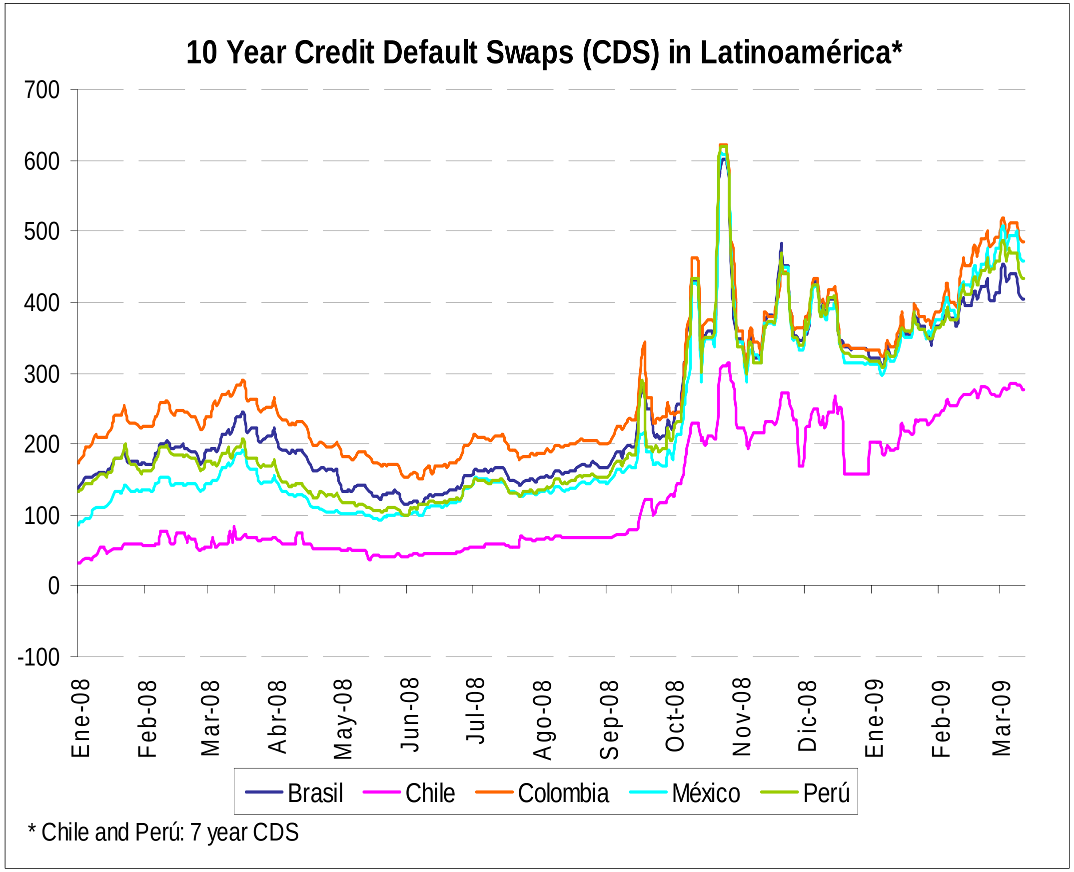
Ecuador imposed trade restrictions / Venezuela becoming more fragile

Drop of remittances from Colombian workers abroad

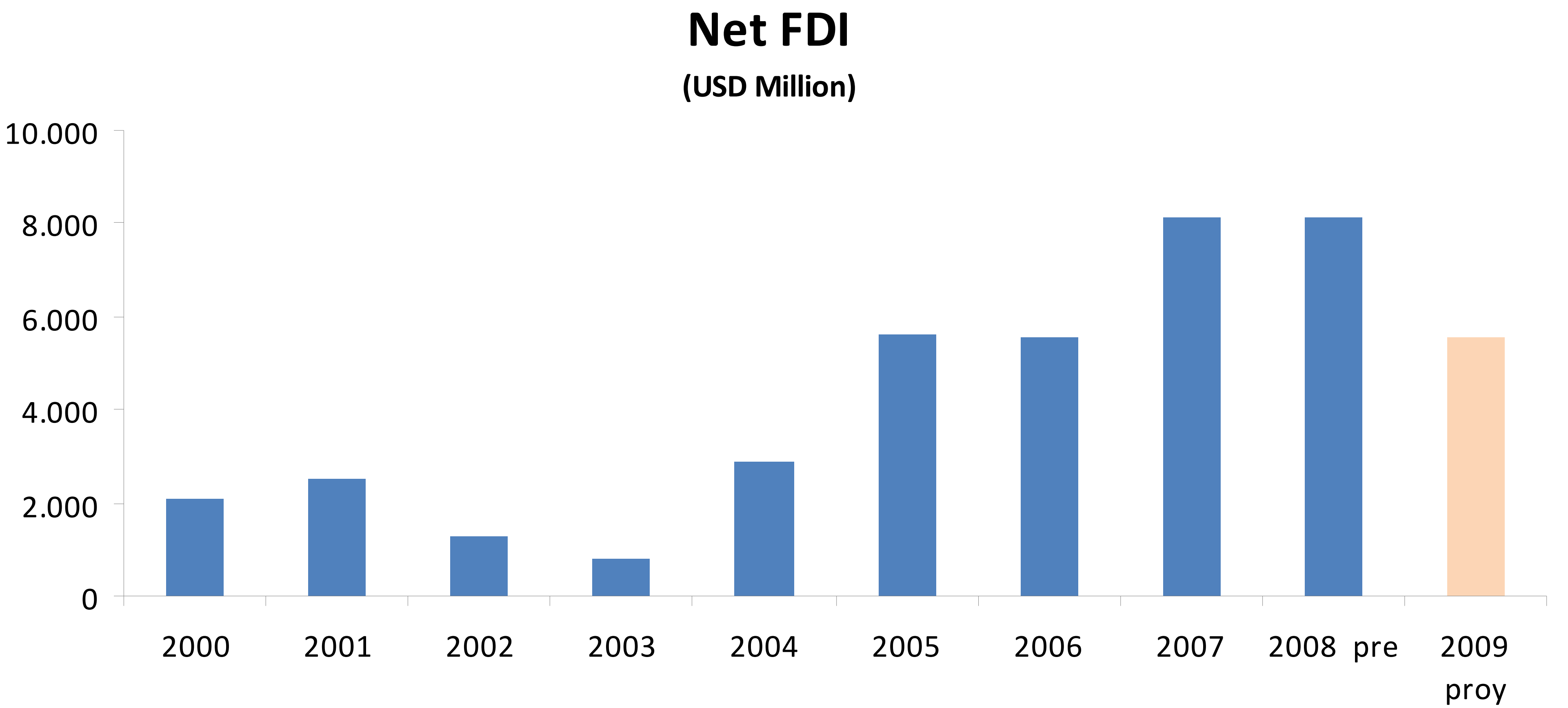


Increases in risk premia





FDI expected to fall



pre: Preliminar.
proy: BR BoP Forecast

Assessment:

- Strong shocks to the Current Account
- External financing dearer but available
- Worsening expectations at home (consumers and businesses) and abroad (outlook for trading partners, TOT)

Results:

- Negative shock to national income and expenditure on top of ongoing slowdown
- Real and nominal depreciation

But:

- Real depreciation (partially) compensates impacts on current account items
- No strong restriction on foreign financing
- No domestic credit crunch (credit annual growth rate still greater than GDP growth)

➔ No dramatic adjustment of Domestic Absorption

In sum:

Negative shock to income and expenditure

+

No abrupt adjustment of Domestic Absorption

+

Reversion of “supply” shocks

+

Pick up in public investment (regional electoral cycle)

=

Sharp decline in growth, but not a disaster like 1999 (Recession + Financial Crisis)

On Inflation:

- Reversion of “supply shocks”
- Widening of the output gap
- Expectations partially anchored

  (Reacted less than one for one to “supply shocks” and converged rapidly to target with reversion of headline inflation)
- Moderate wage adjustments

➔ Margin for inflation to fall

III. Monetary Policy Responses

Countercyclical so far:

- The inflation target was increased from 3.5%-4.5% in 2008 to 4.5%-5.5% in 2009

  Idea: Gradual reversion of inflation after "supply shock" ➔ Avoid large volatility of interest rates and output in the face of worsening external conditions

- Path of convergence to long run target was announced to ensure that the signal was one of a temporary adjustment in the target: 4% midpoint for 2010 and 3%±1% for 2011

Countercyclical so far:

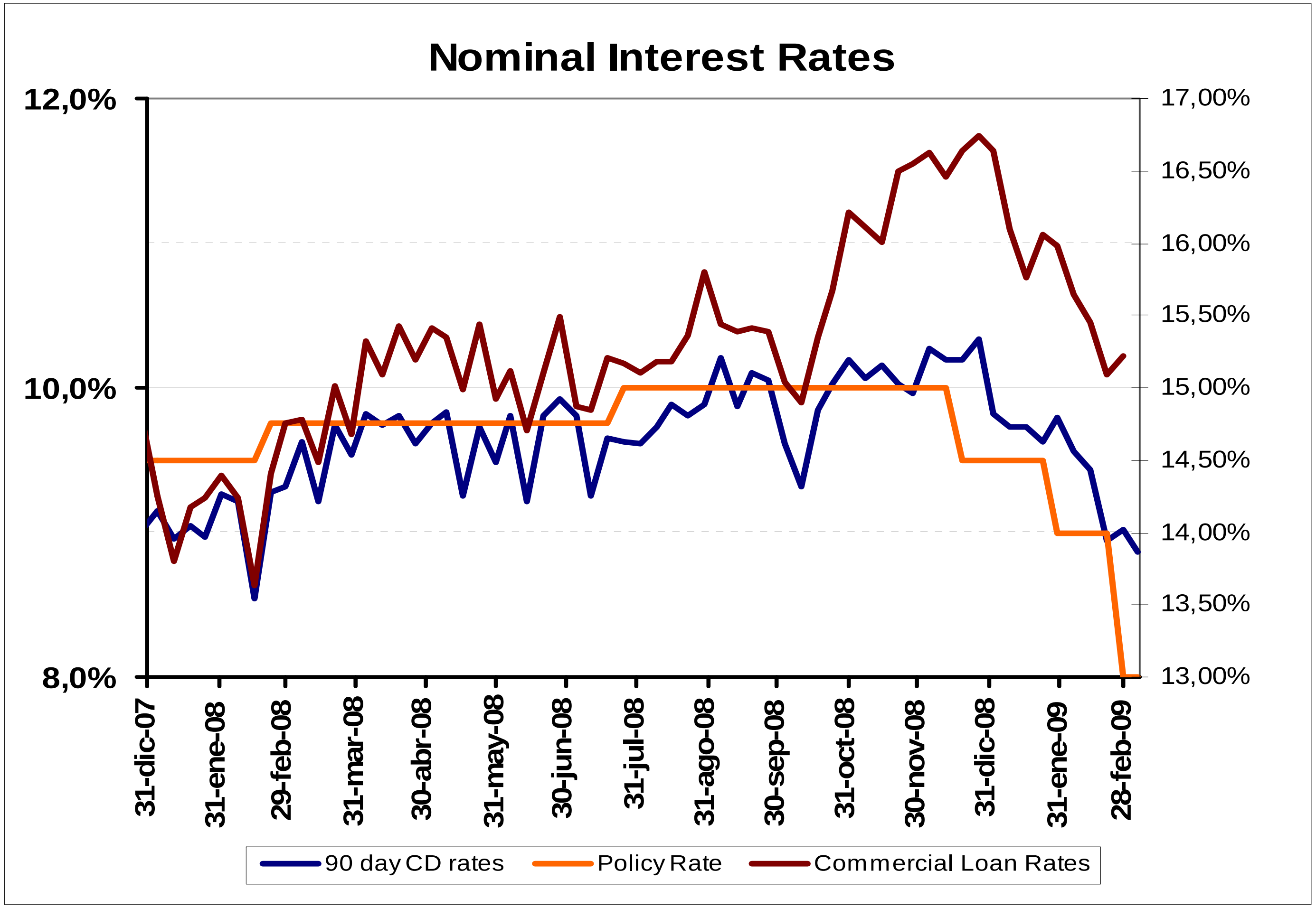
- Reserve requirements were reduced in November 2008 by 1% (on average) to provide liquidity in a moment of market nervousness and to start relaxing the stance of monetary policy
- Capital controls were partially lifted in October 2008: Depreciation + Slowdown in credit
- Policy rate has been decreased by 200 bps. since December 2008 (smaller drop in ex-post real interest rates)

This has been possible because:

- Policy was countercyclical in the expansion phase of the cycle:
  - ➔No large imbalances were allowed, so core inflation was contained
  - ➔Inflation expectations were partially anchored
- There have been no serious trouble so far with the depreciation:
  - ➔Relatively low pass-through + Sustained depreciation not expected
  - ➔The external shock caused a depreciation, but at the same time impacted negatively aggregate demand
  - ➔Low currency mismatches
  - ➔Moderate CA deficits before (no large imbalances were allowed)

The transmission mechanism seems to be working:

- Active credit channel
- Policy rates reduction has been transmitted to other rates (less clear for consumer loans)



Thanks to a still healthy financial system

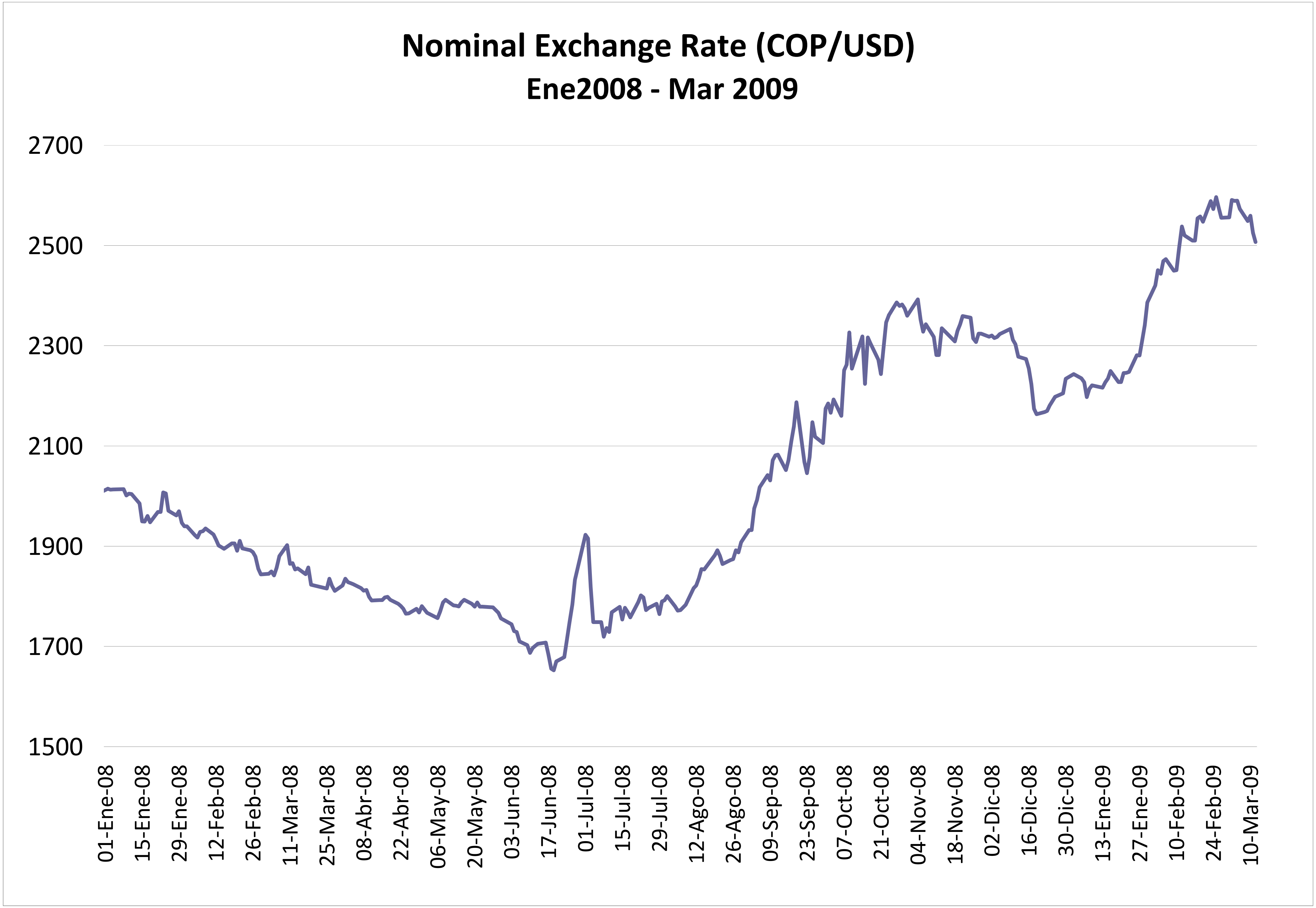
Risks:

- Size of the external shocks
- In particular, serious restriction of foreign financing:
  - Strong depreciation with imperfectly credible monetary policy
  - Still plenty of rigidities (e.g. labor markets) ➔ Abrupt CA deficit correction will cause a contraction of domestic absorption

IV. Exchange Rate Policy Responses

Floating Exchange Rate:

- International Reserves accumulation while the exchange rate appreciated in 2008:
  - Auction of put options (US$ 450 million, April-June 2008)
  - US$20 million daily direct purchases (auctions) (June-October 2008)
  - No discretionary intervention
  - No exchange rate target


Nominal Exchange Rate (COP/USD)
Ene2008 - Mar 2009
2700
2500
2300
2100
1900
1700
1500
01-Ene-08
15-Ene-08
29-Ene-08
12-Feb-08
26-Feb-08
11-Mar-08
25-Mar-08
08-Abr-08
22-Abr-08
06-May-08
20-May-08
03-Jun-08
17-Jun-08
01-Jul-08
15-Jul-08
29-Jul-08
12-Ago-08
26-Ago-08
09-Sep-08
23-Sep-08
07-Oct-08
21-Oct-08
04-Nov-08
18-Nov-08
02-Dic-08
16-Dic-08
30-Dic-08
13-Ene-09
27-Ene-09
10-Feb-09
24-Feb-09
10-Mar-09

FX Intervention by Banco de la República
(USD Million)

		Accumulation Put	Volatility Put	Volatility Call	Direct Auctions	Total
2008	January					0,00
	February		232,7			232,65
	March		38,0			38,00
	April	150,0	62,5			212,50
	May	150,0				150,00
	June	150,0	180,0		71,6	401,60
	July				444,3	444,30
	August				380,0	380,00
	September				440,0	440,00
	October			-234,55	79,9	-154,65
	November					0,00
	December		2,3			2,30
	Total	**450,0**	**515,5**	**-234,55**	**1415,8**	**2146,7**
2009	January			-175,0		-175,0
	February			-193,5		-193,5
	March					0,0
	Total	**0,0**	**0,0**	**-368,50**	**0,0**	**-368,5**

Floating Exchange Rate:

- Appreciation trend was reversed in June 2008 and depreciation accelerated in August 2008
- Reserve accumulation program based on daily interventions in the FX market was stopped in October 2008
- Capital controls were lifted in October 2008
- As the international context was rapidly changing, floating was considered convenient

➔ Intervention restricted to automatic auctions of “Volatility” call options

➔ Even this mechanism was altered to allow for greater flexibility (trigger was increased from 2% to 5% of exchange rate 20 day moving average) and was eventually suspended between July and October 2008

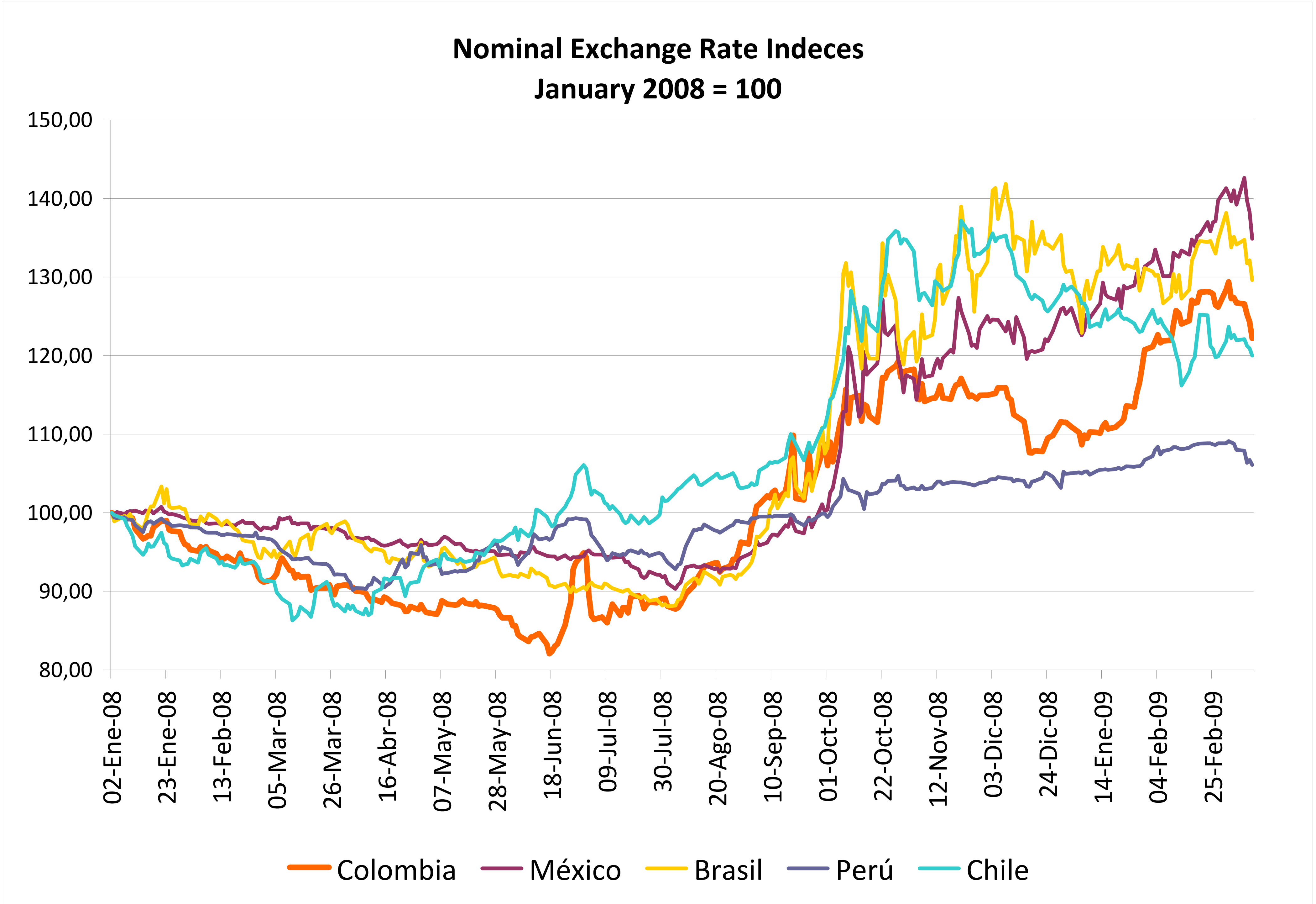
Floating Exchange Rate:

- The liquidity squeeze that hit other FX markets in the region did not happen in Colombia

  ➔Regulation inhibits domestic USD interbank loan market

  ➔Regulation limited FX counterparty risk

- The COP was relatively stable between November 2008 and January 2009, while other currencies in the region depreciated rapidly


Nominal Exchange Rate Indeces
January 2008 = 100
150,00
140,00
130,00
120,00
110,00
100,00
90,00
80,00
02-Ene-08
23-Ene-08
13-Feb-08
05-Mar-08
26-Mar-08
16-Abr-08
07-May-08
28-May-08
18-Jun-08
09-Jul-08
30-Jul-08
20-Ago-08
10-Sep-08
01-Oct-08
22-Oct-08
12-Nov-08
03-Dic-08
24-Dic-08
14-Ene-09
04-Feb-09
25-Feb-09
Colombia
México
Brasil
Perú
Chile

Floating Exchange Rate:

- However, the COP caught up abruptly with other currencies in February 2009

  ➔ Large forward purchases by off-shores and pension funds

- Again, only automatic “Volatility” call options have been used

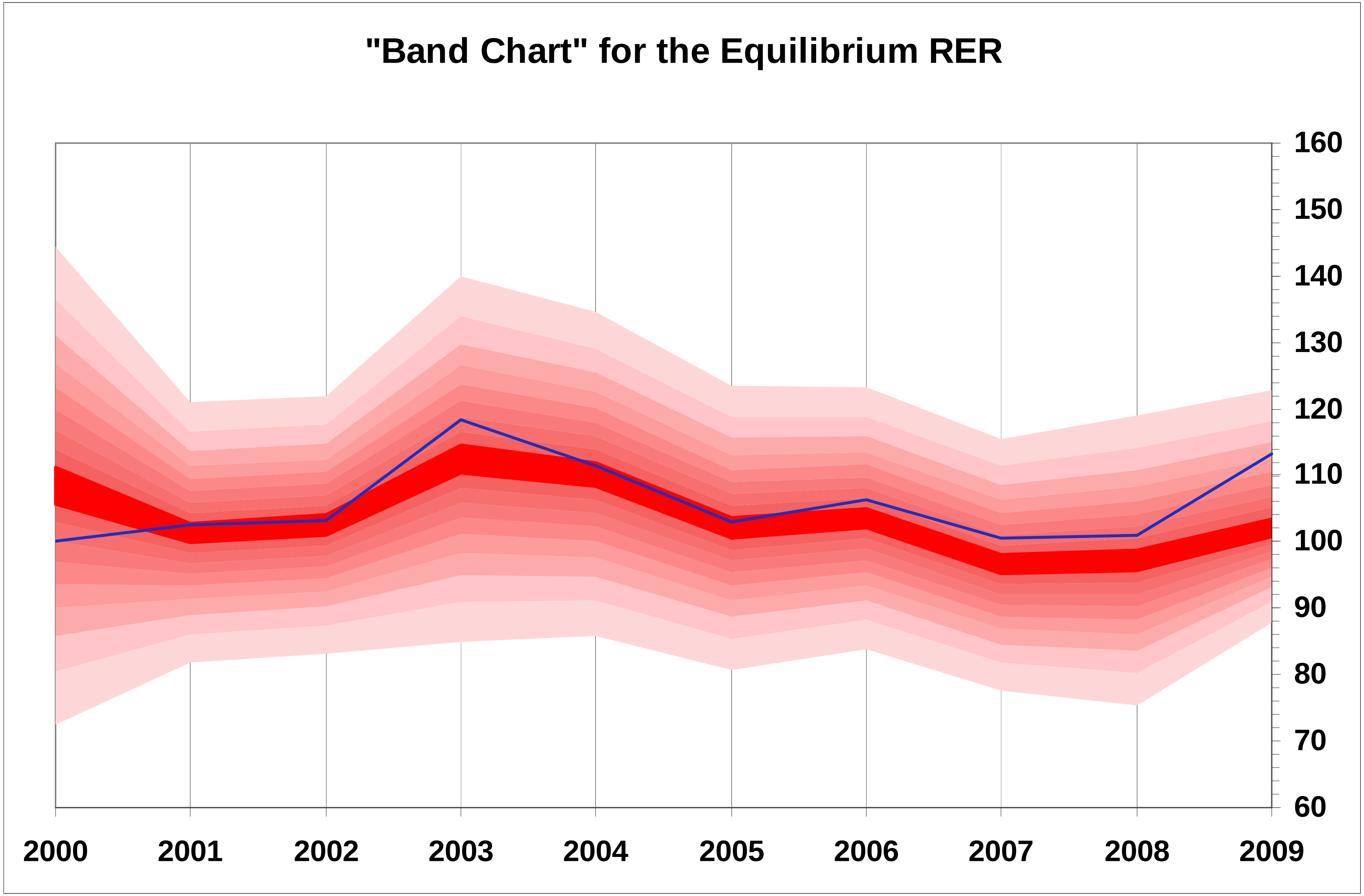
Floating Exchange Rate:

- Rationale:
  - "Healthy" effects of exchange rate flexibility (shock absorber, countercyclical monetary policy, currency risk)
  - Given inflation outlook and low currency mismatches, the only reason to intervene is to avoid disorderly behavior in currency and other asset markets ➔ Automatic "Volatility" call options instrument useful so far
  - No clear evidence of persistent exchange rate misalignment
  - Desirable to avoid contradictory signals of FX policy and monetary policy

  ➔ Do not want to invite speculative behavior against the central bank

  \+

  Use of international reserves deemed more valuable under worse external or FX market conditions



Band chart built on the basis of 4 “equilibrium” RER models: PPP, SVEC, “Smoothing CA Deficit” and a Balassa-Samuelson based model. Weight depends on Variability of equilibrium RER estimate. Probability distribution depends on the weighted standard errors of the models

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