



# **Global Rise in Food Prices and Monetary Policy Response: Peru 2008**

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**Central Reserve Bank of Peru**

**The Global Rise in Food Prices and the U.S. Slowdown:  
Issues and Challenges in Monetary Policy  
June 2008**



BANCO CENTRAL DE RESERVA DEL PERÚ



*“If it were in our power to regulate completely the price system of the future, the ideal position...would undoubtedly be one in which, without interfering with the inevitable variations in the relative prices of commodities, the general average level of money prices....would be perfectly invariable and stable.*

*And why should not such regulations lie within the scope of practical politics?.....Attempts by means of tariffs, state subsidies, export bounties, and the like, to effect a partial modification of the natural order of [relative prices] almost inevitably involve some loss of utility to the community. Such attempts are so far regarded as opposed to all reason. Absolute prices on the other hand –money prices- are a matter in the last analysis of pure convention, depending on the choice of a standard of price which it lies within our own power to make”*

**Knut Wicksell, “Interest and Prices”, 1898, page 4, cuoted by Woodford (2003)**



# Outline

- a. Design of Monetary Policy in Peru
- b. Recent Evolution of Prices
- c. How is the Central Bank of Peru responding?

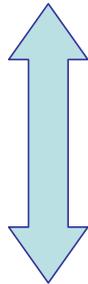


# Peru: Monetary Policy Framework

**INFLATION  
TARGETING**



- Target: 2% +/- 1
- Operative target: Policy rate
- Communication
- Forward-Looking Policy



**CONTROL OF FINANCIAL  
DOLLARIZATION RISKS:  
Liquidity and Solvency  
Risks**



- High Reserve Requirements on foreign currency liabilities
- Accumulation of NIR of the CB
- CB FX intervention to reduce excessive exchange rate volatility
- Prudential provisions for foreign exchange risk
- Development of the financial and capital markets

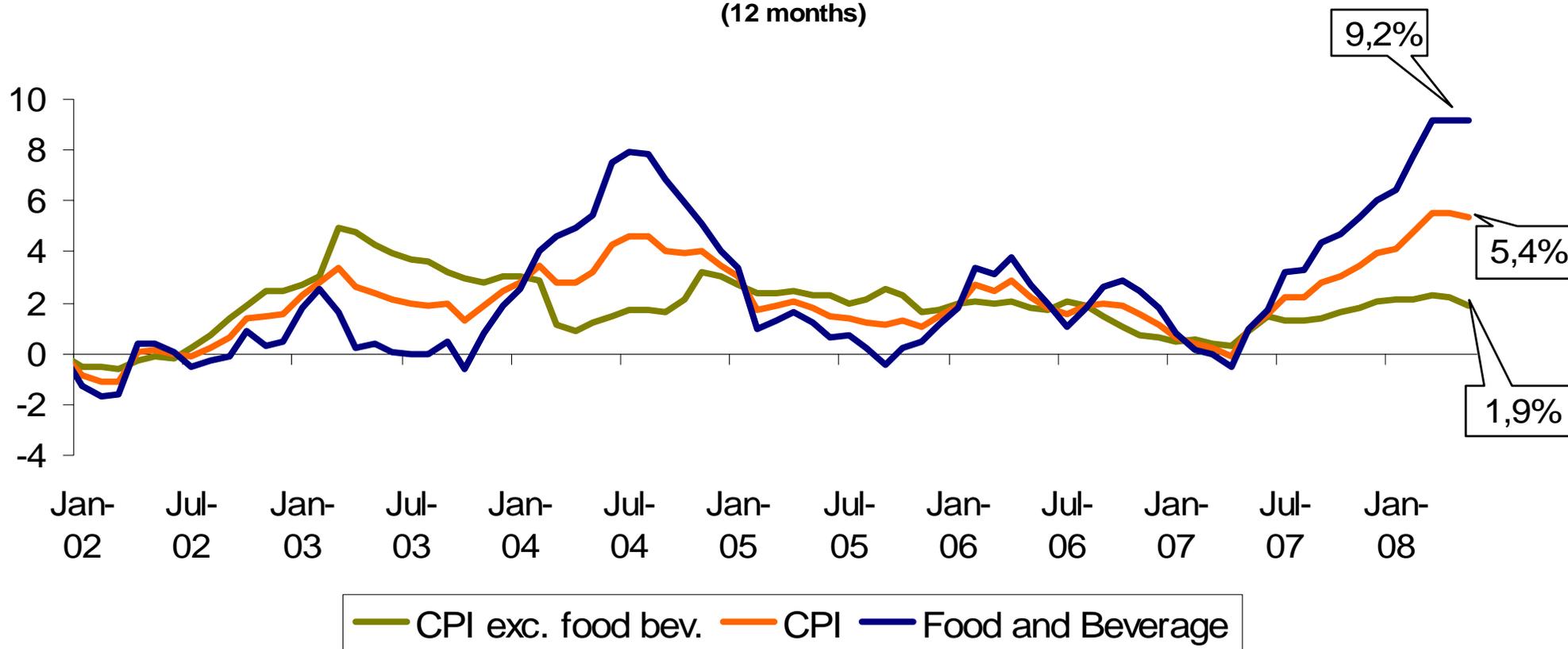


# Recent Developments in Inflation: Main Drivers

- The recent global shock in food prices is among the most severe of the last decades.
- This has had a significant impact on Peru's inflation, as the share of food items in the Peruvian CPI is among the highest in the world
- Rise in inflation expectations in a context of strong economic growth.
- Nevertheless, the rise in prices has been concentrated in food items.



**TOTAL CPI, FOOD AND BEVERAGES, AND CPI EXCLUDING FOOD AND BEVERAGES  
(12 months)**



January 2002- May 2008	Average	Standard Deviation
Food and Beverages	3,2	2,7
CPI excluding Food and Beverages	2,1	1,1

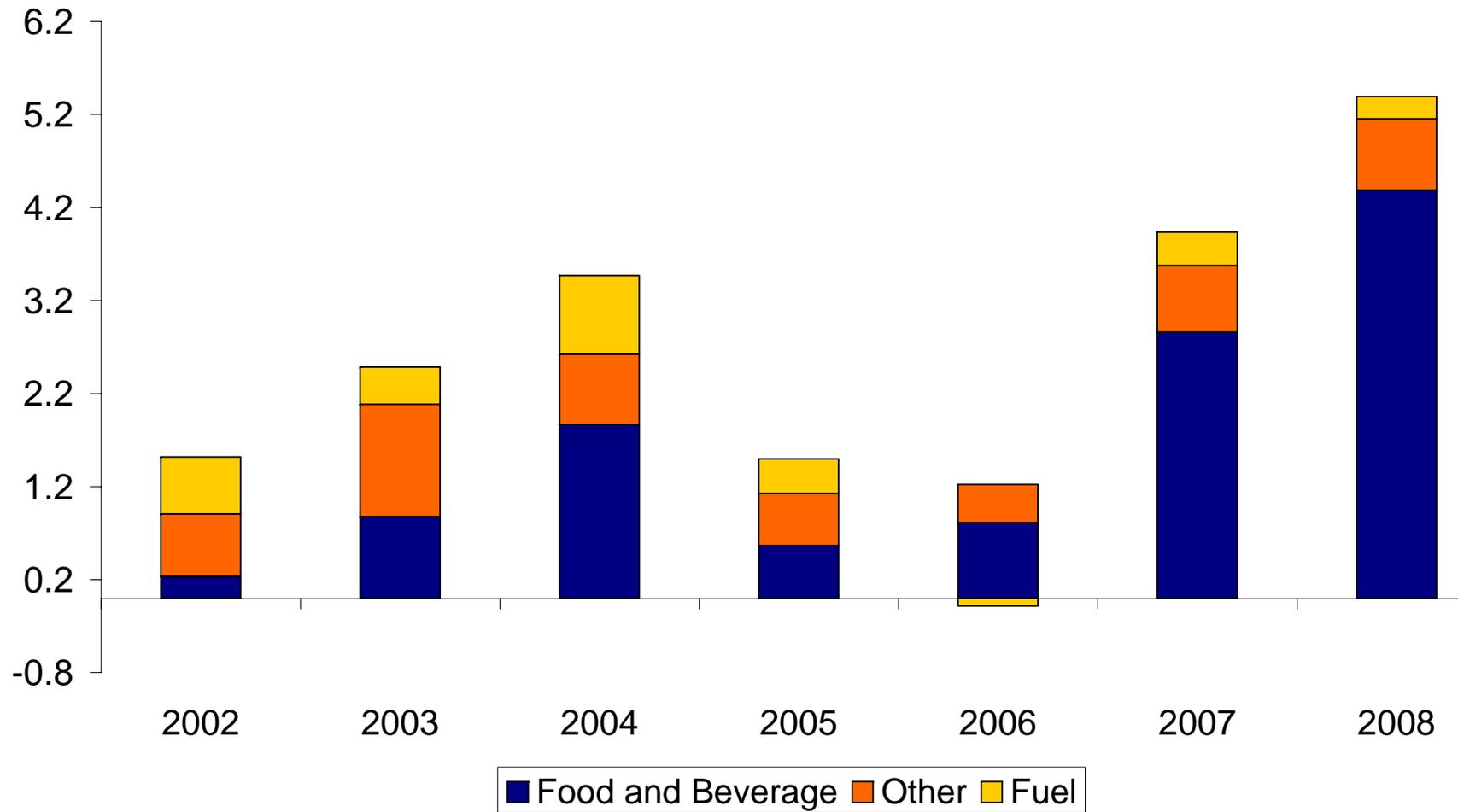
← **High  
volatility**

Non Food – Energy Items	
<b>Total:</b>	<b>1,85%</b>
Goods	1,86%
Public services	2,31%
Transport	1,12%
Other Services	2,21%

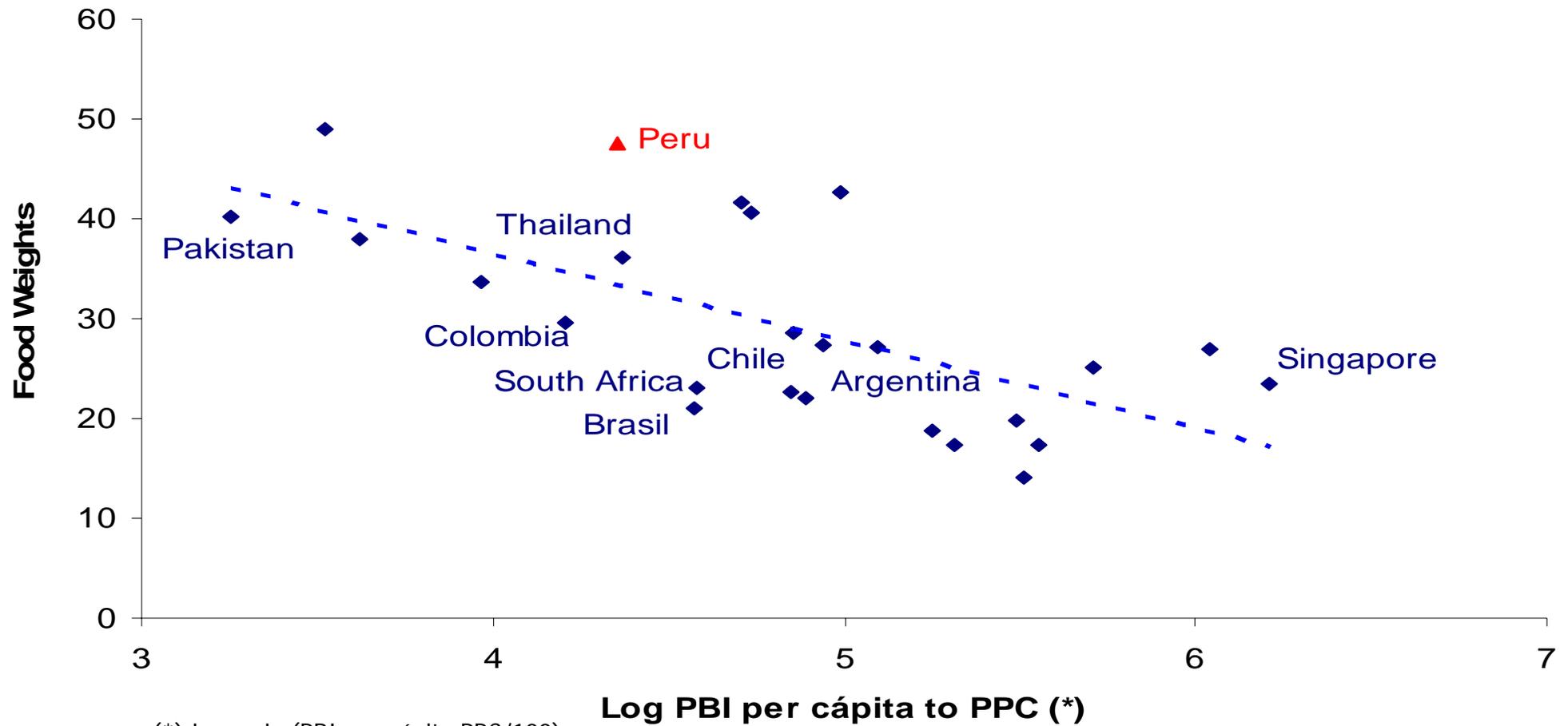


# The recent evolution of inflation has been shaped mainly by food items

## CONTRIBUTIONS TO THE CONSUMER PRICE INDEX (Percent)



# GDP per capita and food share in total CPI



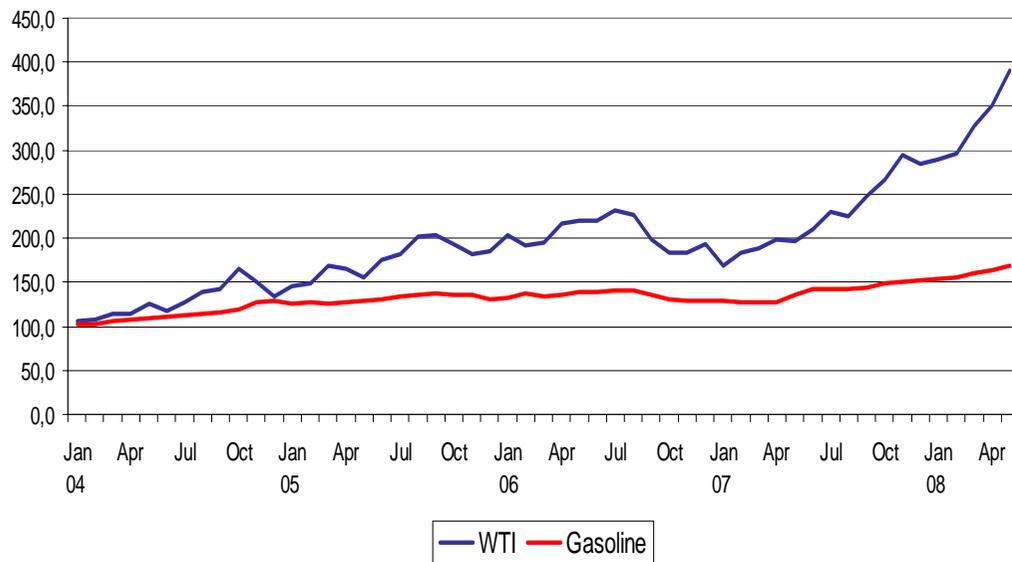
(\*) Log = Ln(PBI per cápita PPC/100)



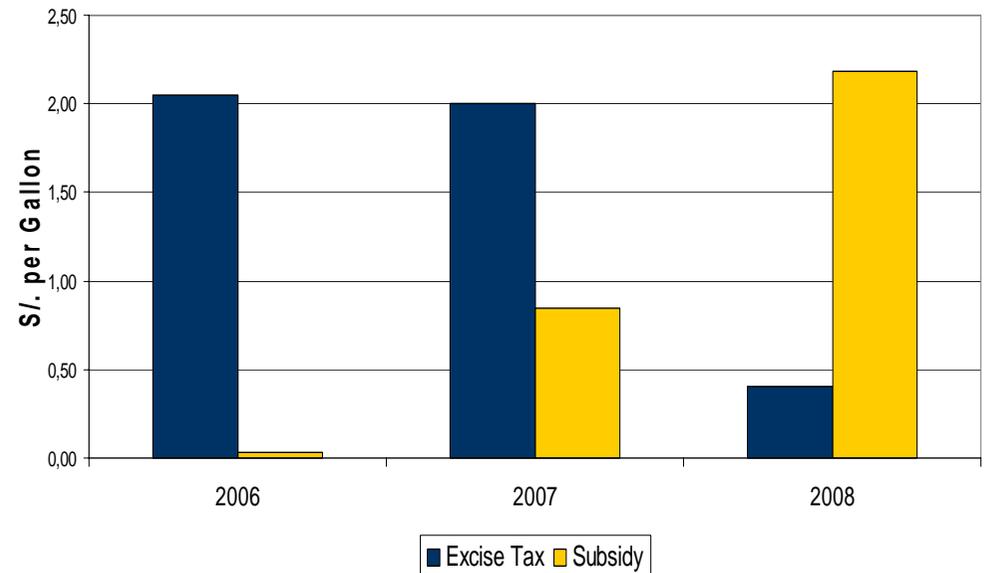
# Fuel Prices

The evolution of domestic fuel prices has been bounded by fiscal policy through the Fuel Stabilization Fund and an active tax policy.

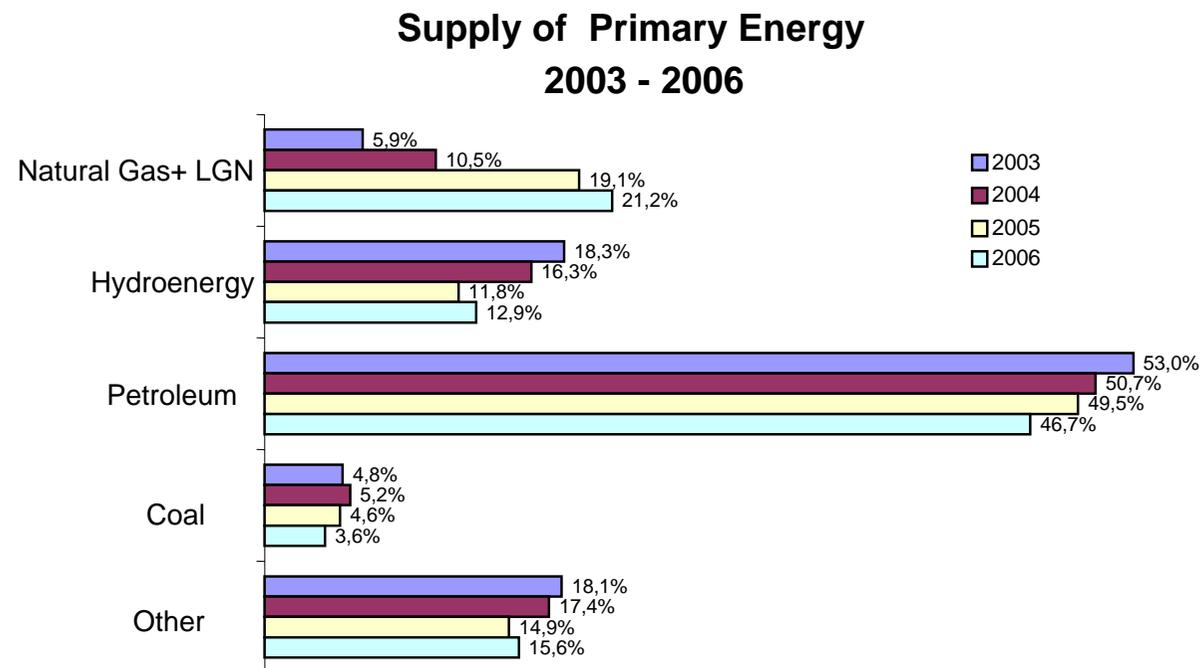
Crude Oil and Gasoline Prices  
(Index December 2003=100)



Excise Tax and Subsidy on Gasoline  
(end of period)



# The shift in the energy matrix (to natural gas) is enhancing productivity and reducing the impact on electricity prices

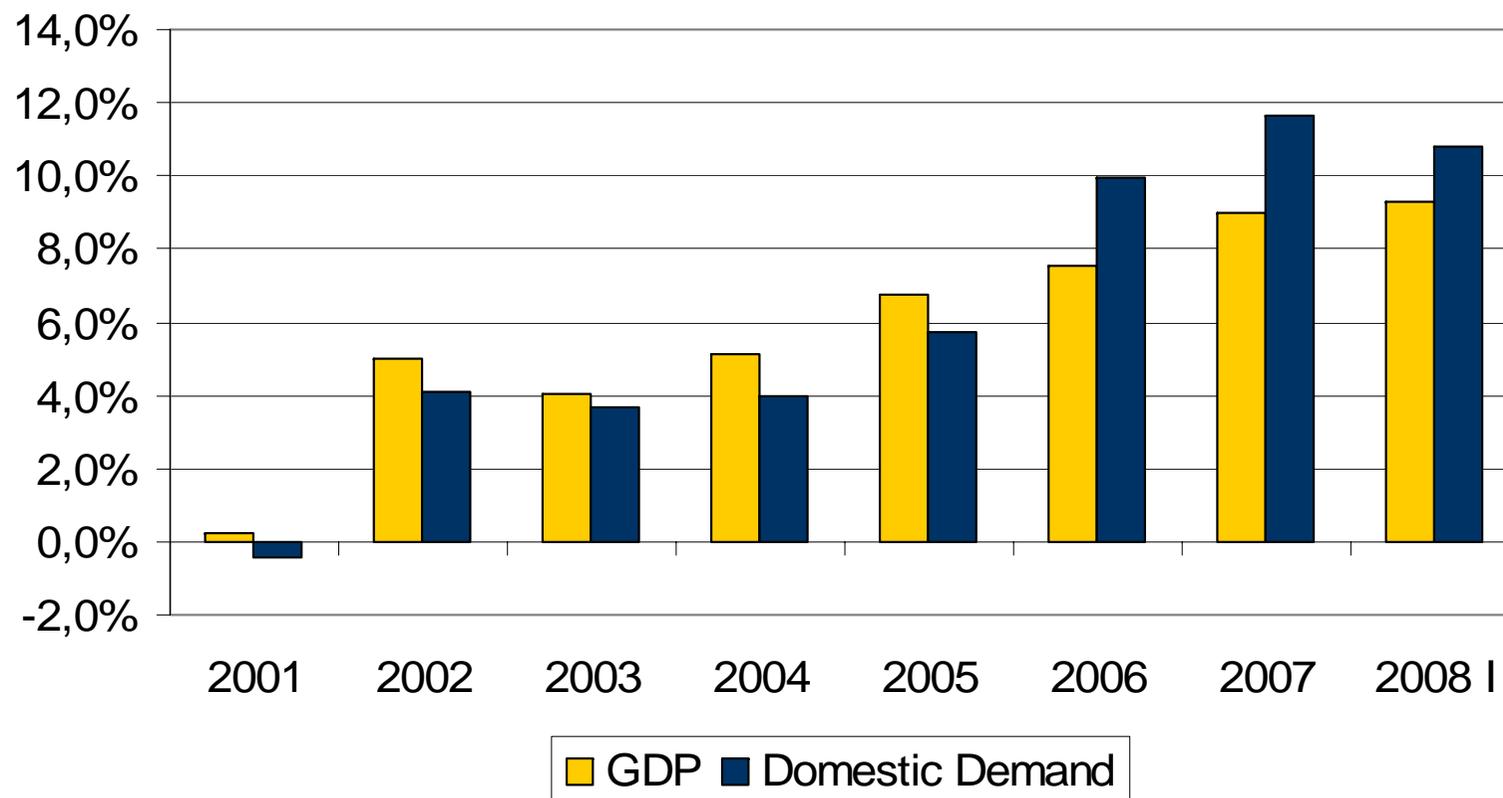


Source: Ministry of Energy and Mining



# The supply shock comes together with strong economic growth...

**GDP AND DOMESTIC DEMAND**  
(Annual growth rates)



Productivity has been increasing. Thus, GDP potential growth estimates are in the range of 7,0-7,5% for the next years

**PRODUCTIVITY GROWTH OF CORPORATIONS  
2007/2006\***

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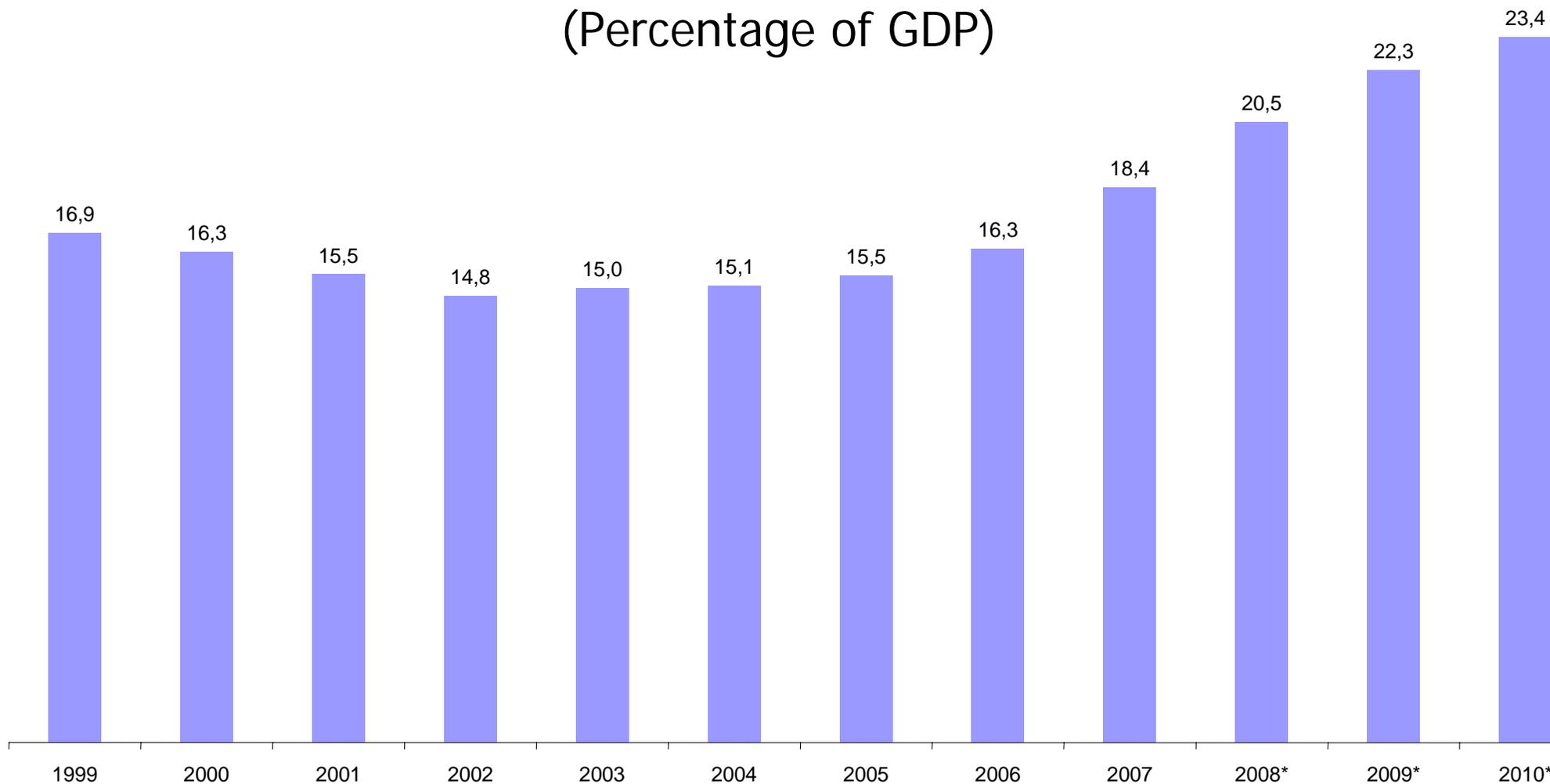
	<b>Var. %</b>
Agriculture and Livestock	3,4
Fishing	2,0
Mining and Fuel	1,7
Manufacturing	4,6
Electricity and Water	3,7
Construction	4,6
Commerce	4,2
Other Services	4,0
<b>Total</b>	<b>4,0</b>

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# Private investment has been increasing

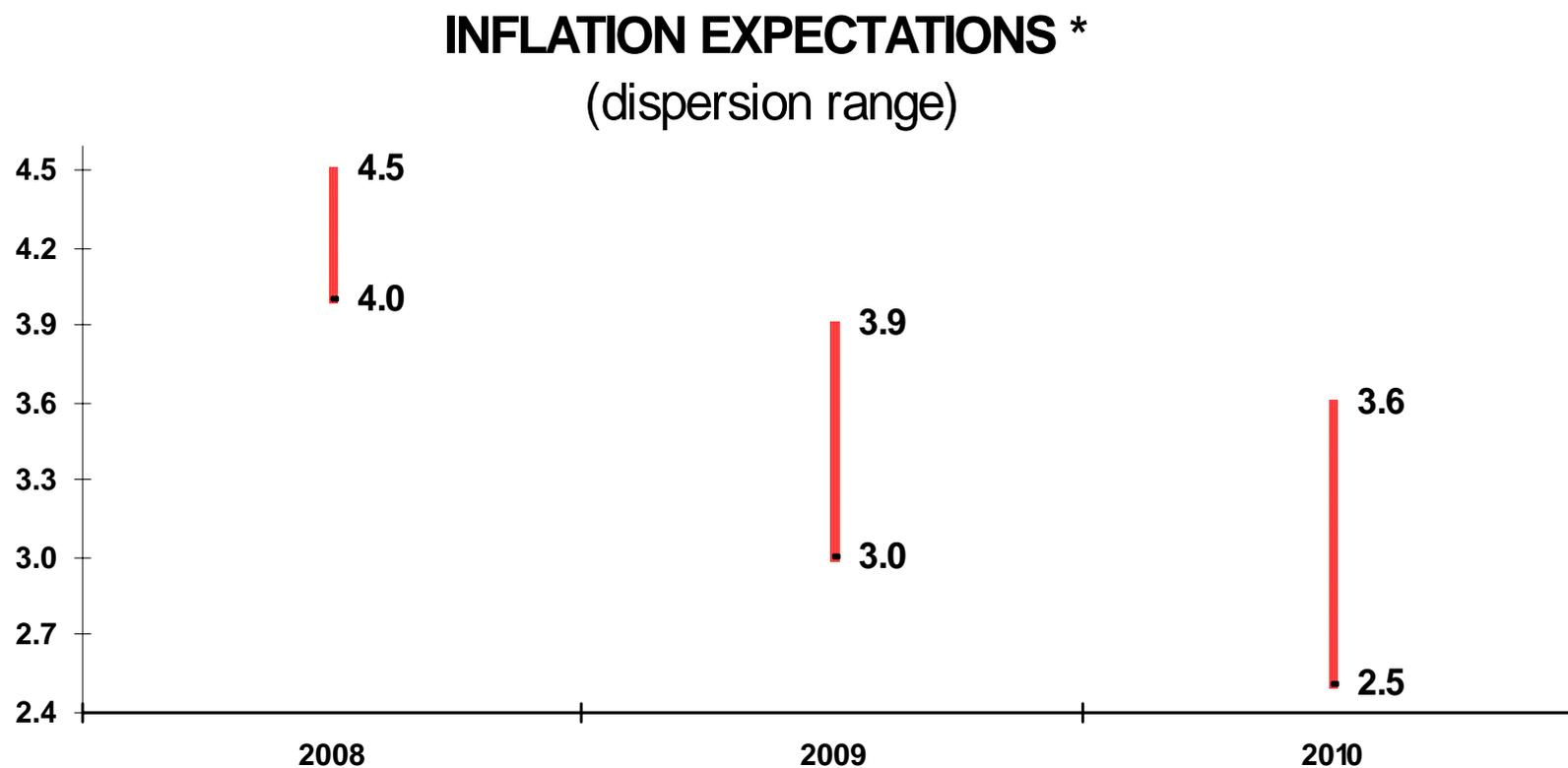
## Private Investment 1999-2010 (Percentage of GDP)



\* Forecast



# Inflation expectations were affected in the short run



\*Survey of Macroeconomic Expectations: May 2008



# Should Central Banks Respond?

- Not to pure supply shocks as long as inflation expectations remain within the target range and there are no second-round effects.

However:

- Possible increase in inflation expectations, if:
  - Significant size of the shock
  - Uncertainty about the duration of the shock
- Could feed second-round effects:
  - Cost effects
  - Expansionary economic cycles
- Uncertainty about the evolution of the international economy. Decoupling or recoupling?
-  The response must be preemptive, to avoid “contamination” of the other price items.



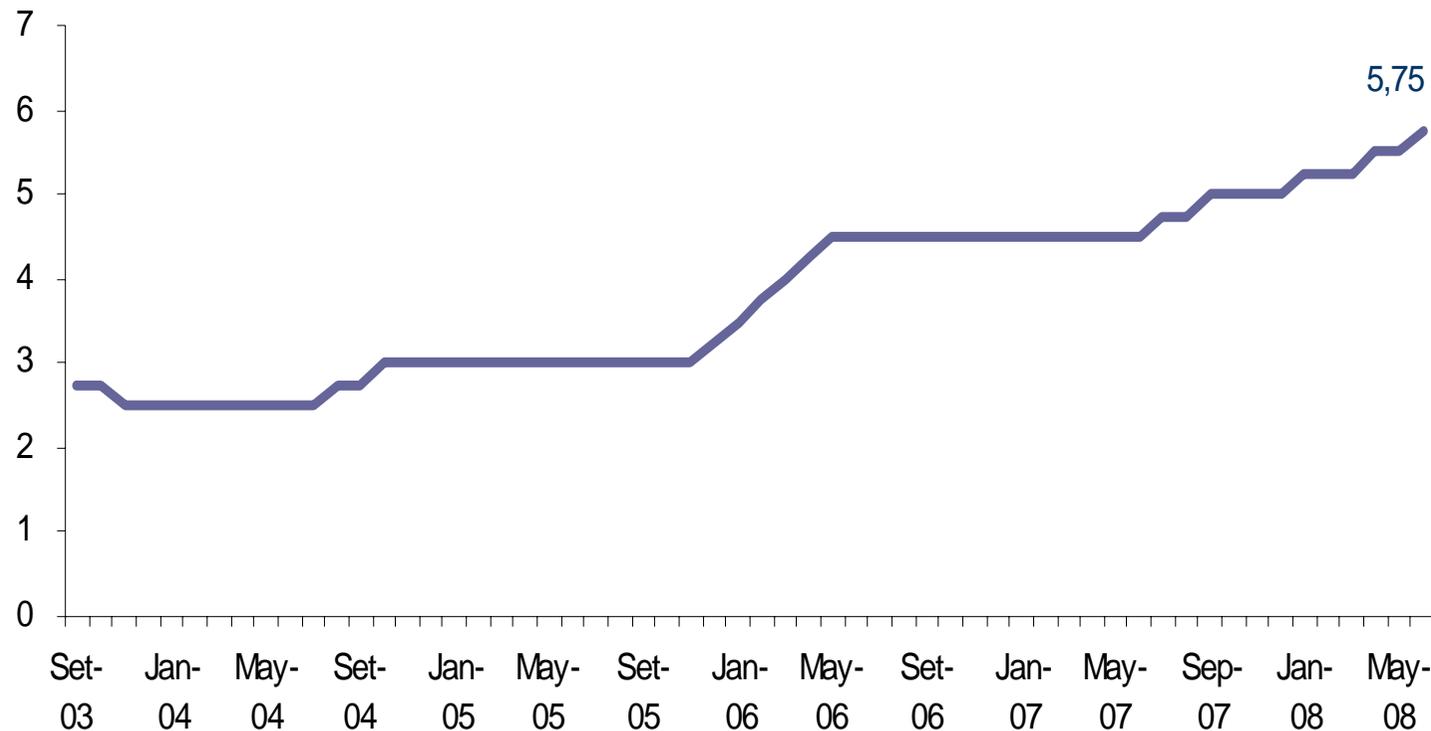
# Guiding Expectations: Informative Note in April 2007

- The Board of the Central Bank (BCRP) decided to maintain the reference interest rate for the interbank market at 4.50 percent. However, the Board expressed concerns about the possible inflationary impact that domestic demand growth exceeding the rates forecast by the Bank might have in a 12-18-month horizon. Therefore, should this trend persist, the Board would be inclined to withdraw monetary stimulus on a timely basis.



# In response, the Central Bank has increased its interest rate five times...

CENTRAL BANK POLICY RATE  
(Percent)



# The increase in the Policy Rate has been complemented by higher reserve requirements:

## SUMMARY OF RECENT MEASURES OF MONETARY POLICY (Interest rate in percent)

Policy Actions	Dec. 07	Jan. 08	Feb. 08	Mar. 08	Apr. 08	May. 08
Policy rate	5,00	5,25	5,25	5,25	5,50	5,50
Minimum Legal Reserves in S/. y US\$	6,0	6,0	7,0	7,0	8,0	8,5
Minimum deposit at Central Bank S/. - US\$ <sup>1/</sup>	1,0	1,0	2,0	2,0	2,0	2,0
Marginal Reserve rate in S/. <sup>2/</sup>	6,0	6,0	15,0	15,0	20,0	25,0
Reserve remuneration en S/. <sup>3/</sup>	n.a.	n.a.	3,50	3,50	3,75	3,75
Marginal Reserve rate in US\$	30,0	30,0	40,0	40,0	40,0	45,0

<sup>1/</sup> From february, additional reserves required should be kept at the Central bank

<sup>2/</sup> Up to February 2008 w as the same as the Minimun Legal

<sup>3/</sup> n.a. = not apply



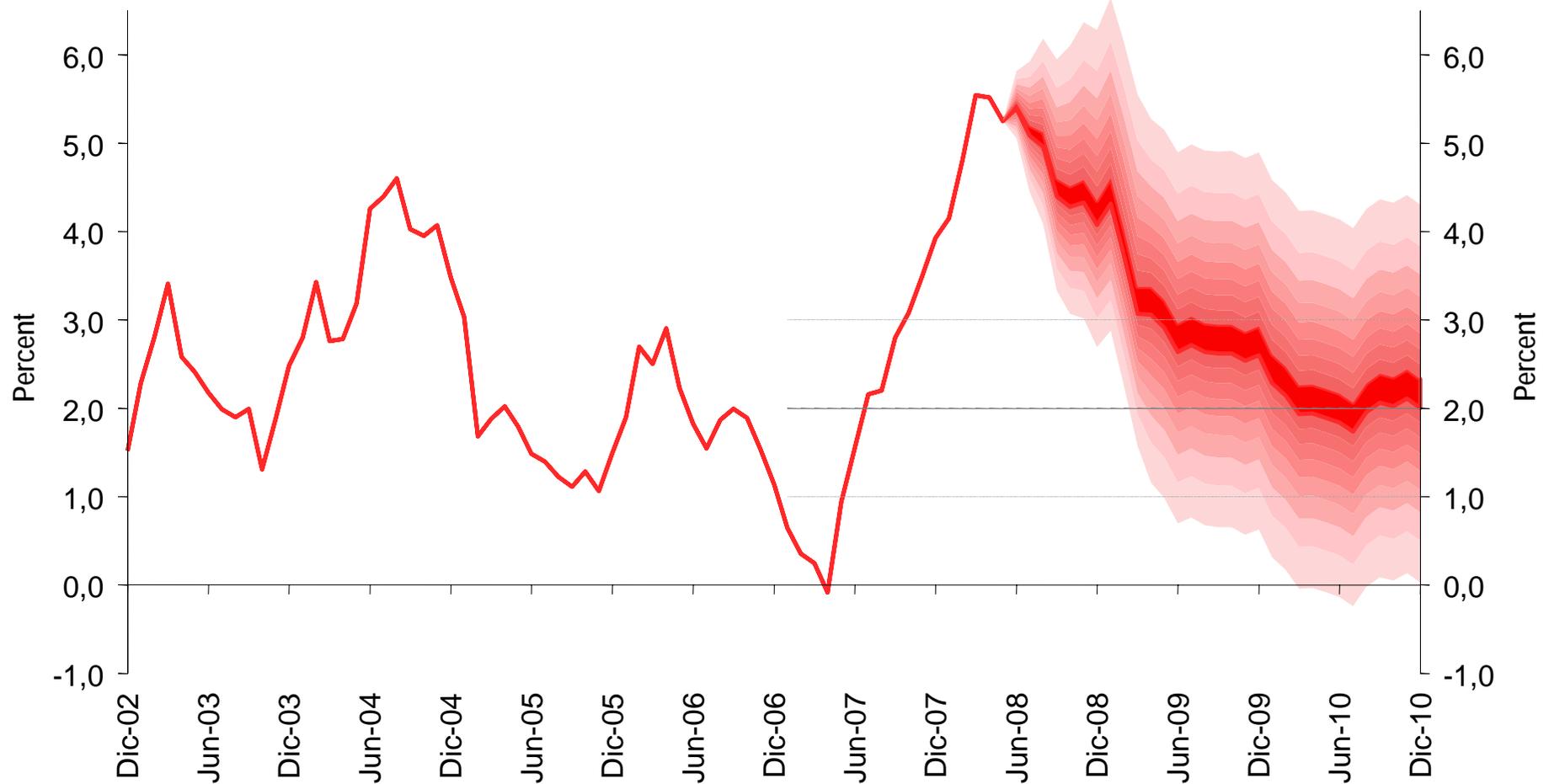
# Monetary Policy Response: Informative Note June 2008

1. The Board of the Central Reserve Bank of Peru decided to raise the monetary policy reference interest rate from 5.5 to 5.75 percent. Together with a series of monetary adjustments implemented this year, this increase in the reference interest rate is aimed at preventing the rise in the international price of food and fuels from translating into higher inflation expectations in a context of high public and private expenditure growth.
2. Inflation is thus expected to gradually return to the target range in a context of high and sustained economic growth.
3. The Board will continue to oversee the evolution of inflation and its determinants, particularly indicators of pressures on demand and inflation expectations.



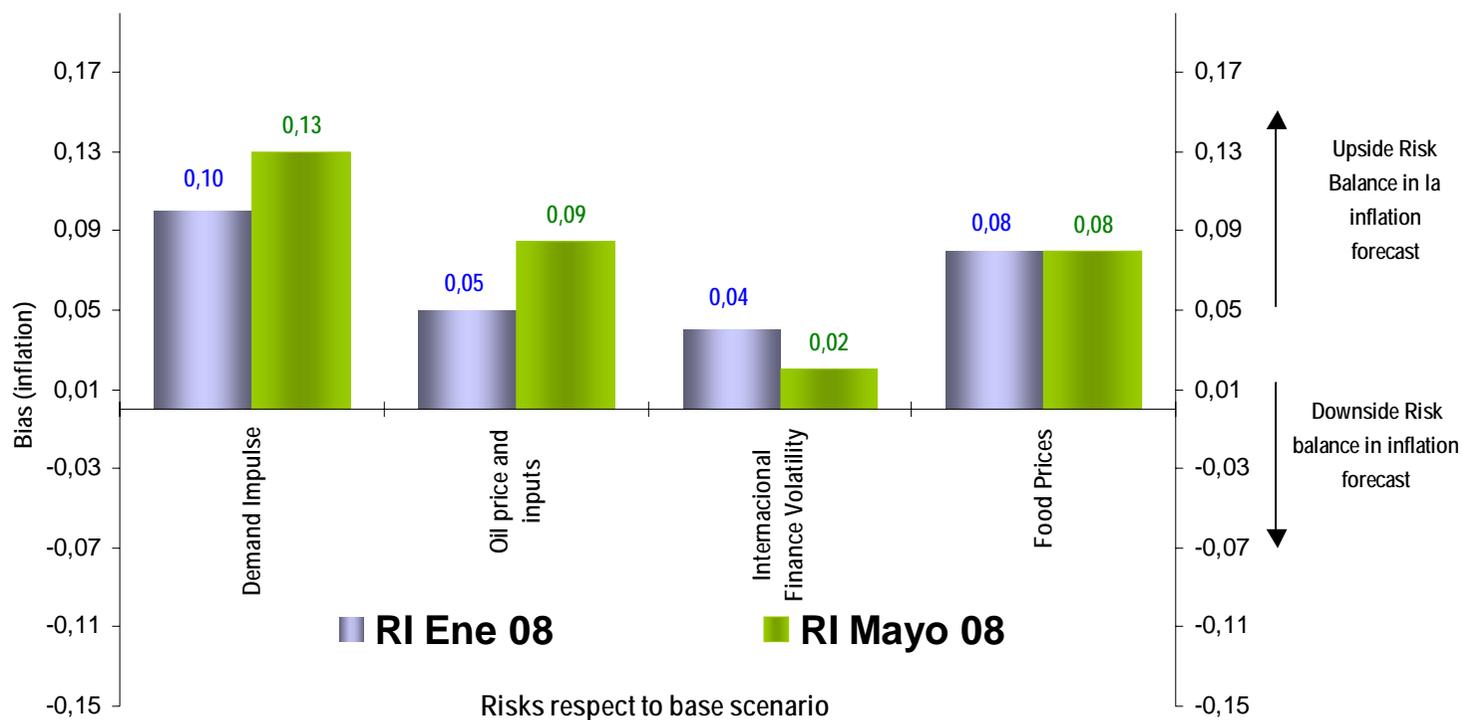
# Inflation Forecast: Fan Chart

Inflation Forecast Density: 2008-2009  
(12-month variation)



# BALANCE OF RISKS IN THE INFLATION FORECAST<sup>1/</sup>

(Percent deviation of the inflation rate two years ahead)



<sup>1/</sup> Shows the change in the perception of risk respect to IR January 08.



# As in other episodes, inflation is expected to return to the band in the next months

## Inflation Deviations from target in the World

Deviations from the Inflation Target Range (%)  
(2004/05-2006/04)

	Target=CPI	Above	Below	Total	Var. Bps. Policy rate
South Africa	Total	0	0	0	-100
Czech Rep.	Total	0	33	33	0
Colombia	Total	8	0	8	-50
Israel	Total	13	54	67	115
Chile	Total	17	25	42	325
Brasil	Total	25	0	25	-25
<b>Peru</b>	<b>Total</b>	<b>25</b>	<b>29</b>	<b>54</b>	<b>175</b>
Slovenia	Total	25	50	75	50
Hungary	Total	33	8	42	-600
Poland	Total	38	33	71	-125
Islandia	Total	46	0	46	504
Mexico	Total	63	0	63	-250
Rumania	Total	78	0	78	-1275
Indonesia	Total	80	0	80	0
Philipines	Total	96	0	96	75
<b>Average</b>		<b>33</b>	<b>16</b>	<b>49</b>	
Turkey	Total	38	63	100	-875

Deviations from the Inflation Target Range (%)  
(2006/05-2008/04)

	Target=CPI	Above	Below	Total	Var. Bps. Policy rate
Brasil	Total	0	0	0	-400
Czech Rep	Total	25	25	50	175
Poland	Total	25	25	50	175
<b>Peru</b>	<b>Total</b>	<b>29</b>	<b>25</b>	<b>54</b>	<b>100</b>
Israel	Total	29	42	71	-200
Chile	Total	38	0	38	125
Indonesia	Total	38	13	50	-475
Philipines	Total	38	50	88	-250
Mexico	Total	42	0	42	50
Rumania	Total	50	0	50	50
South Africa	Total	54	0	54	450
Colombia	Total	67	4	71	350
Slovenia	Total	71	n.a.	71	75
Hungary	Total	83	0	83	225
Islandia	Total	92	0	92	530
<b>Average</b>		<b>45</b>	<b>12</b>	<b>58</b>	
Turkey	Total	100	0	100	200

**Memo:** The average not includes Turkey (target point).





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