



Inflation Targeting in Romania: Experience and Future Developments

**Cristian Popa
Deputy Governor
National Bank of Romania**

Prague, April 2008





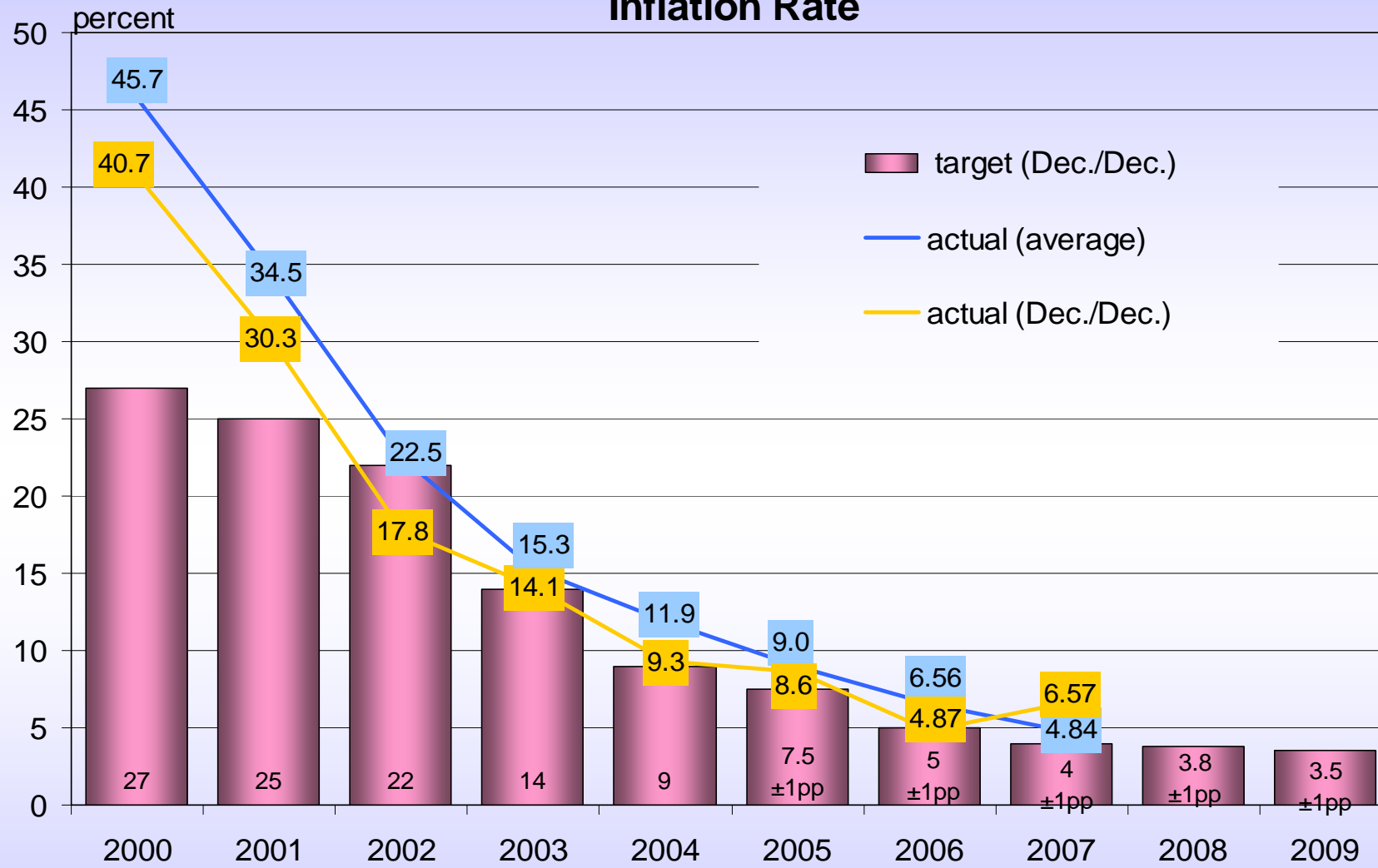
Initial Conditions

- In 1997-2004, Romania followed an eclectic monetary base targeting framework, with increased reliance on interest rates + relatively frequent interventions within a managed float regime
- High inflation rates, low financial depth/monetization, recourse to borrowing in fx, fiscal dominance complicated choice of regime switch
- IT one of two choices envisaged in 2000 MT Economic Strategy (underpinning EU accession effort) – other was a more predictable exchange rate arrangement, seen risky in context of larger future capital inflows, likely shift in eq. real exchange rate
- IT seen as constrained discretion, already successfully applied in EMs w. similar conditions (also in ECE), more likely to be robust to a variety of shocks (incl. related to rapid catching-up, liberalization in context of upcoming accession), facilitate progress towards euro adoption; possibly more favorable in terms of sacrifice ratio
- IT viewed as least costly, most sustainable available means of securing lasting disinflation and conducing to eventual price stability: (i) status quo not functional (breakdown of multiplier stability, eclecticism leading to inconsistency); (ii) exchange rate anchor risky in context of rapid credit growth, fast capital acct. liberalization w. high real rates, both on background of convergence-induced real appreciation trend





Inflation Rate



(Mar. 2007-Feb. 2008)/(Mar. 2006-Feb. 2007): 5.5%

February 2008 (yoy): 7.97%

Source: National Institute of Statistics, National Bank of Romania





Specifications & Preparatory Work

- IT framework defined in terms of:
 - ✓ targeting 12M headline CPI (transparency/accountability, effectiveness in influencing expectations), despite limited capacity of monetary policy to influence administered & volatile prices
 - ✓ defining point central target w. narrow symmetrical variation band (± 1 percentage points), again for effective anchoring of expectations
 - ✓ two-year overlapping targeting horizon
 - ✓ gradually declining annual targets, in line w. sustainability of disinflation (given substantial B-S effect estimates, limited policy toolbox, improving but still constrained effectiveness of standard policy instrument, gradual credibility gains)
 - ✓ explanatory clauses, not used for cop-outs
 - ✓ avoiding target revisions at all costs
 - ✓ target set by CB, announced jointly with government
- Valuable TA from IMF/CNB, 2003-4 and after: model specification/calibration (full Board participation in final stages), further extensions, two quarterly cycles of dry-run practice before going live (incl. fully fledged writing of QIR + attendant drafting of press releases, etc.)
- Official introduction of IT in Romania: August 2005





Initial Prerequisites & Challenges in Implementing Inflation Targeting in Romania

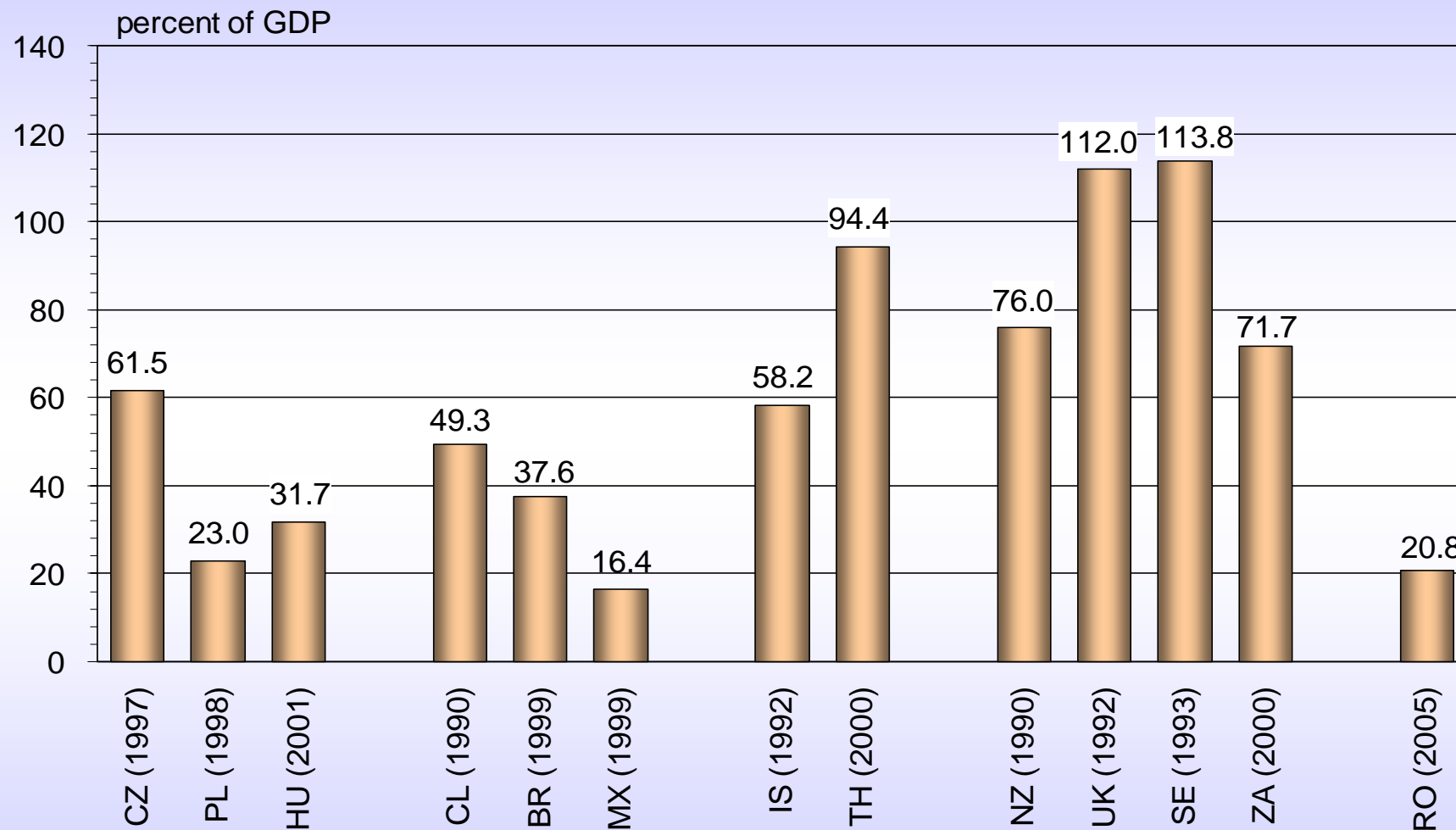
- Inflation at starting point already in single digits
- Fiscal dominance no longer a threat
- Increased effectiveness of interest rate instrument
- Soundness & stability of financial sector (w. low depth, however)
- Consolidation of CB full independence, transposition of EU acquis
- Increased forecasting capacity of CB
- Disinflation gains since 1999 improved credibility of monetary authority

- Liberalisation of capital flows with large impact on forex market in the context of significant interest rate differential & perspective of more appreciation (Tošovský dilemma)
- Significant level of currency substitution, net debtor position of the central bank hinder transmission of policy signals
- Small open economy magnifies importance & visibility of exchange rate
- Persistently high current account deficit





Credit to Non-government*



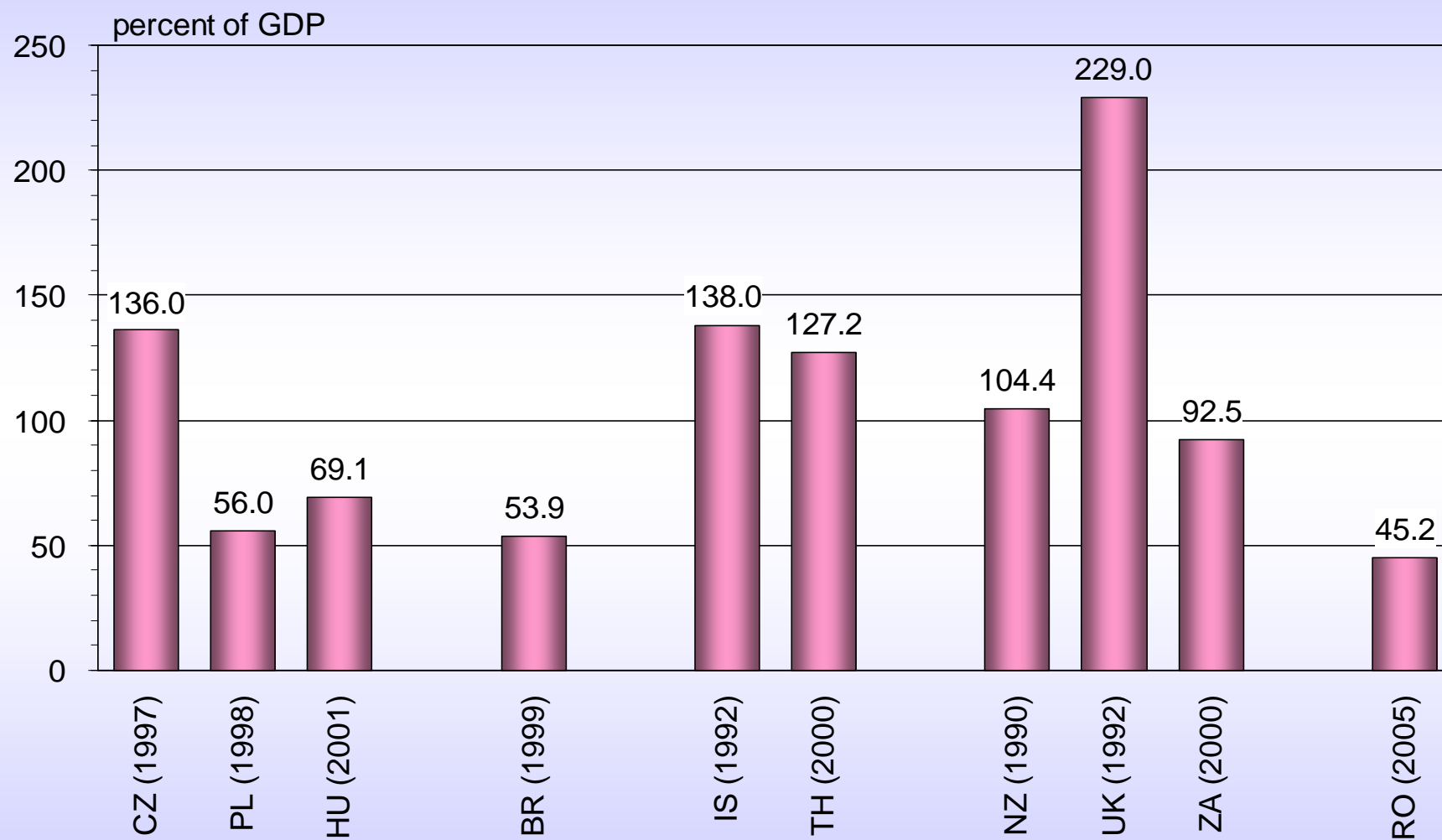
*) at the time of shifting to inflation targeting

Source: EUROSTAT, NBR, NIS, IMF





Bank Assets*



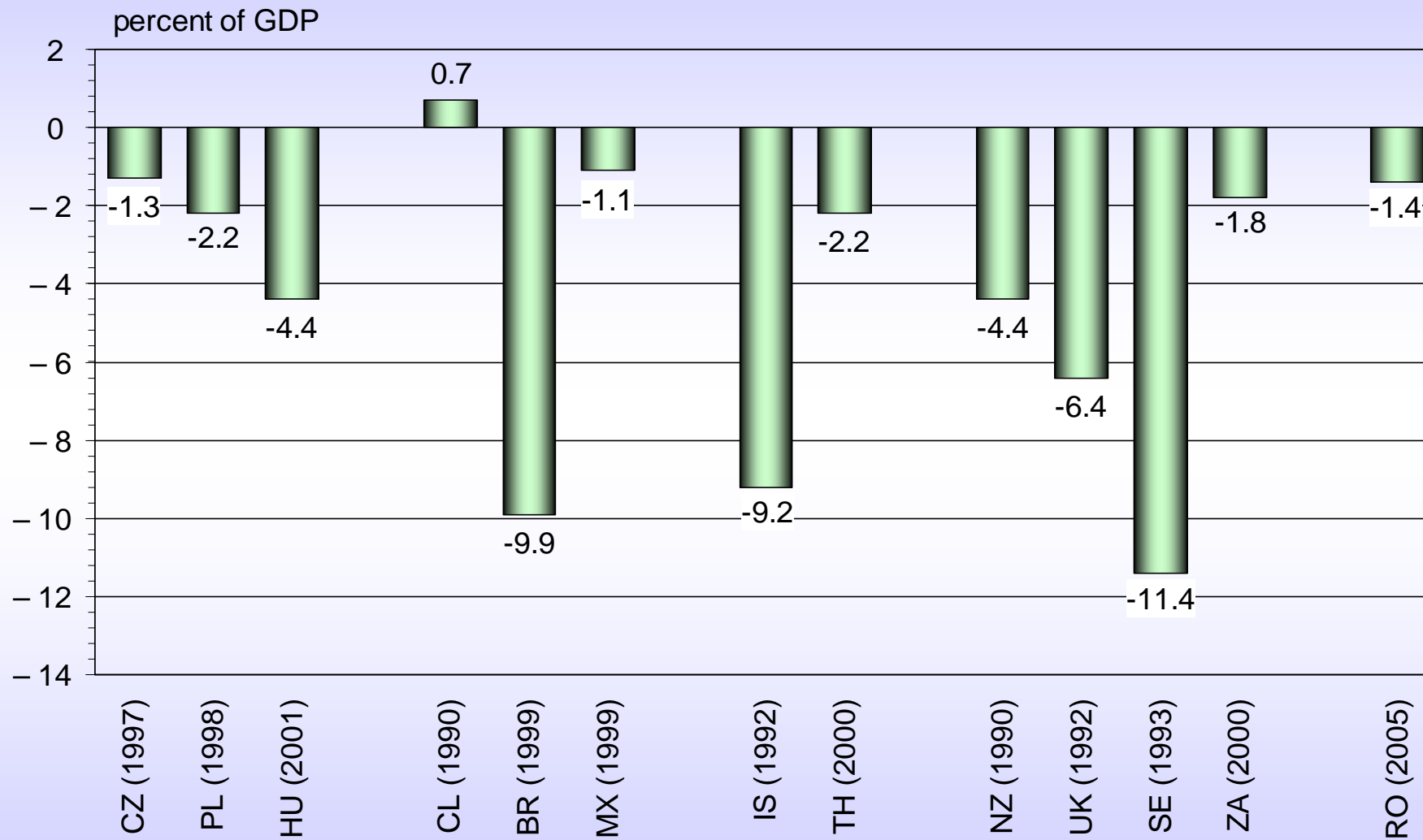
Source: Websites of central banks and national statistics institutions

*) at the time of shifting to inflation targeting





Fiscal Surplus/Deficit*



Source: EIU, MPF, NIS

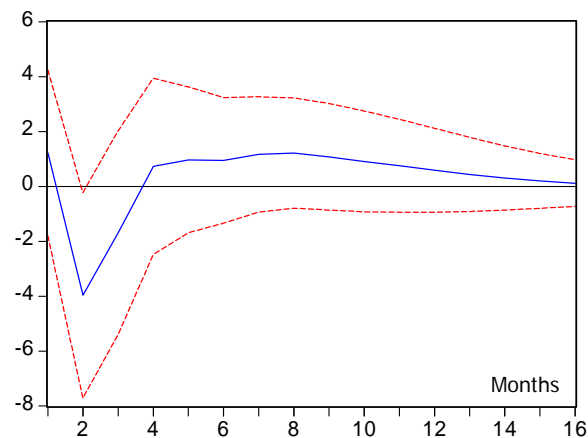
*) at the time of shifting to inflation targeting



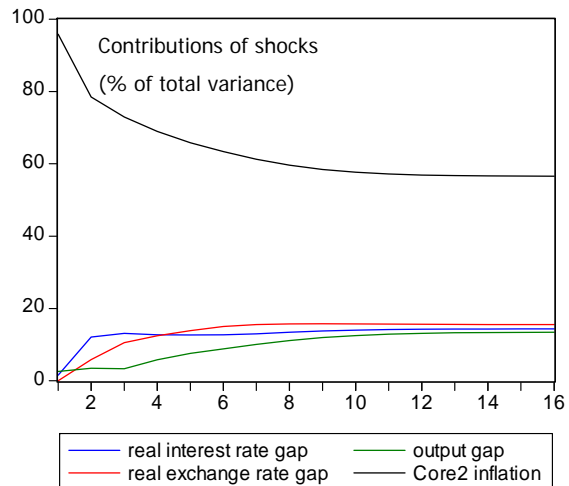


Increasing role of policy rate in determining inflation

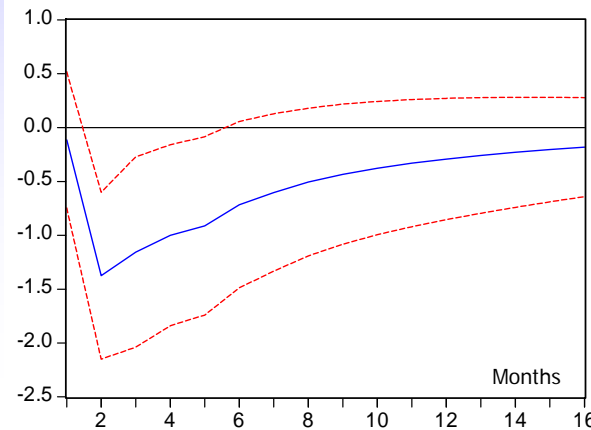
Response of Core2 inflation to a monetary policy induced shock
Sample: 1998:08 - 2001:12



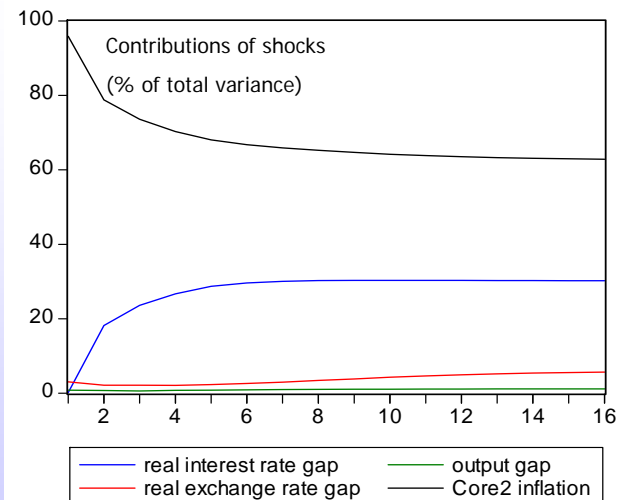
Variance Decomposition of Core2 inflation



Response of Core2 inflation to a monetary policy induced shock
Sample: 2002:01 - 2007:12



Variance Decomposition of Core2 inflation





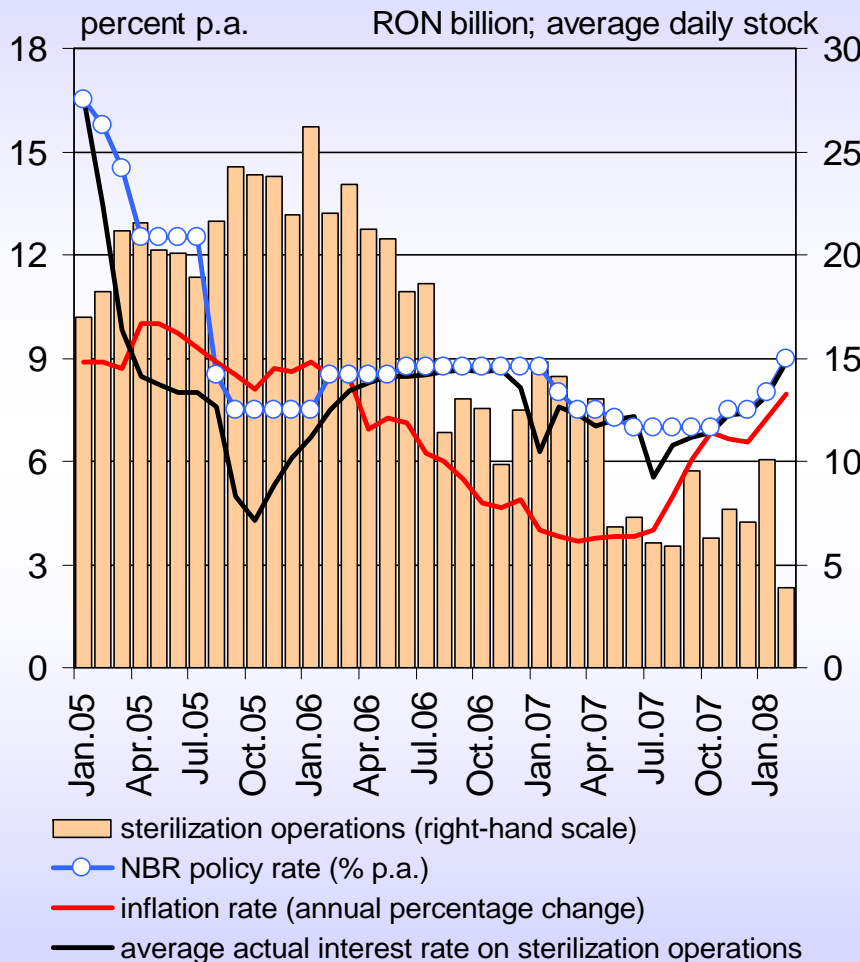
Characteristics of IT in Romania

- Flexible interpretation of IT: NBR use of all available instruments, incl. exchange rate & “unorthodox”, i.e. administrative/prudential policy tools employed for both macroeconomic & prudential reasons (differentiated reserve requirements, limits for bank lending to unhedged borrowers, loan-to-income limits for households, broadening scope of regulations outside credit institution sphere, etc.), but with ex ante awareness of their limited effectiveness over time and potential side effects
- Emphasis on medium-term disinflation path, not only point-attainment of annual targets
- Emphasis on sustainability, esp. in terms of nominal appreciation arising from potentially volatile capital flows, need to ensure complementarity between price stability and financial stability in context of persistent rapid credit expansion (fx borrowing, asset-liability mismatches, increasing external private sector indebtedness) also as vehicle of carry trades
- NBR implementation of IT focuses on ensuring compliance with medium-term path described by announced annual inflation targets, while not exacerbating existing macroeconomic vulnerabilities whose effects might compromise sustainability of secured disinflation gains: ‘macroeconomic risk-management perspective’
- Explicit calls for consistency from other components of macro policy mix (fiscal, incomes, structural reform) superseding constraints to monetary policy effectiveness



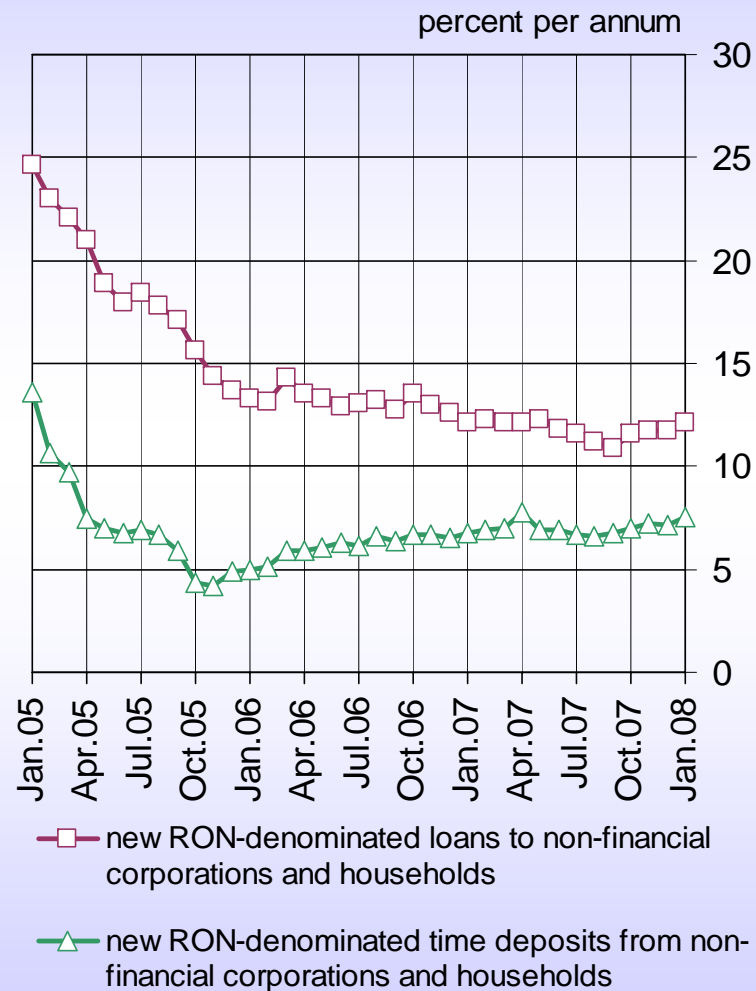


NBR Policy Rate, NBR Sterilization Operations and Inflation Rate



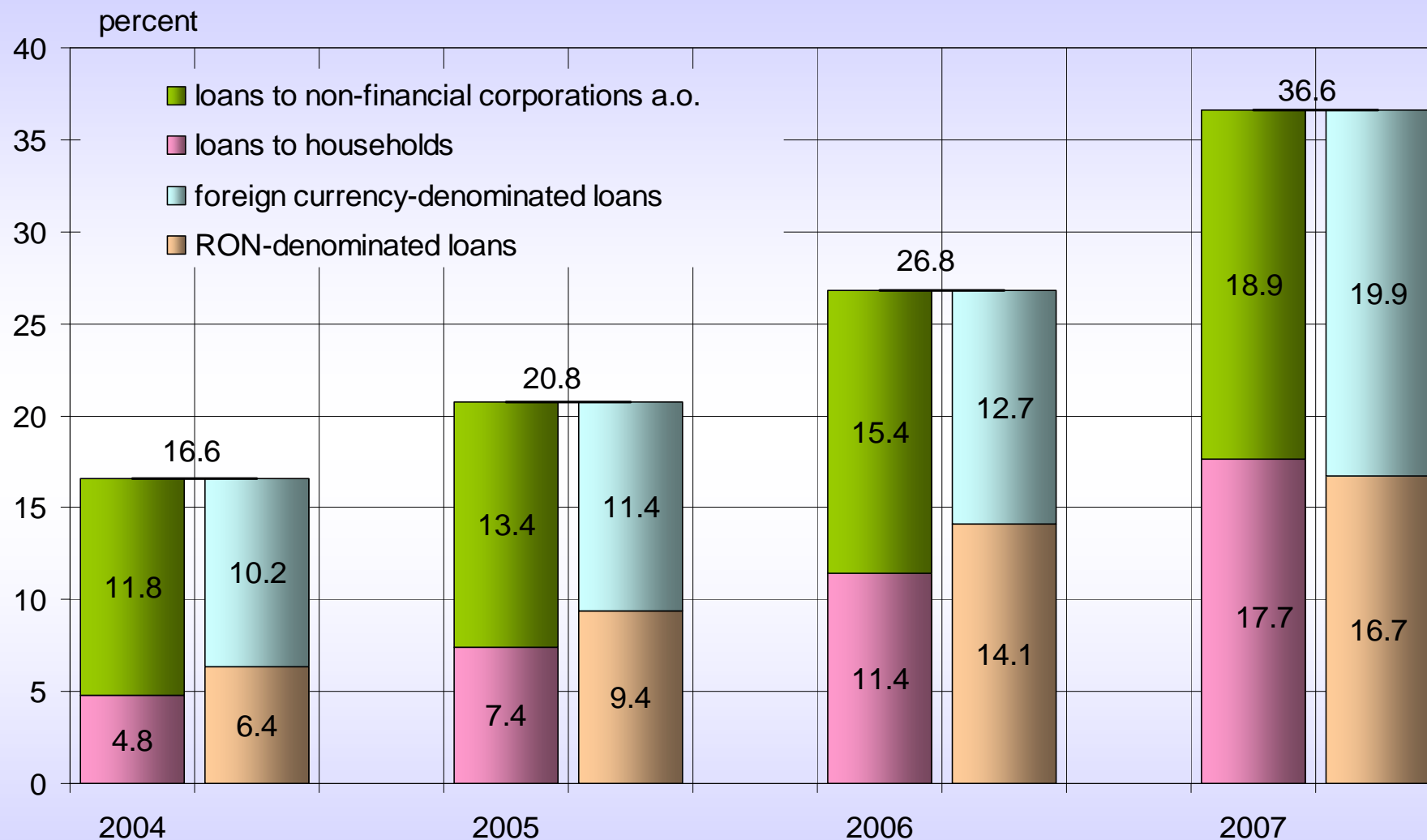
Source: National Bank of Romania, National Institute of Statistics

Average Interest Rates in the Banking System





Financial Intermediation*



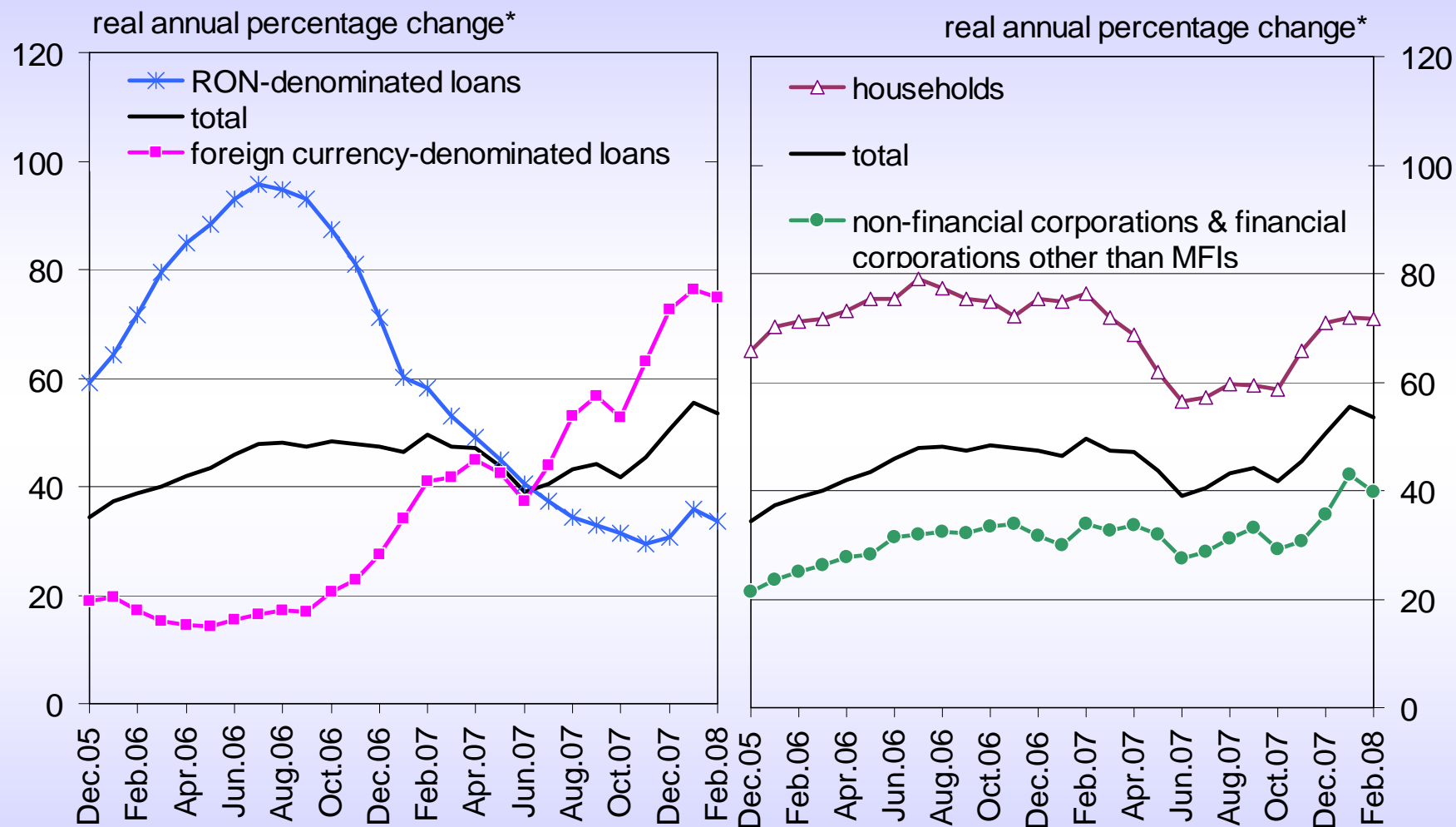
Source: National Institute of Statistics, National Bank of Romania

*) loans to the private sector / GDP





Loans to the Private Sector



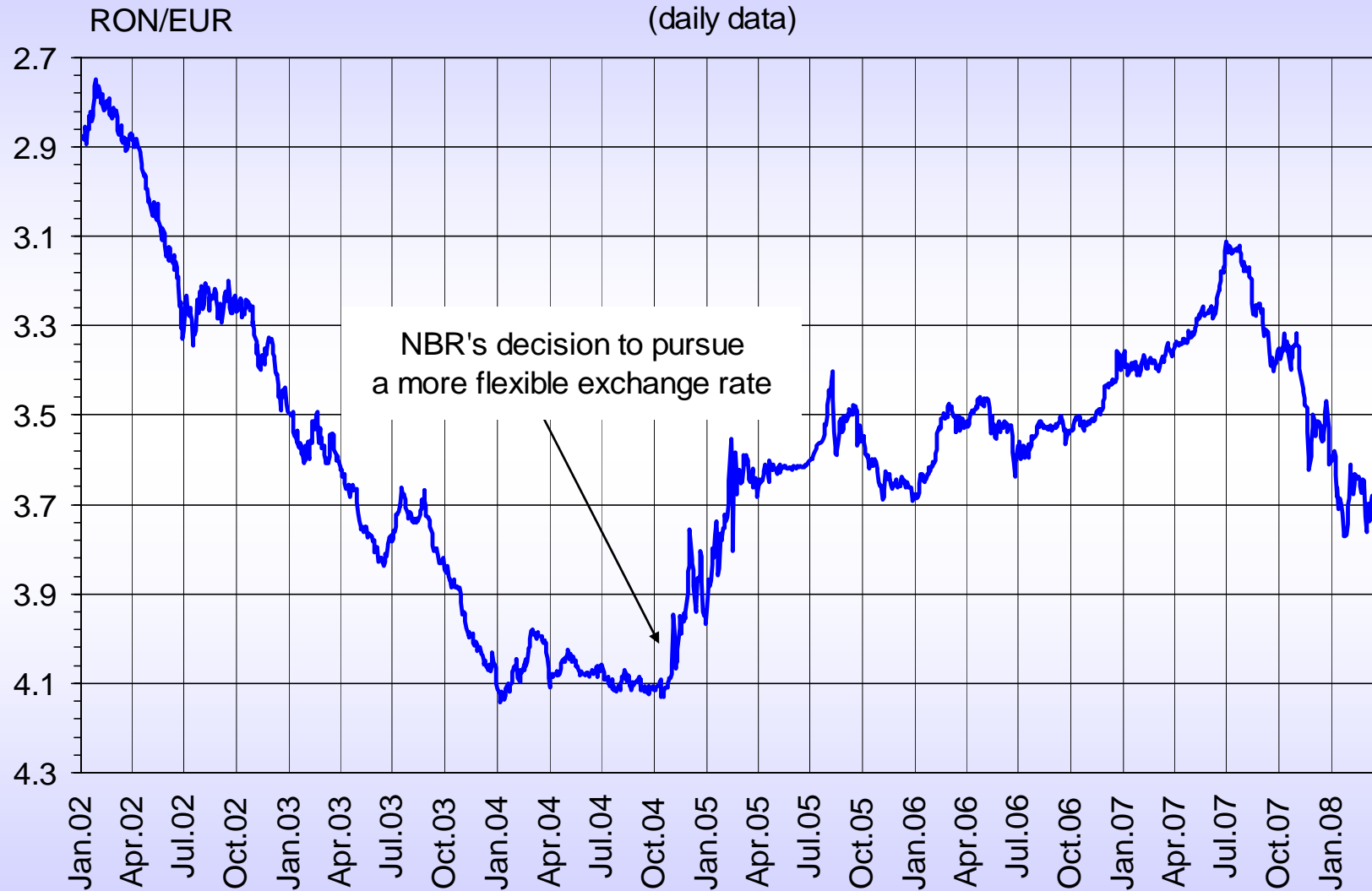
Source: National Bank of Romania, National Institute of Statistics

*) based on CPI





Nominal Exchange Rate



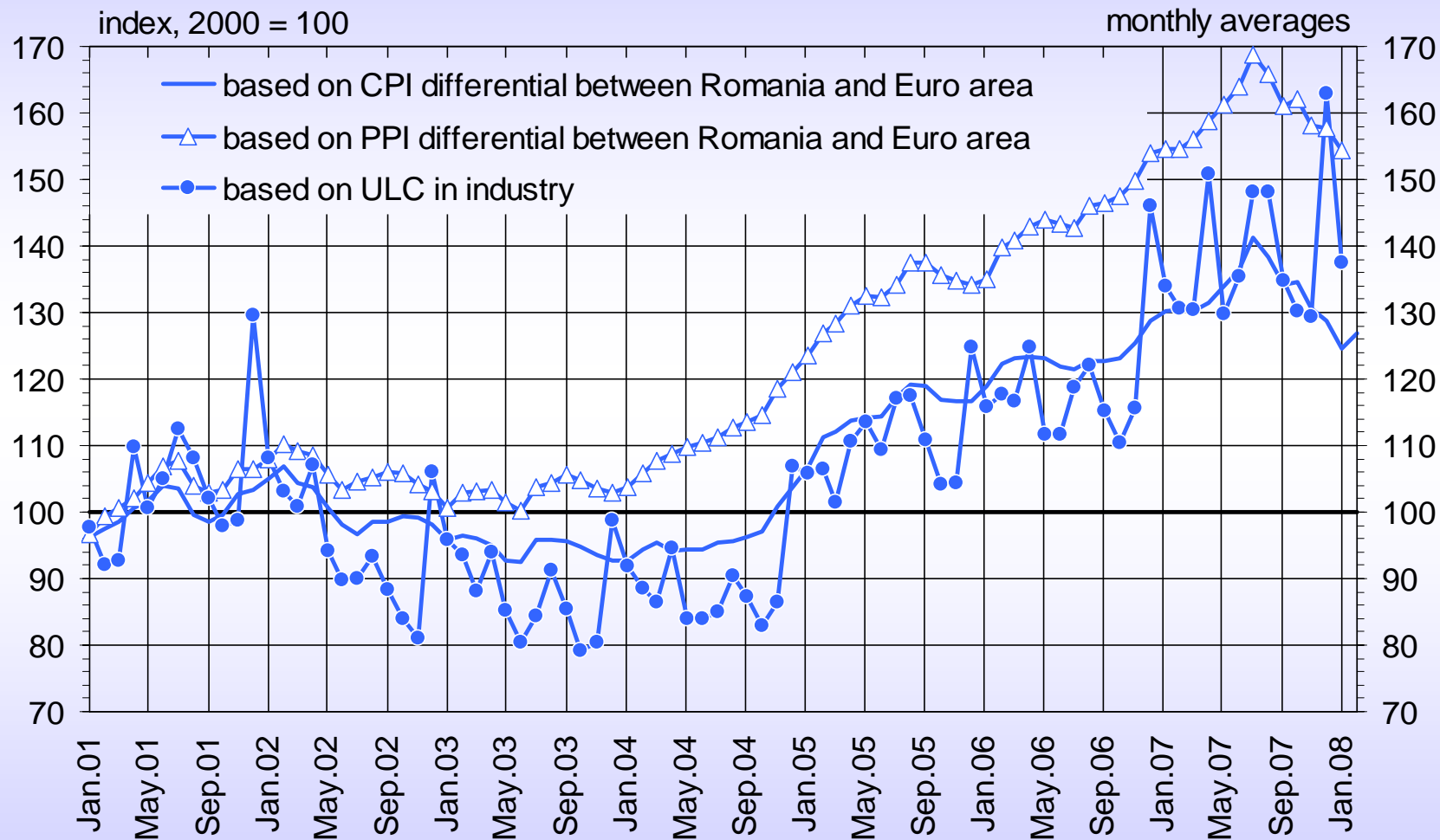
Source: National Bank of Romania





Real Exchange Rate of the RON against the EUR

Appreciation (+)/Depreciation (-)

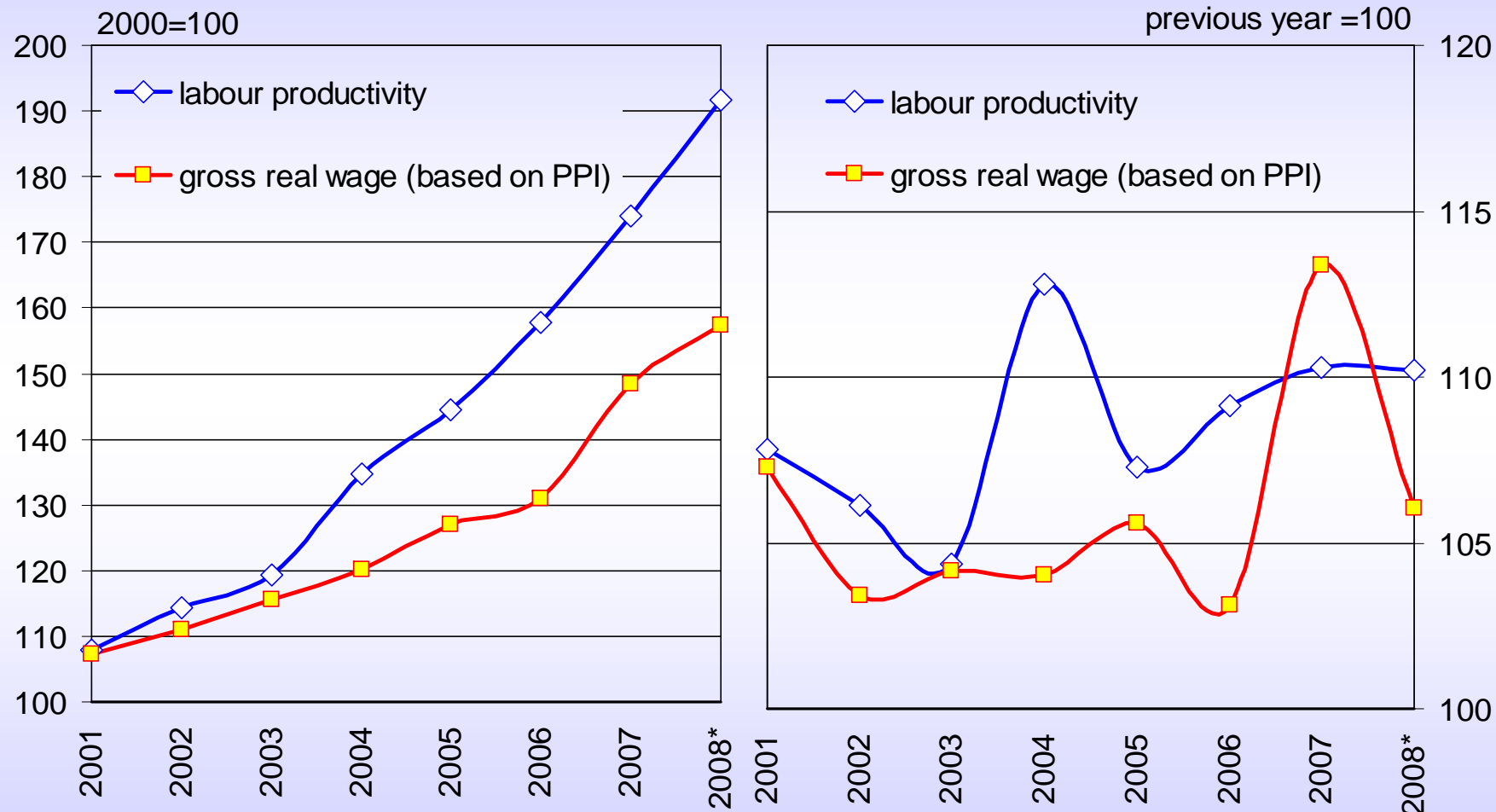


Source: National Bank of Romania calculations, National Institute of Statistics, International Financial Statistics





Real Wage and Labour Productivity in Manufacturing



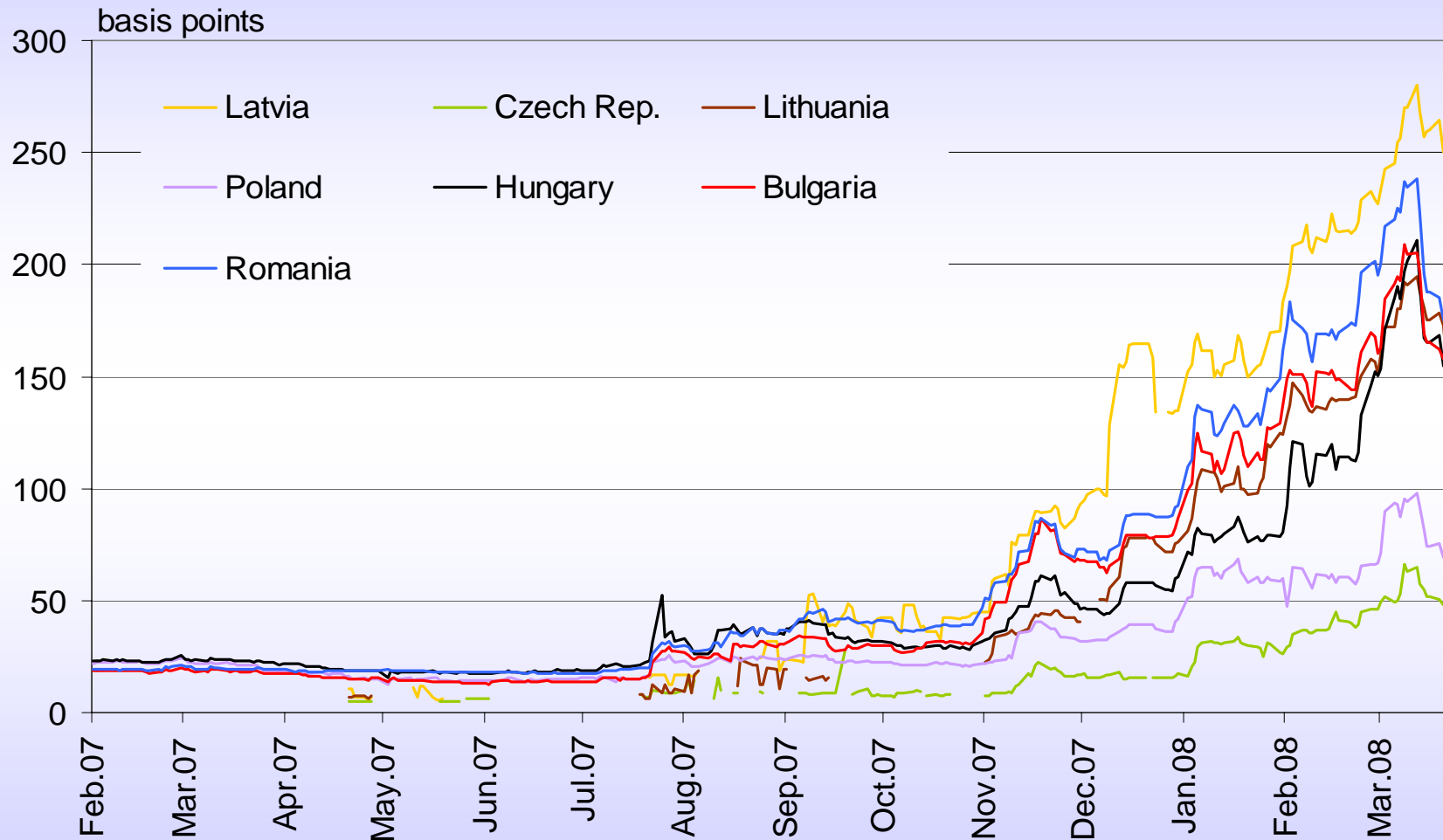
Source: National Institute of Statistics, National Bank of Romania calculations

*) January





Spreads of Five-year CDS for Emerging Economies in Central and Eastern Europe

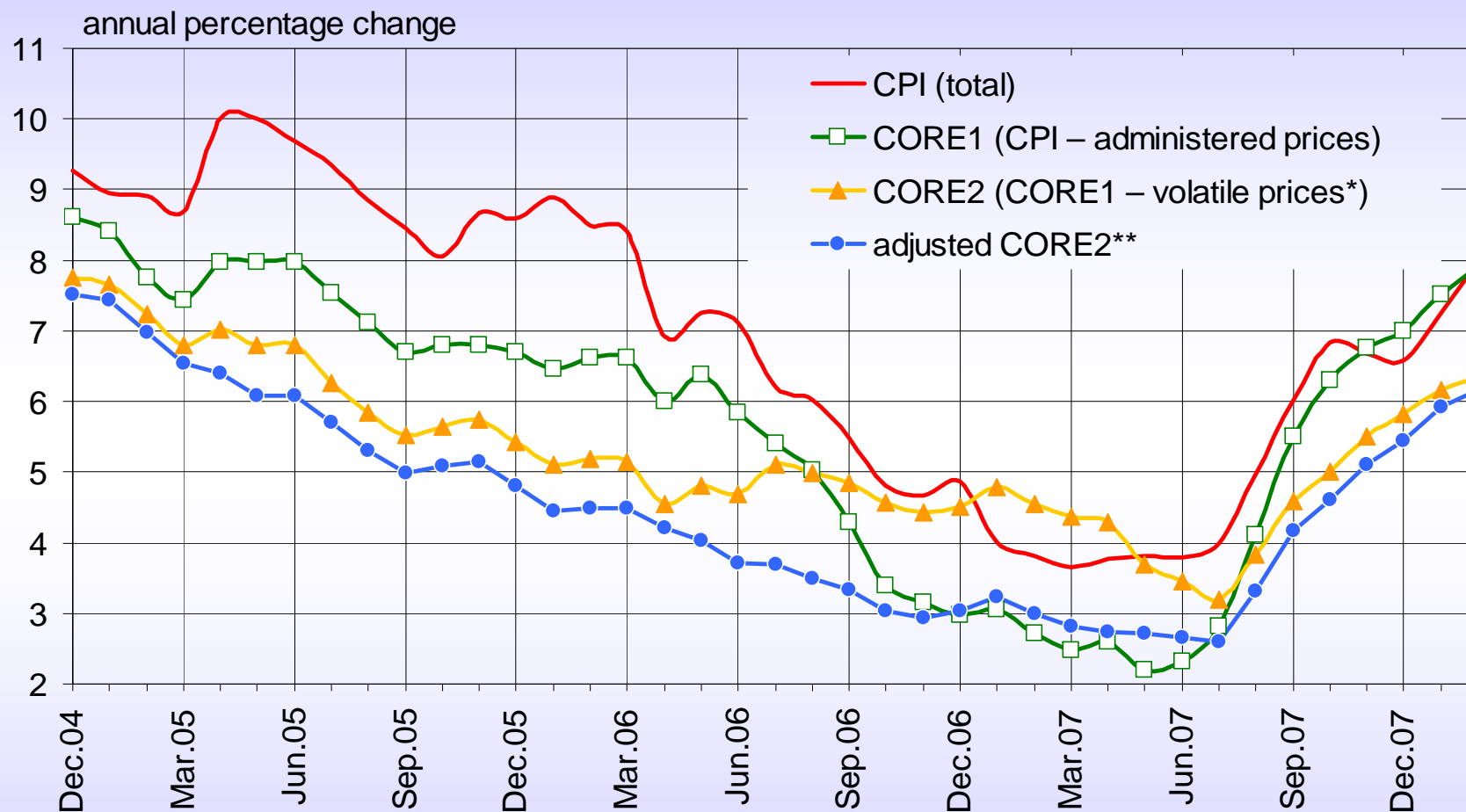


Source: Bloomberg





Headline Inflation and CORE Inflation



*) products with volatile prices: vegetables, fruit, eggs, fuels

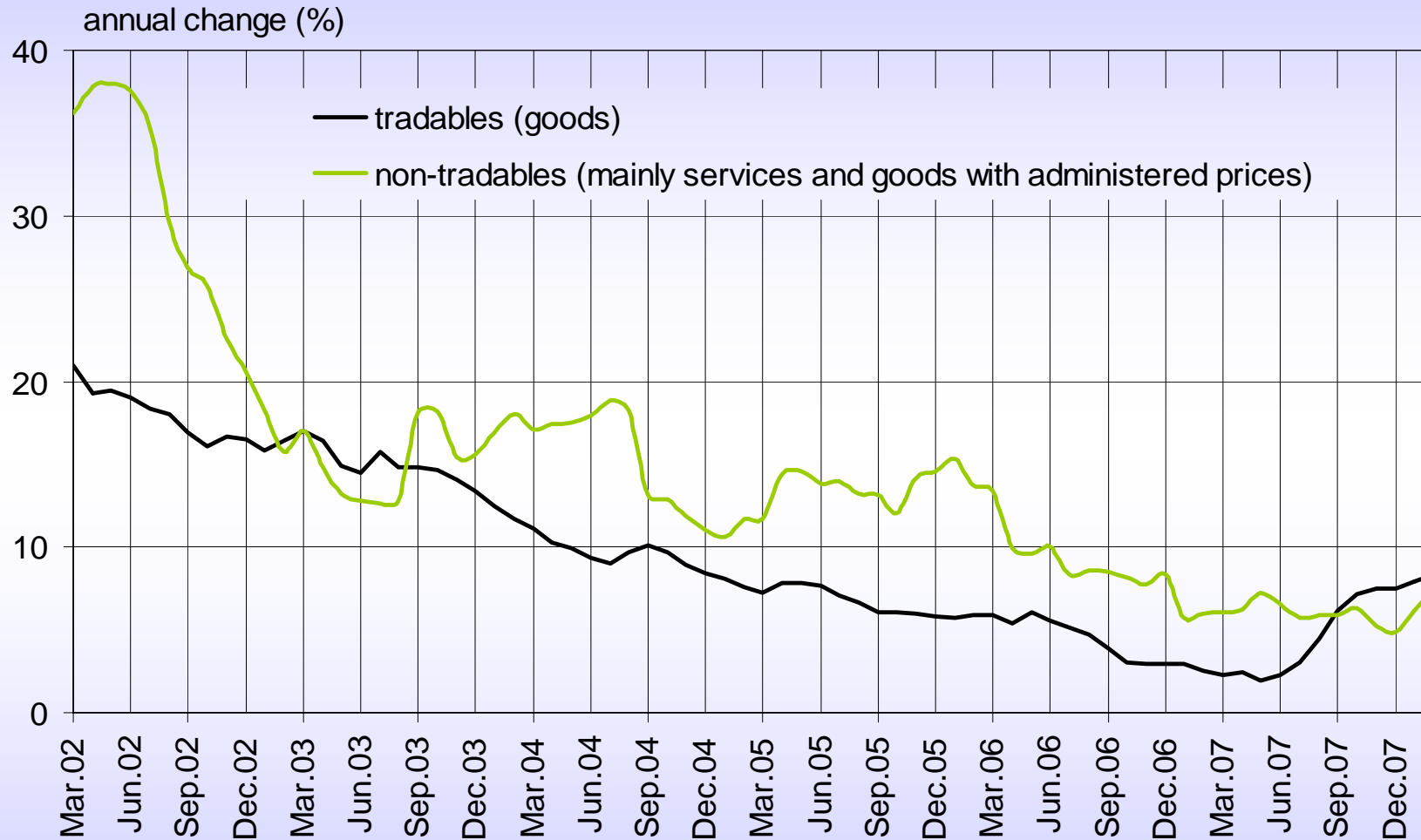
***) the influence of excise duties and vice tax is removed

Source: National Institute of Statistics, National Bank of Romania calculations





Tradables and Non-tradables* Prices



*) based on COICOP

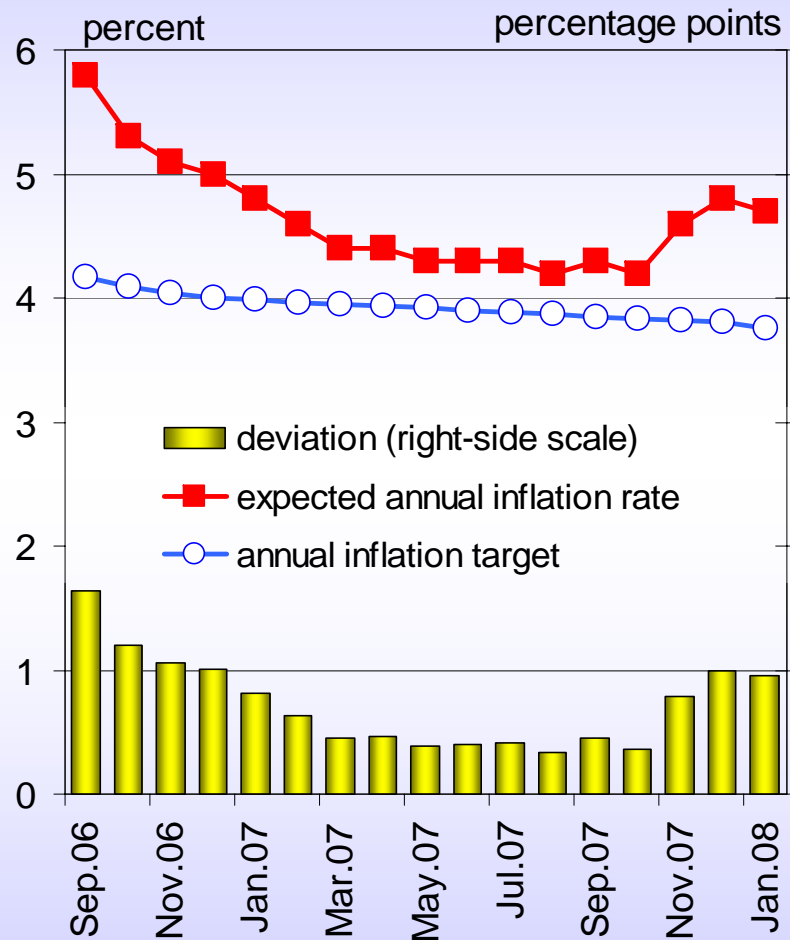
Source: Eurostat; National Bank of Romania calculations



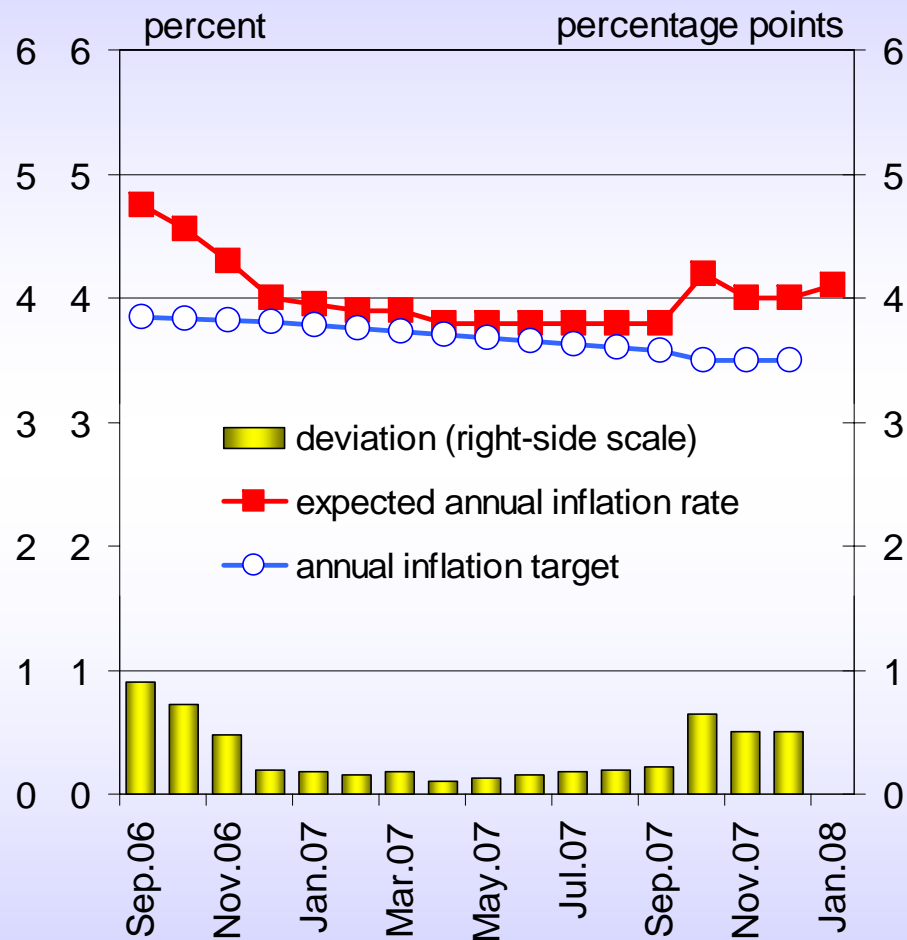


Inflation Expectations of Banks for the Next:

12 months



24 months



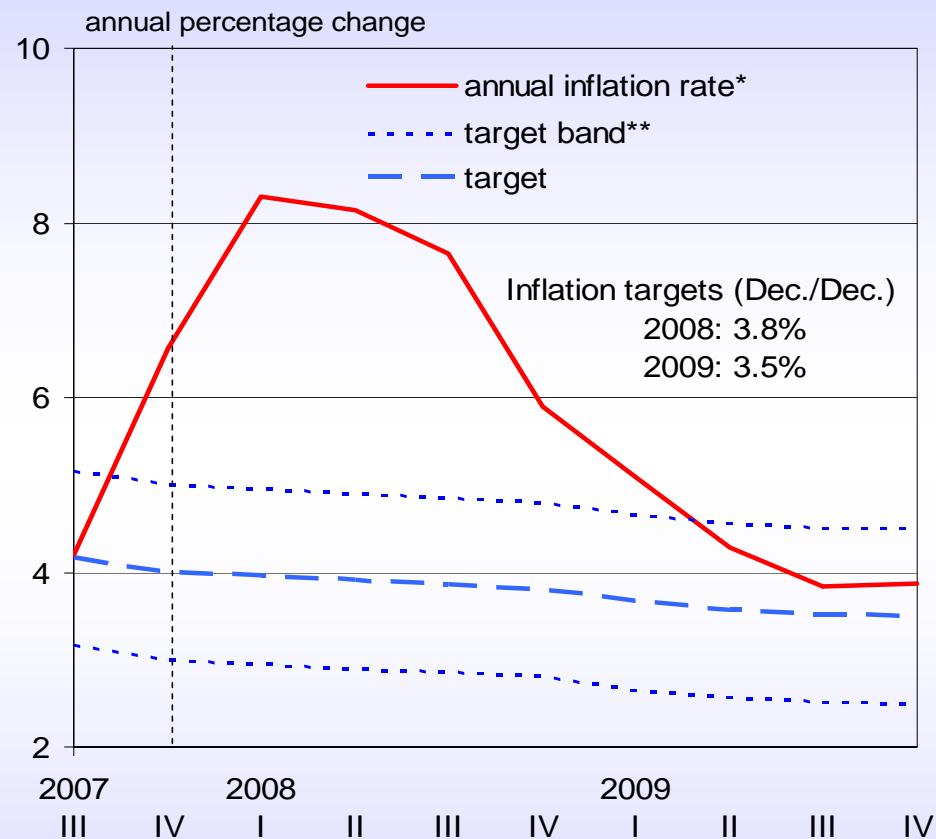
Source: survey conducted by the NBR





Inflation Projections

- The NBR aims to achieve sustainable disinflation amid macroeconomic risk management: hence, the NBR envisages the timely return of inflation to the downward trajectory compatible with the already announced targets, without widening current macroeconomic imbalances and by preserving financial stability
- The NBR does not envisage a change in the established inflation targets, but strives towards achieving disinflation objectives in a sustainable and timely manner, as any delay may have a negative impact on the euro adoption calendar



*) projection based on consumer basket composition for 2007

**) ± 1 percentage points around the (dis)inflation path

Note: according to the February 2008 Inflation Report

Source: National Institute of Statistics, National Bank of Romania calculations





Looking Ahead

- Further improvements in CB forecasting capabilities: DGES model, extensions to current model, etc.
- Ongoing discussion on improvements in transparency – need for focus to remain on issues
- IT framework in light of euro adoption efforts: choice of medium-run annual targets, sequencing

