Next Steps for Romania:

A (Mainly) Exchange Rate-based Perspective

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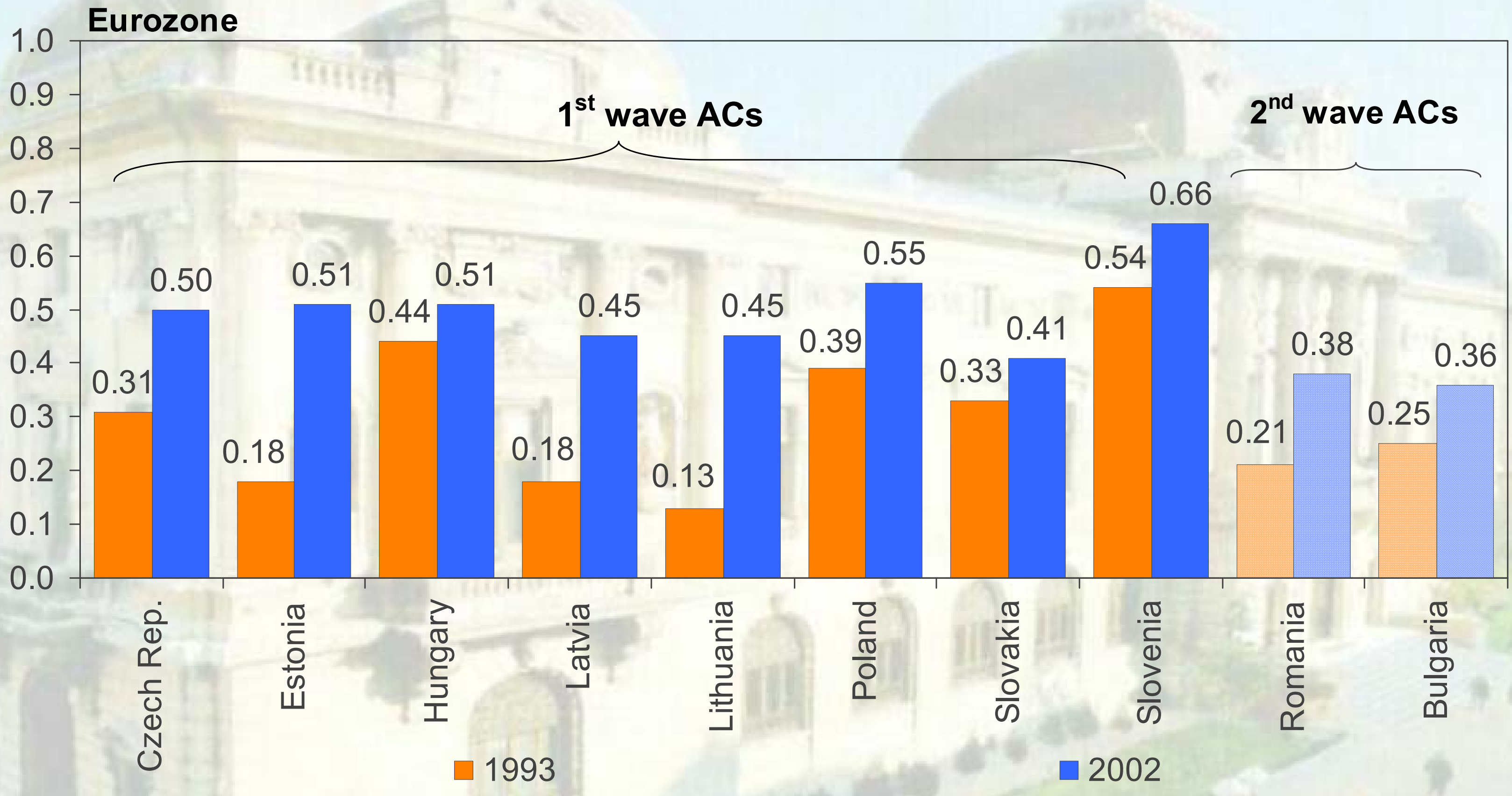
50th East Jour Fixe

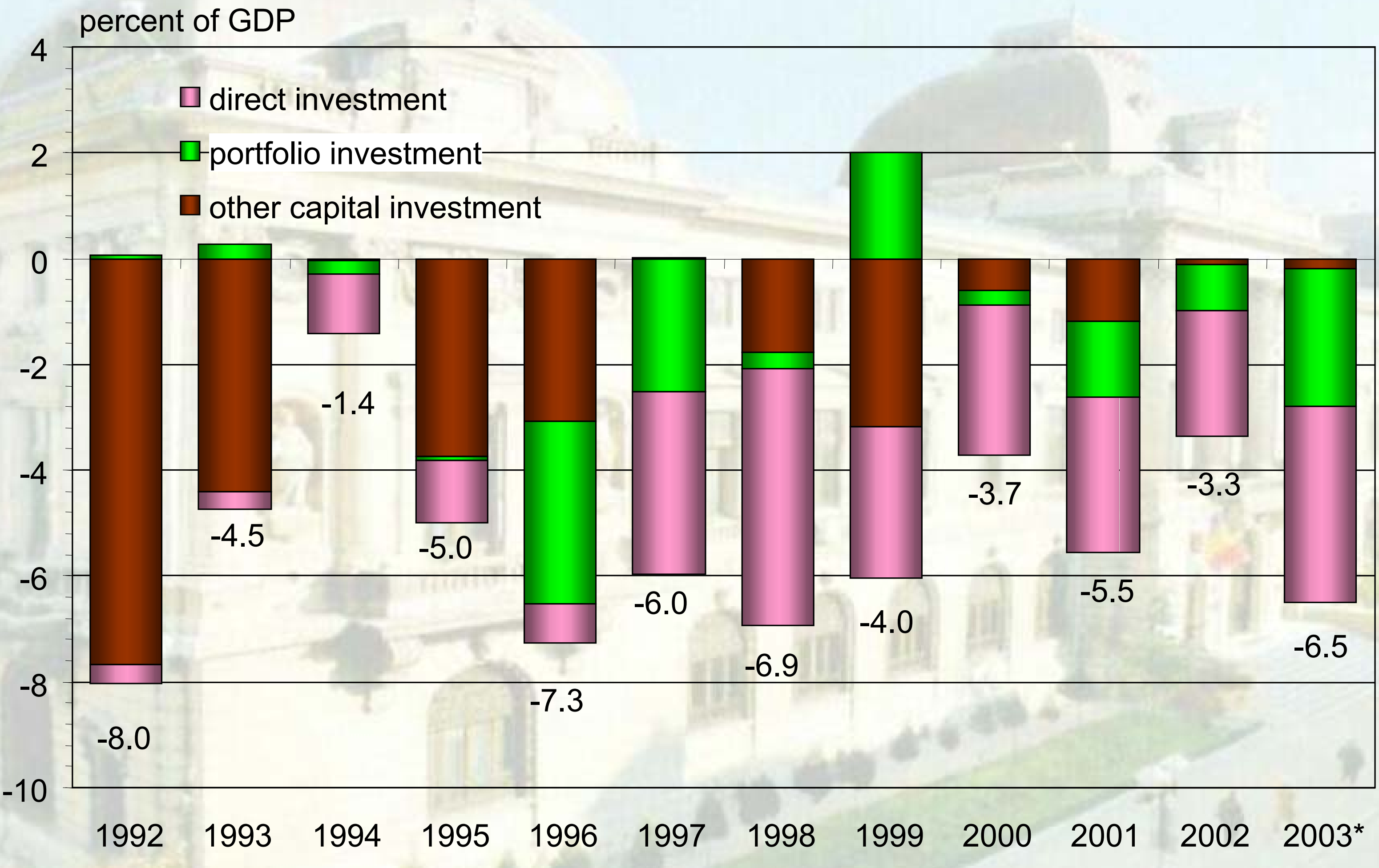
Price Convergence*



*Ratio between GDP per capita using the exchange rate and GDP per capita in PPP/PPS

Source: European Commission, World Bank, national central banks and statistics offices

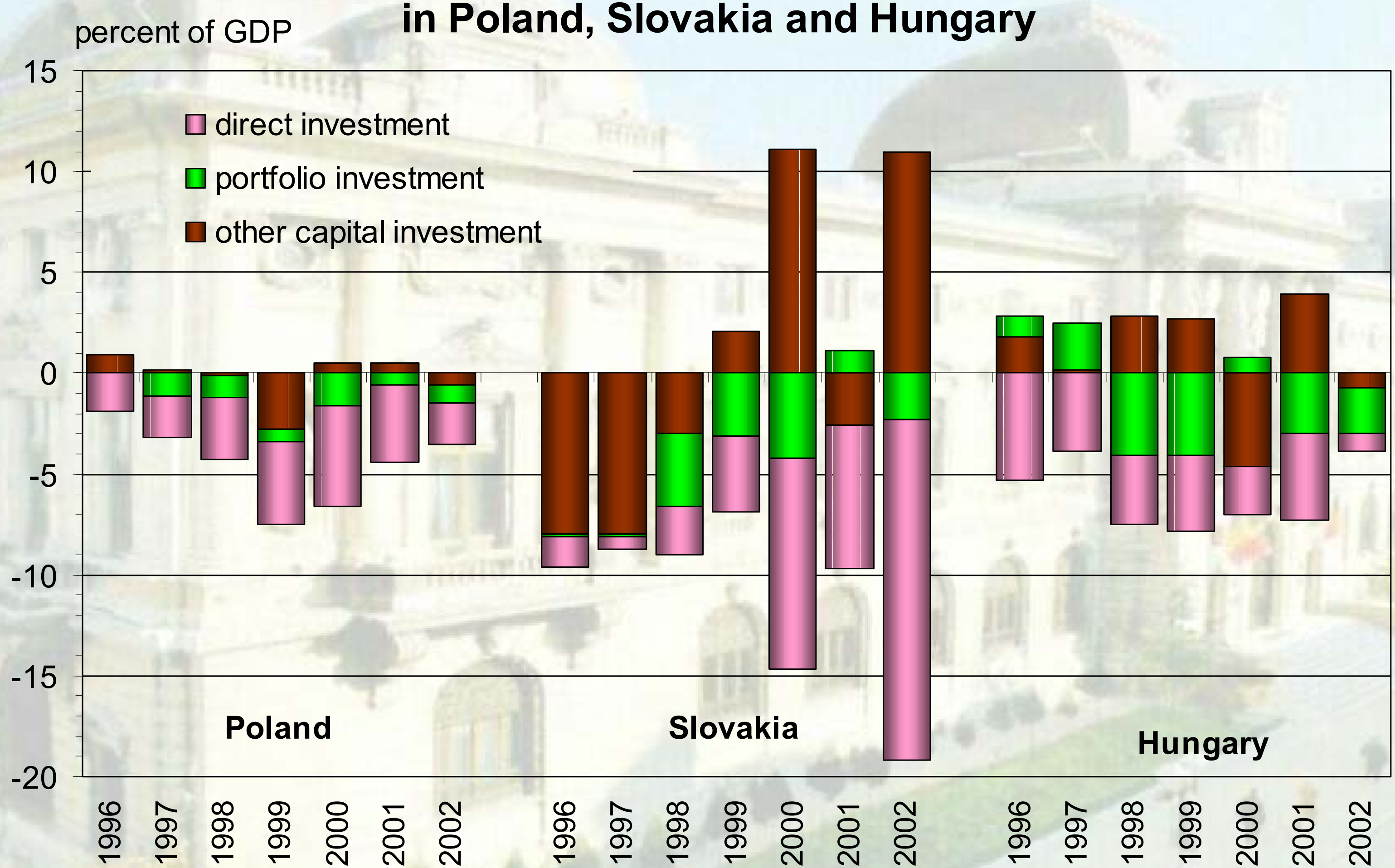
Romania: Financing Current Account Balance



Source: National Bank of Romania

*) estimate

Financing Current Account Balance in Poland, Slovakia and Hungary



Source: central banks and national statistics offices

Central bank reaction function , 1993-8

Reaction function, 1993:02 - 1998:06
Dep. Var. is LRMBASE (change in logs of money base)

Variable	Coefficient	Std. er.	Stat. *t*	Prob.
C	0.077230	0.016433	4.699628	0.0000
LCPITP	0.187471	0.206377	0.908389	0.3674
LCPITN	-0.131326	0.186643	-0.703623	0.4845
LYTP	0.144543	0.241883	0.597574	0.5525
LYTN	0.130714	0.189420	0.690075	0.4929
LXRP	-0.413172	0.115975	-3.562594	0.0007
LXRN	0.310164	0.110499	2.806934	0.0068

Adjusted R^2 0.269870 Durbin-Watson 2.167085 Prob(F) 0.000381

Central Bank Reaction Function: Inflation Targeting Light

Dependent Variable: LRBASE

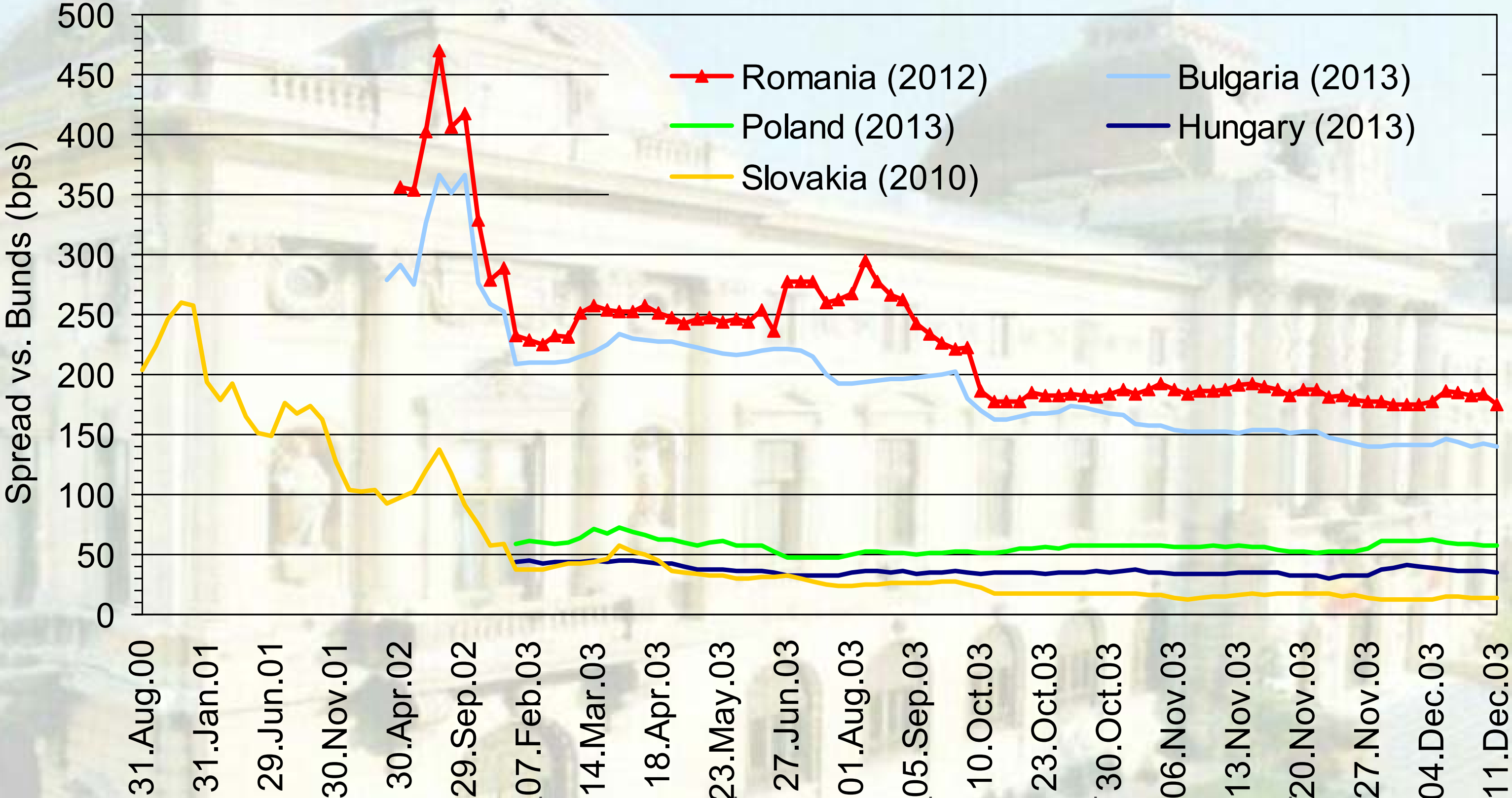
Method: Two-Stage Least Squares

Sample(adjusted): 1997:08 2002:08

Instrument list: LRBASE(-1) LCPITP (-1) LCPITN(-1) LYTP(-1) LYTN(-1) XR(-1) NX(-2)

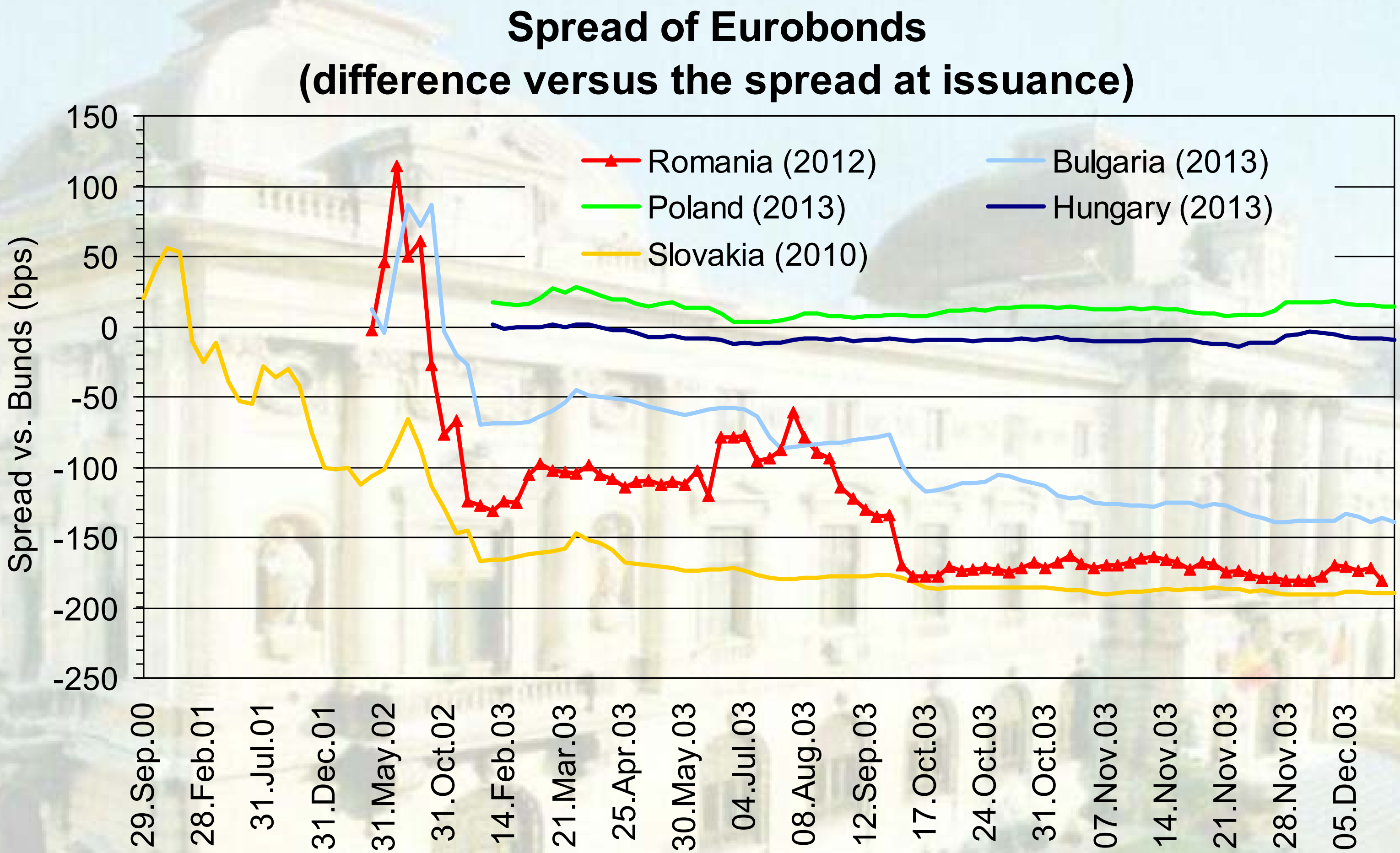
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.925278	0.038318	-24.14760	0.0000
LCPITP	-2.029392	0.253086	-8.018597	0.0000
LCPITN	1.985937	0.745501	2.663898	0.0101
LYTP	-0.215399	1.314761	-0.163832	0.8705
LYTN	3.247406	0.695849	4.666826	0.0000
R^2	0.648505	Adjusted R^2		0.623398
F-statistic	34.38366	DW		1.719325

Spread of Eurobonds



Source: Bloomberg

	SLOVAKIA	HUNGARY	POLAND	BULGARIA	ROMANIA
Moody's	A3	A1	A2	Ba2	Ba3
S&P	BBB	A-	BBB+	BB+	BB



Source: Bloomberg

	SLOVAKIA	HUNGARY	POLAND	BULGARIA	ROMANIA
Moody's	A3	A1	A2	Ba2	Ba3
S&P	BBB	A-	BBB+	BB+	BB

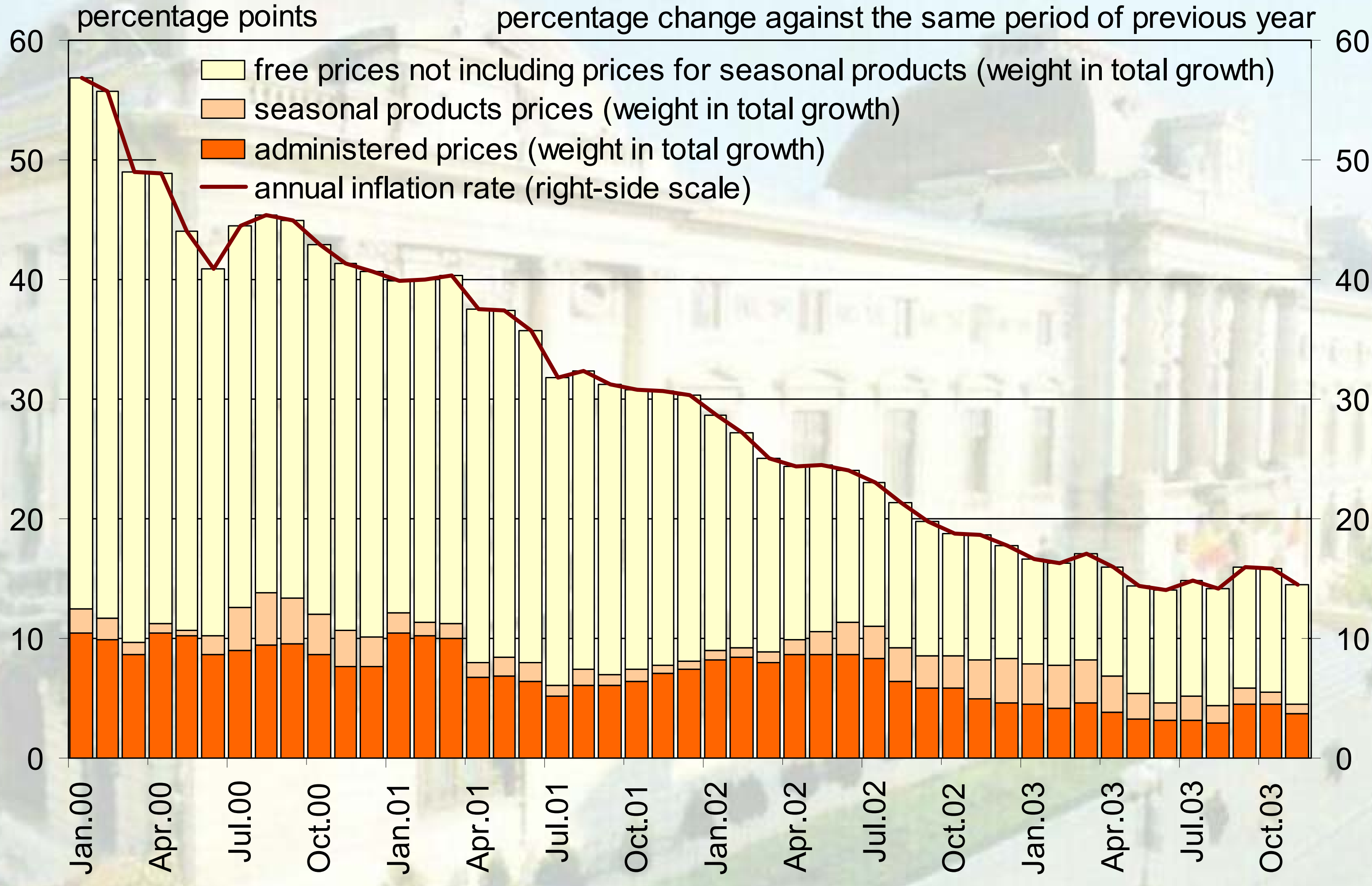
Estimated Size of Balassa-Samuelson Effect

for the 1990's versus Germany

	Actual annual real appreciation (annual average;%)	Estimated size of BS effect	
		simple accounting	econometric evidence
Czech Rep.	4.9	1.6	0.1
Hungary	2.4	1.9	1.0 - 2.0
Poland	5.8	n.a.	1.2 - 1.5
Slovakia	4.3	1.0 - 2.0	n.a.
Slovenia	2.2	0.7 - 1.4	1.0 - 2.0
for 1997-2003 H1 versus Eurozone			
Romania	5.0	n.a.	2.5 – 3.4

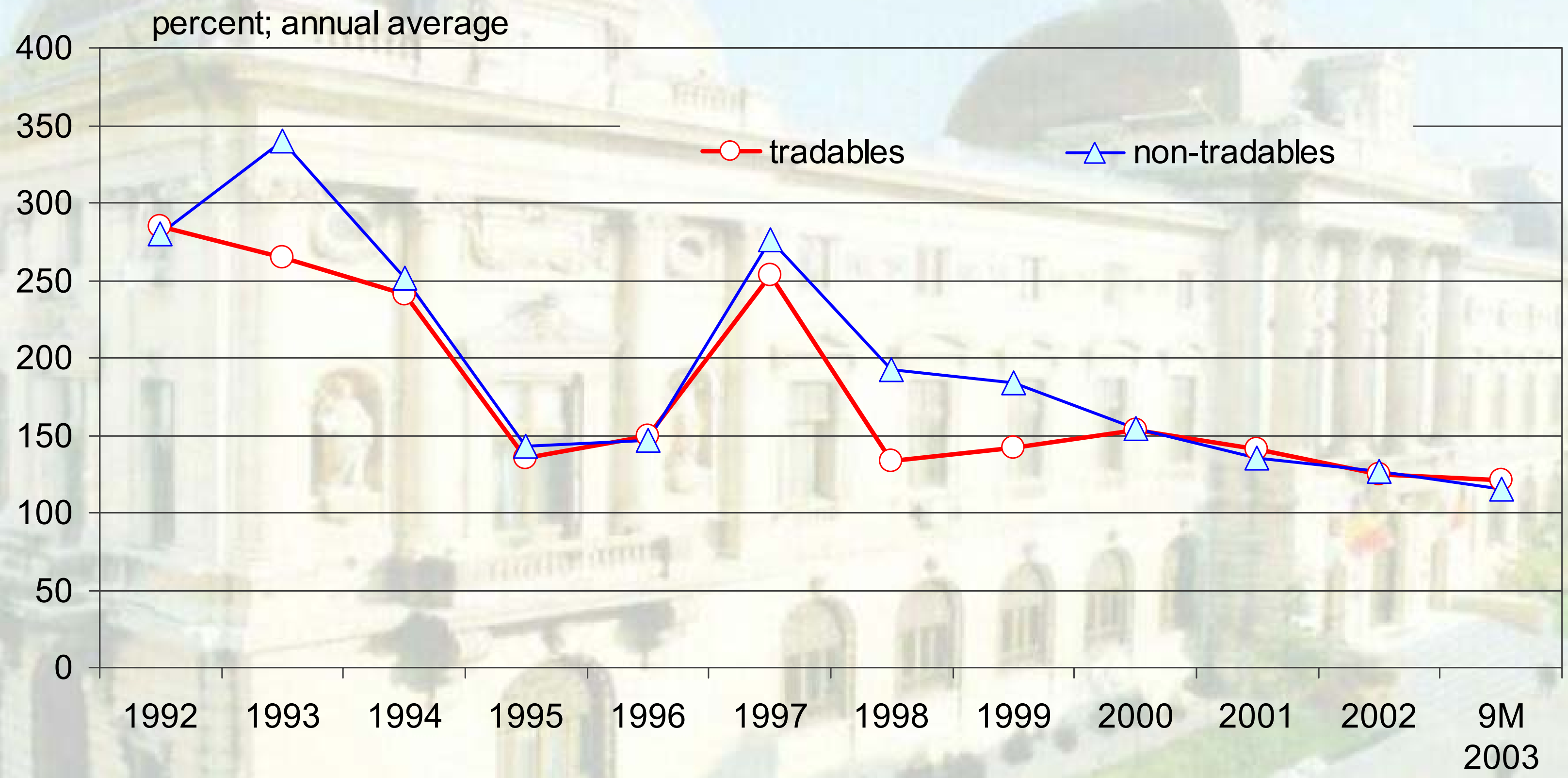
Source: Mihaly Andras Kovacs, NBH Working Paper 2002/5, p.3; NBR estimates

Inflation Rate



Source: National Institute of Statistics, NBR calculations

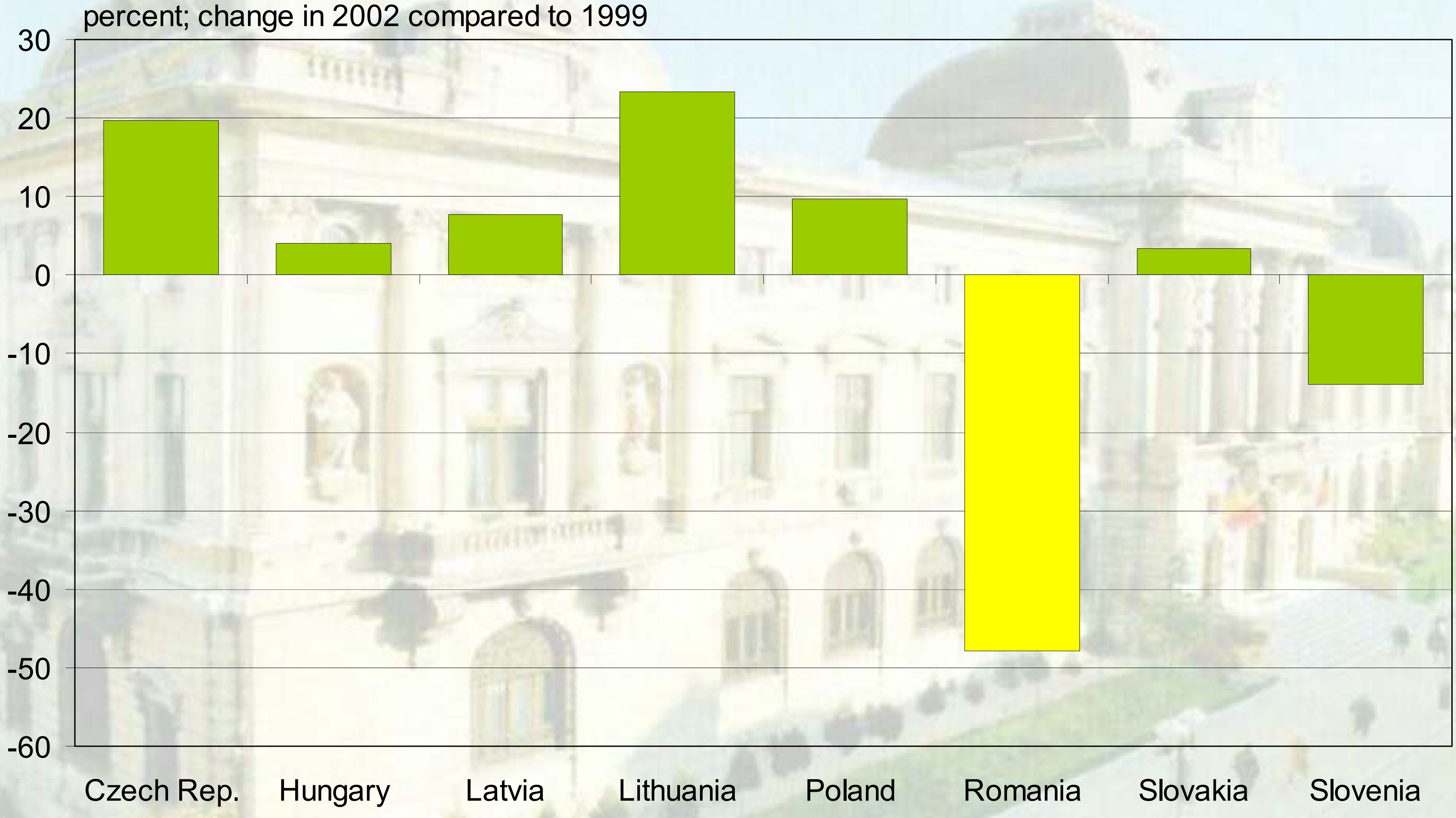
Relative Prices



Tradables: Industrial producer price index
Non-tradables: Consumer price index for services

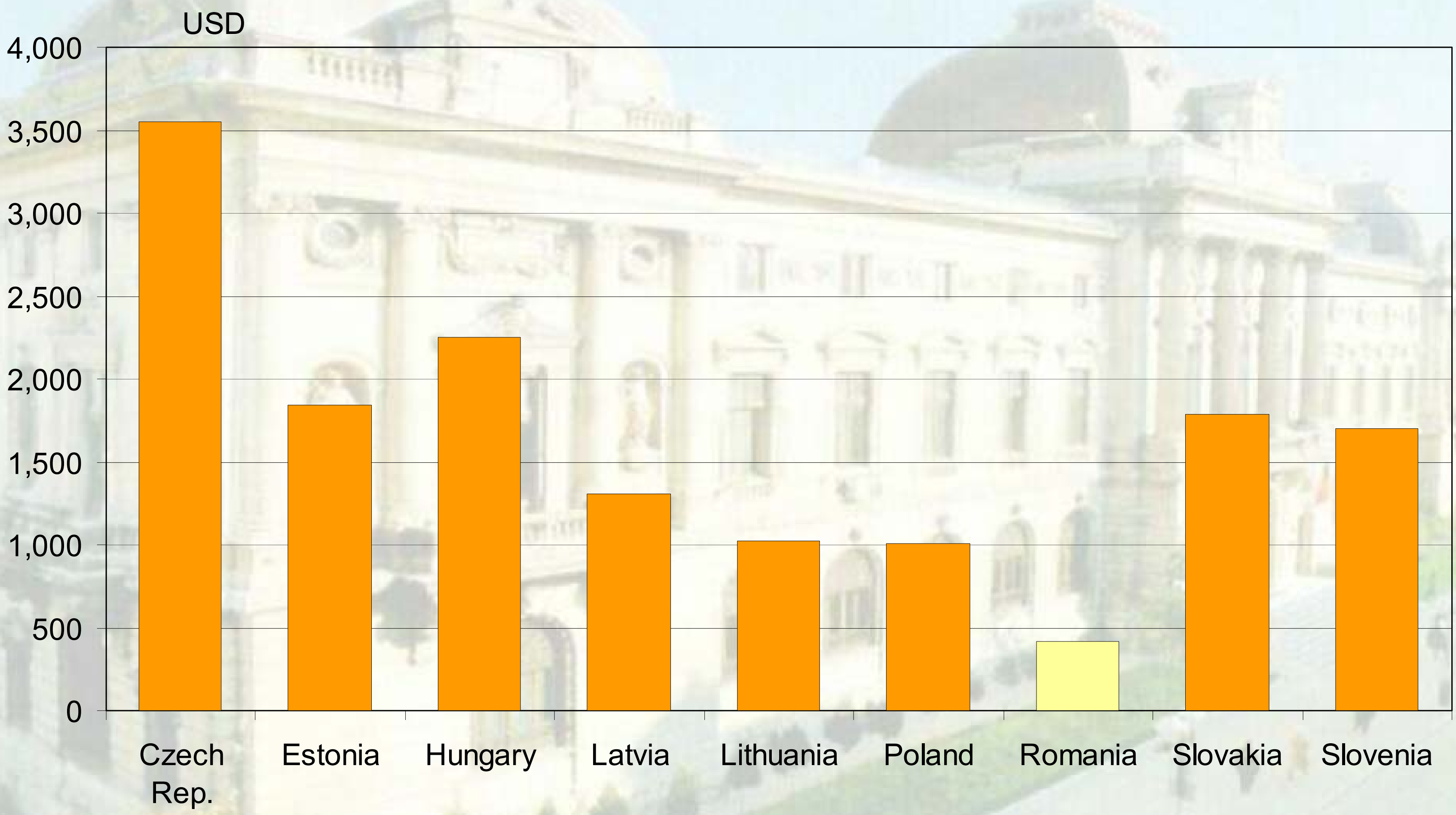
Source: NSI

Nominal appreciation (+)/depreciation (-) against EUR



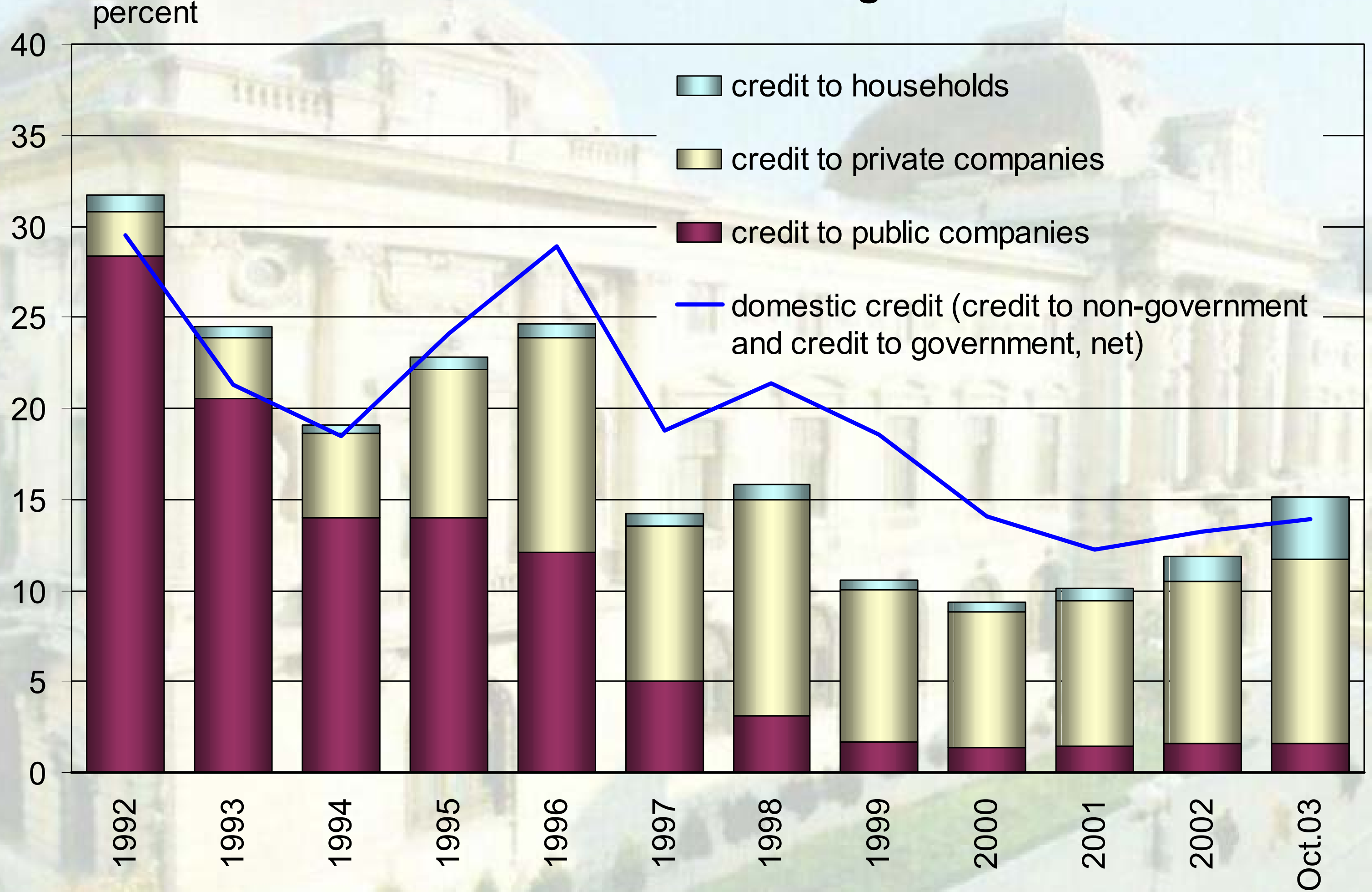
Source: own calculations based on national central banks' data

Cumulative FDI inflows per capita, 1989-2002



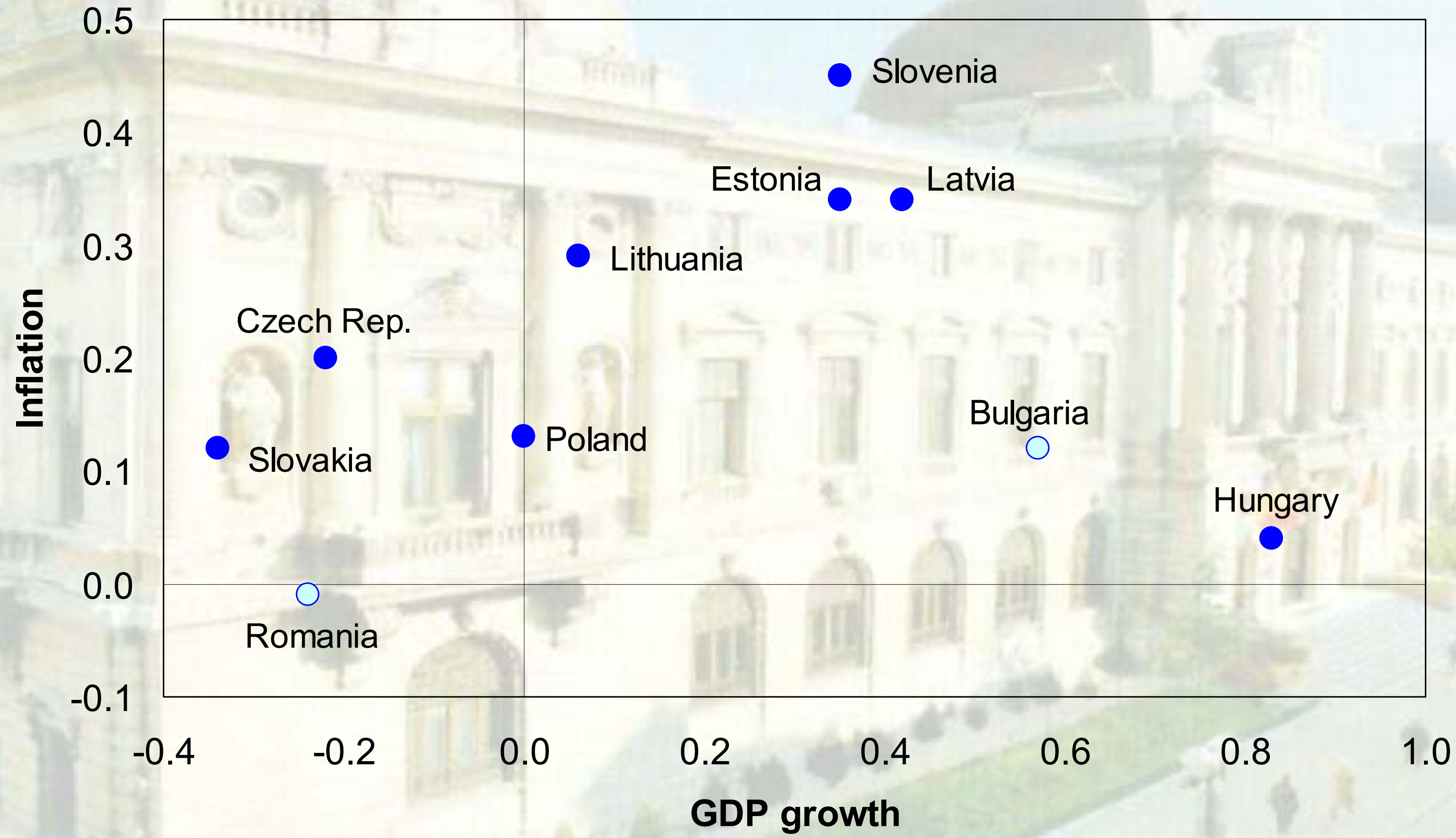
Source: EBRD

Domestic Credit as Percentage of GDP



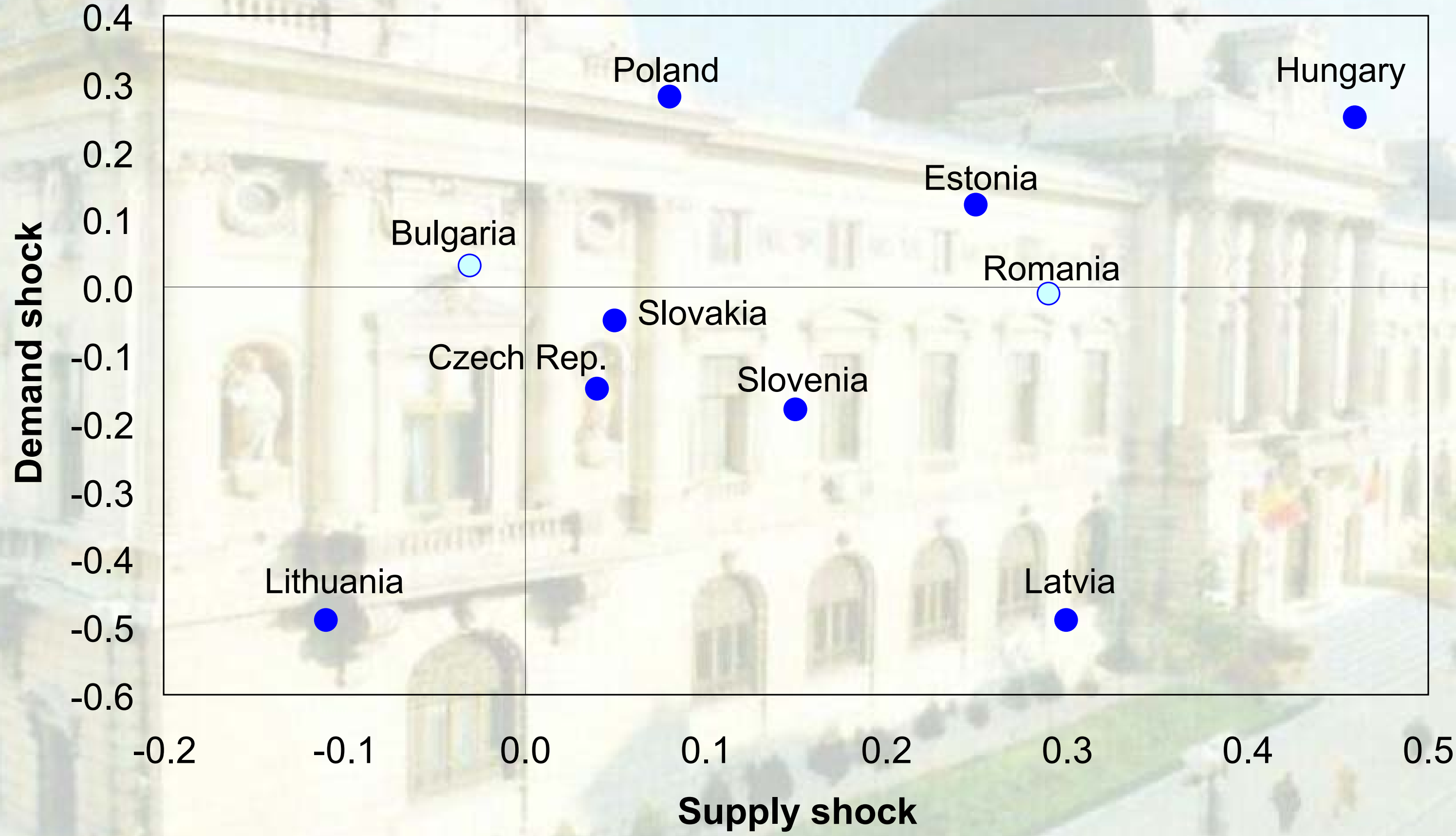
Source: National Bank of Romania

Correlation of GDP and Inflation with the Eurozone



Source: Oesterreichische Nationalbank, Focus on Transition 2/2001; NBR calculations

Correlation of shocks with the Eurozone



Source: Oesterreichische Nationalbank, Focus on Transition 2/2001; NBR calculations

Conclusions (I)

- Romania had poorer starting point vs. ACs from nominal perspective; despite progress, price convergence still relatively low, need for catching-up increasing
- External balance a constraint until 1999-2000 (large variations, limited autonomous financing); importance of stronger productivity-enhancing FDI flows, especially in export sectors
- Changing reaction function of CB a testimony to primordiality of price stability (up to 1998 exchange rate concerns render inflation, output reactions insignificant; post-1998, flexible inflation-targeting "light" concerns prevail)
- Since move to inflation targeting and nominal convergence itself constrain use of exchange rate, fiscal & wage policies (and even more so, structural adjustment addressing quasi-fiscal losses in the state sector) must gain a more substantial role within the macro policy mix

Conclusions (II)

- Policy of encouraging moderate, sustainable real appreciation vs. an implicit basket (currently 60% EUR/40% USD) was succesful in marrying disinflation and maintaining competitiveness; currently need for tighter link to the EUR; moving to greater flexibility within the managed float context
- Need for cautiousness when discussing exchange rate: Romania still weakly correlated w. EU overall, potential for asymmetric shocks high
- Since rapid spread contraction with continued liberalization of capital flows will mean less interest rate autonomy going forward, fewer degrees of freedom exist for exchange rate adjustment even before ERM2 entry
- Summary:

  - need to front-load real sector reform;

  - sustainability of rapid financial sector development contingent on adjustment of external position;

  - timing of ERM2 entry based on minimizing time spent in "training room", in turn dependent on accumulation of critical mass of adjustment, where a limited window of opportunity exists