Relevance for Latin America of the Experience of the Euro Area Candidate Countries in Central and Eastern Europe (CEEs)

György Szapáry
Central European University Budapest

Conference on „The Euro: Global Implications and Relevance for Latin America" Sao Paulo, March 17-18, 2008

Optimal Currency Area Properties

- Benefits of currency union depend on countries sharing certain OCA properties, e.g., business cycle synchronization (BCS), similarity of structures of production and shocks, labor mobility.

- Generally accepted that most important is BCS, because if cycles are synchronized, cost of foregoing the possibility of using counter-cyclical monetary policy is minimized.

- If BCS is strong, the likelihood of countries being subject to significant asymmetric shocks is reduced.

- Most important channel of BSC is trade integration (*Frankel-Rose*, *1998*).

Share of Exports to EA12 and EU27 (in percent), average of 2004-2006
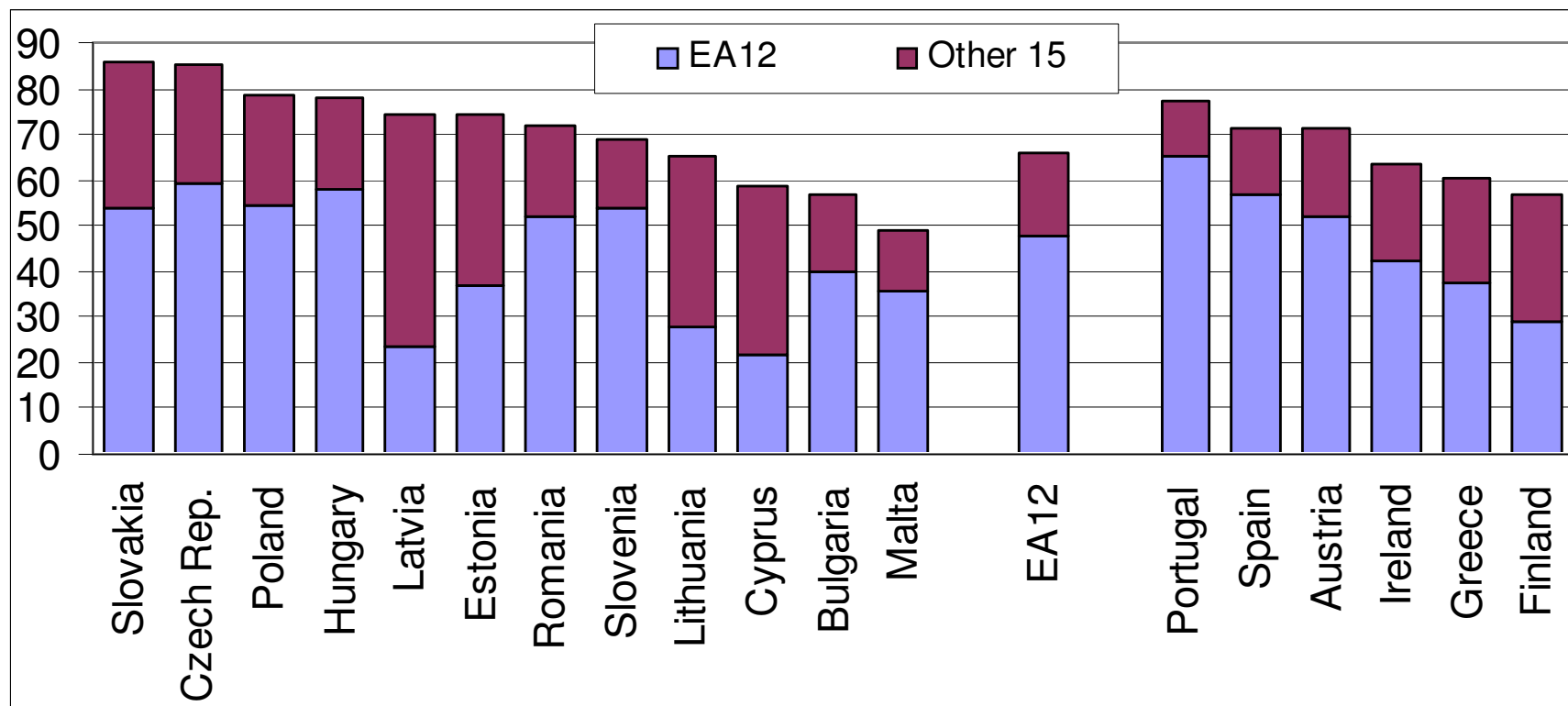
Source: Authors' calculation based on data from IMF: Direction of Trade Statistics.

Note: Value for EA12 is the weighted average of 12 individual euro area countries. Countries are ordered according to their export share to EU27.

Share of Exports to MERCOSUR-4, Associate members-6, and US (in percent), 2006
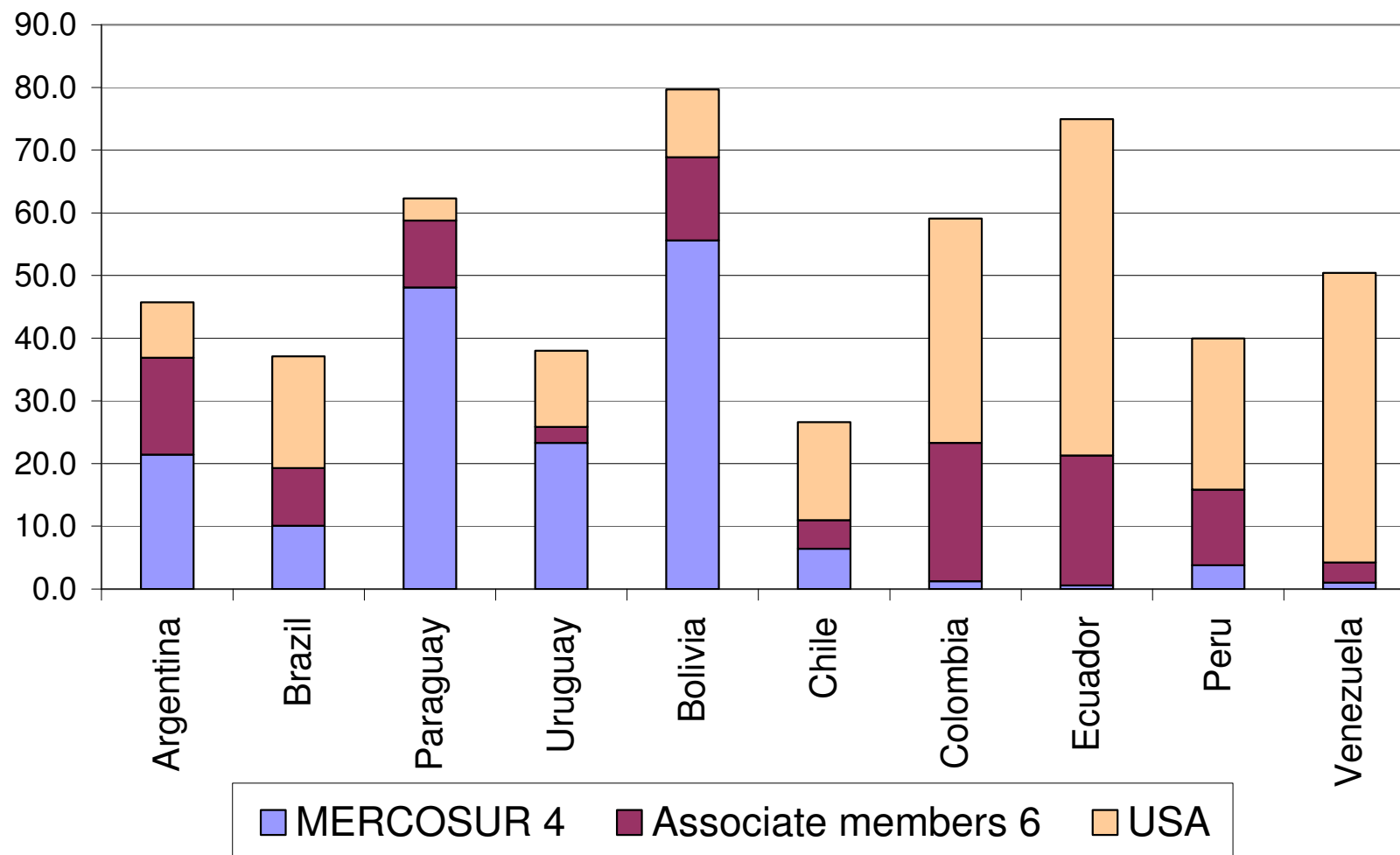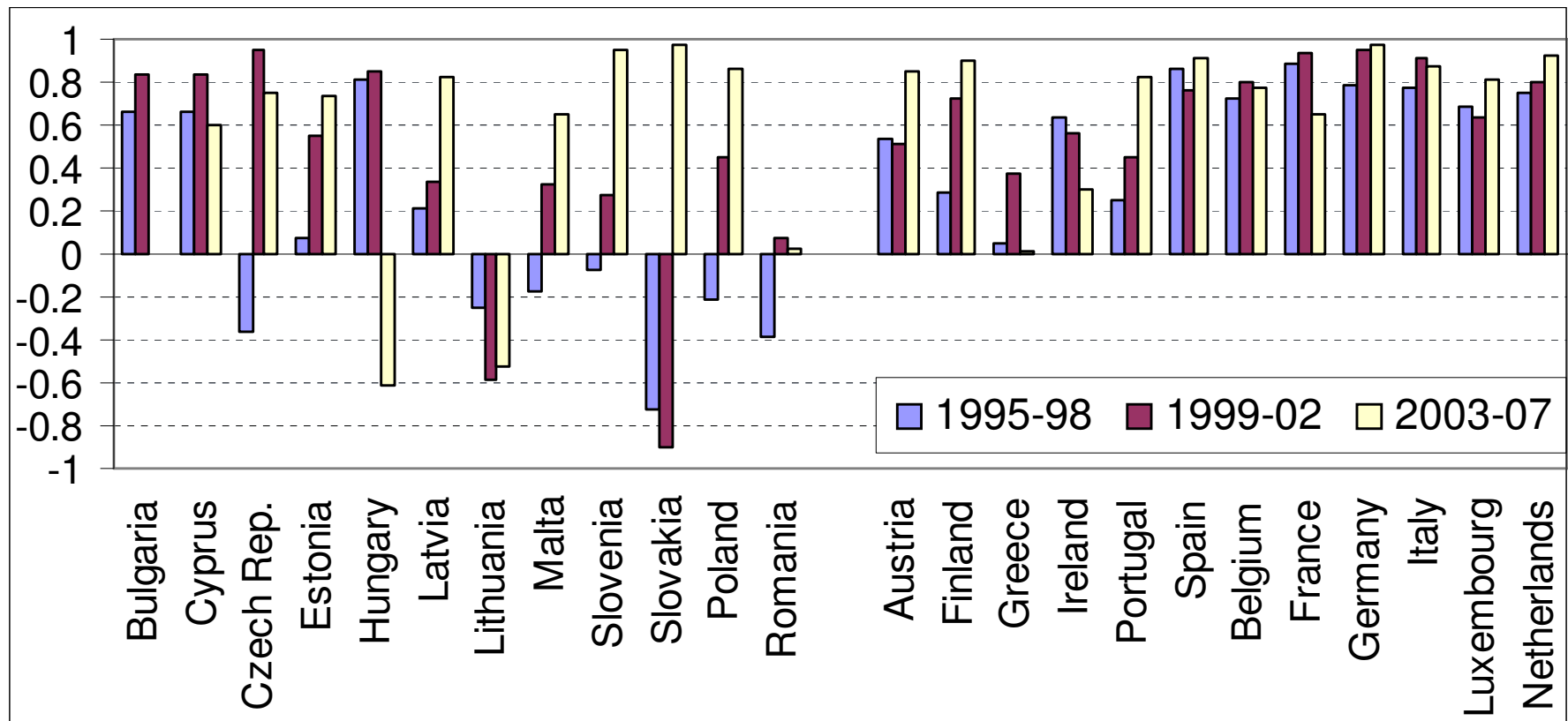
Trade Intensity in Asia
(in percent of total trade)

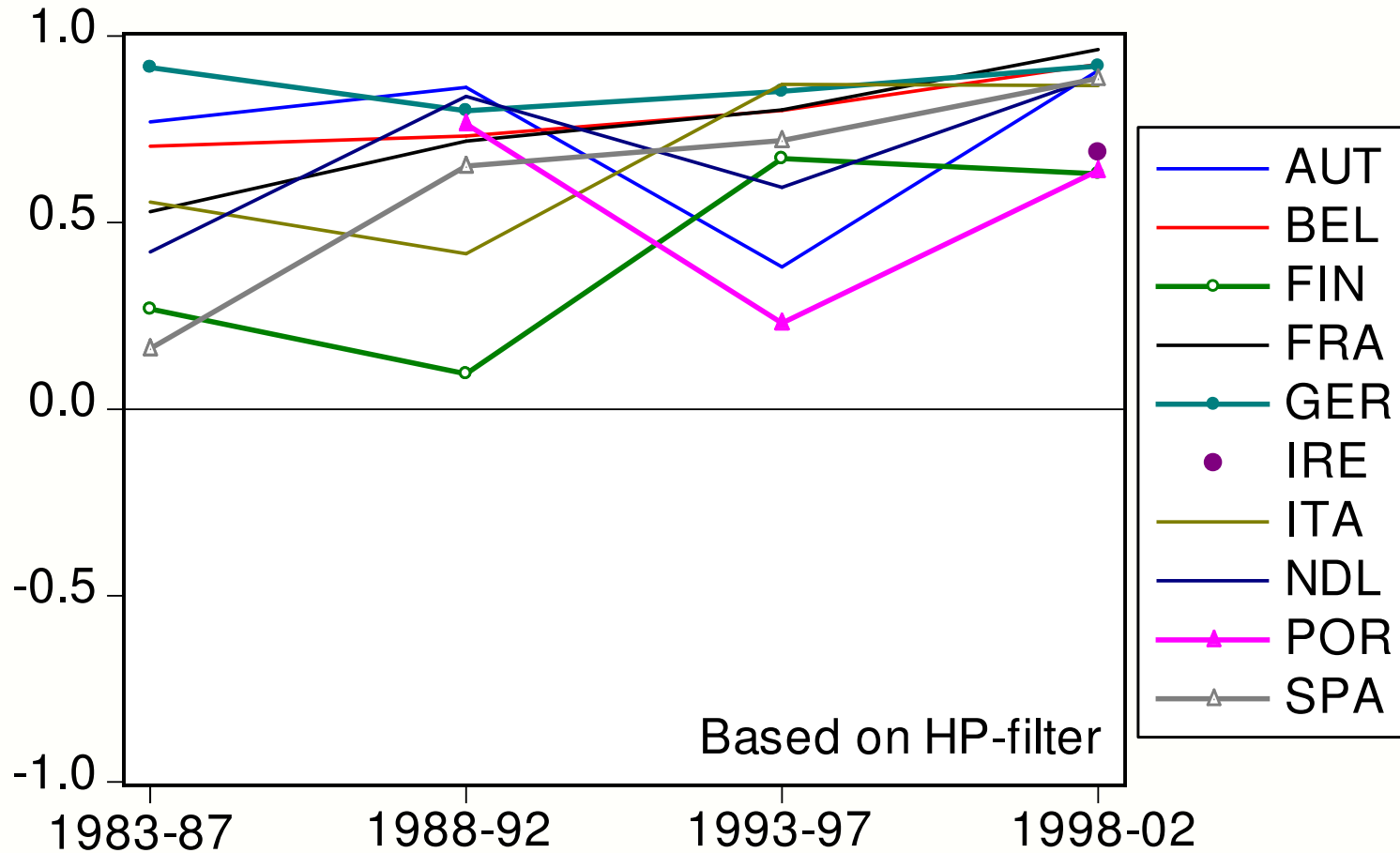|	Asia	US
Japan	30	30
China	31	23
Korea	37	23
Singapore	41	14
Indonesia	39	17
Malaysia	39	24
Philippines	40	26
Thailand	41	19

Source: IMF

Business Cycle Synchronisation with the EA12, 1995-2007 Using the Hodrick-Prescott filter

BCS in the EMU

BSC in the EU

- BCS has increased due to trade integration, endogeneity, Maastricht (less home made idiosyncratic shocks, like fiscal shocks)

- See *Darvas-Szapáry (2008a) and (2008b)* for BCS in enlarged EU

Relevance of European Experience for Latin America

- Assess how strong is BCS in Latin America. Presumably not strong because trade integration rather weak.

- Look at how similar are production structures to reduce the likelihood of asymmetric shocks or the asymmetric effect of similar shocks. Several Latin American countries are exposed to commodity price fluctuations which may constrain BCS.

- Degree of real convergence matter: some evidence that catching up economies have „stretched-out" cycle.

- Similarity of macroeconomic policies matter: strong evidence that fiscal divergence is idiosyncratic (*Darvas-Rose-Szapáry, 2005).*
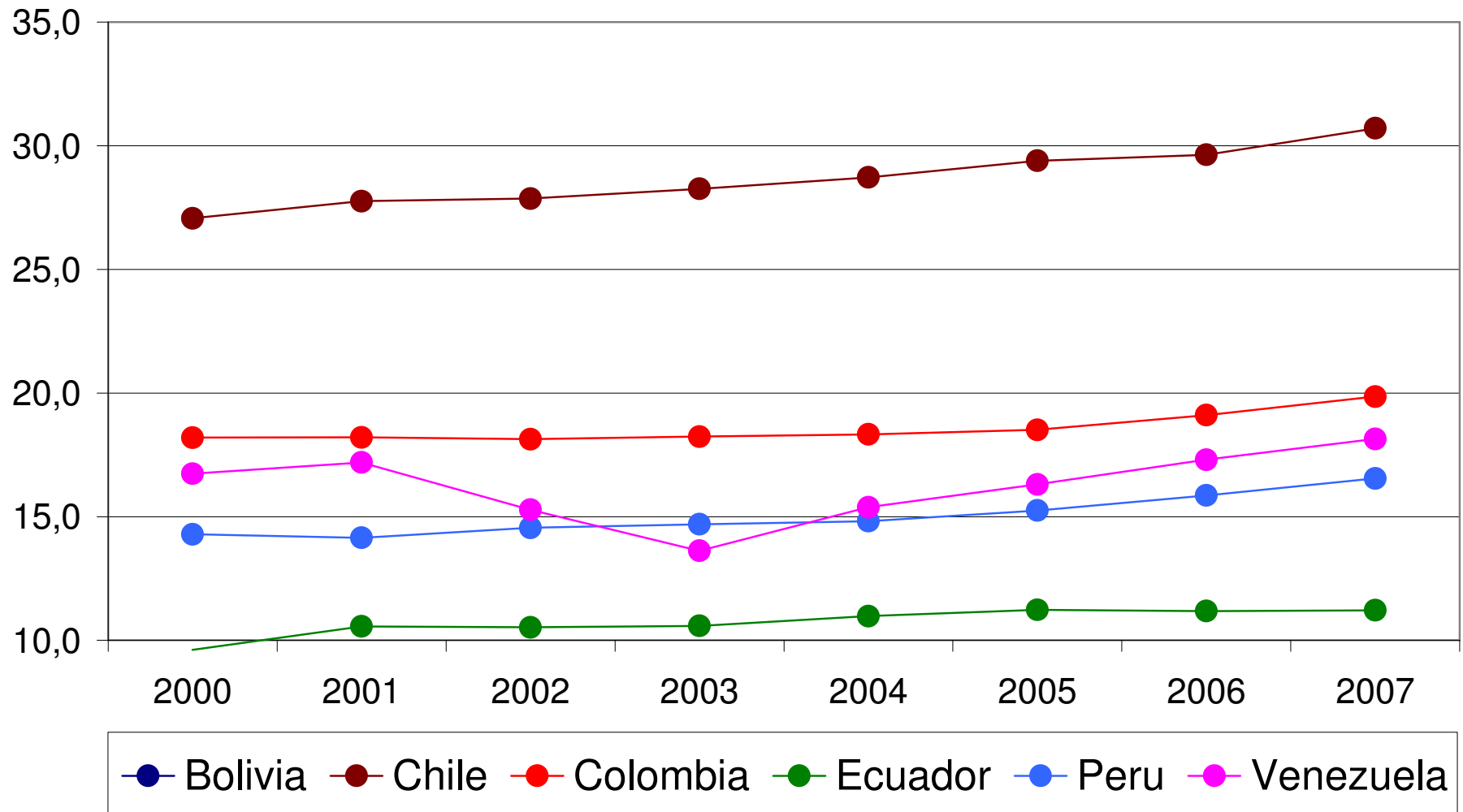
GDP per Capita (1)

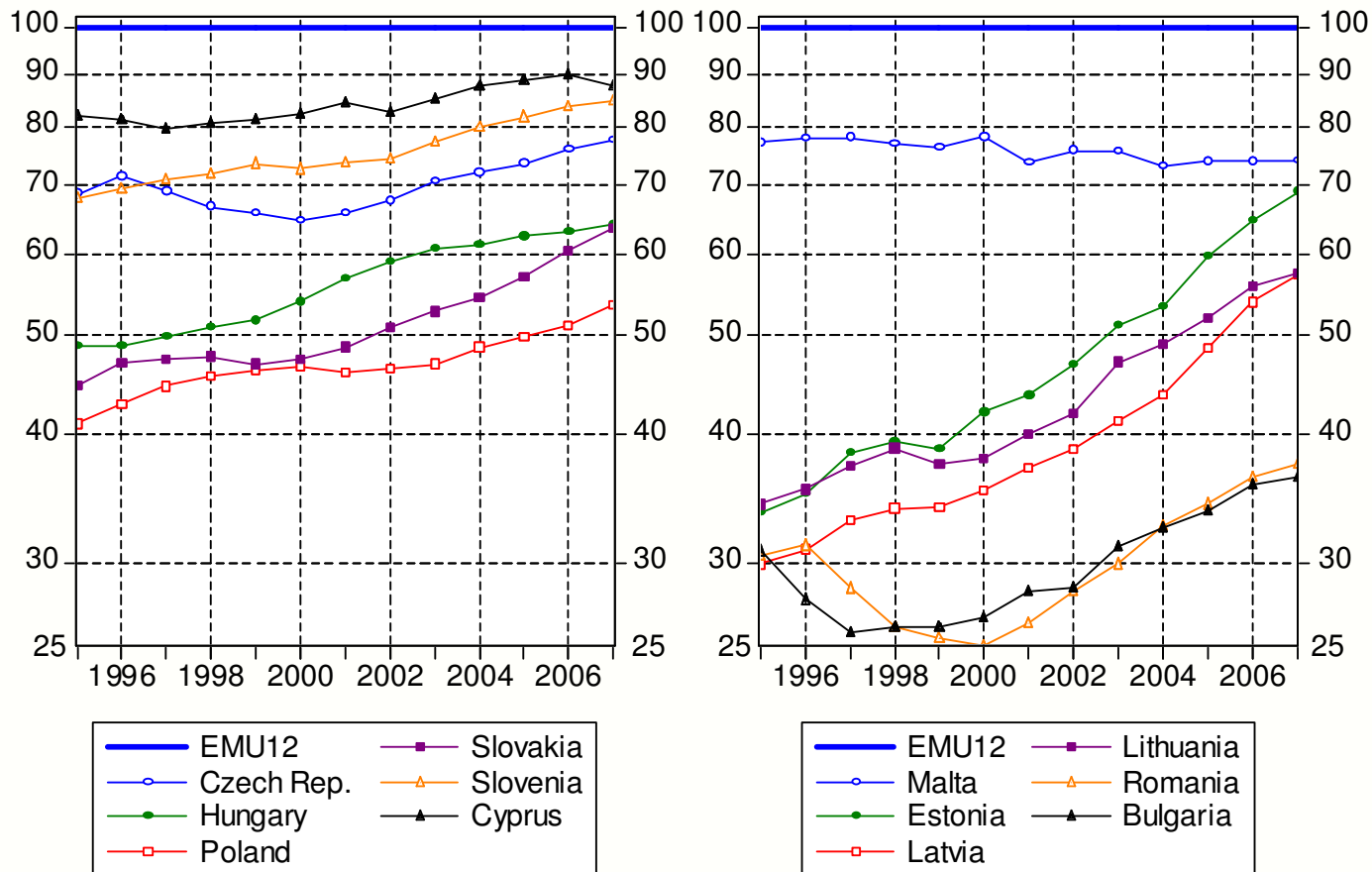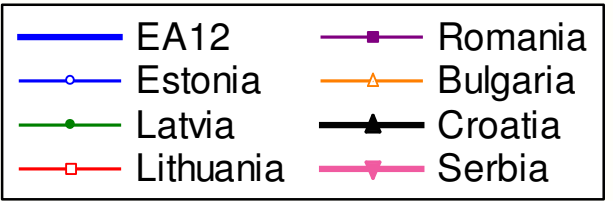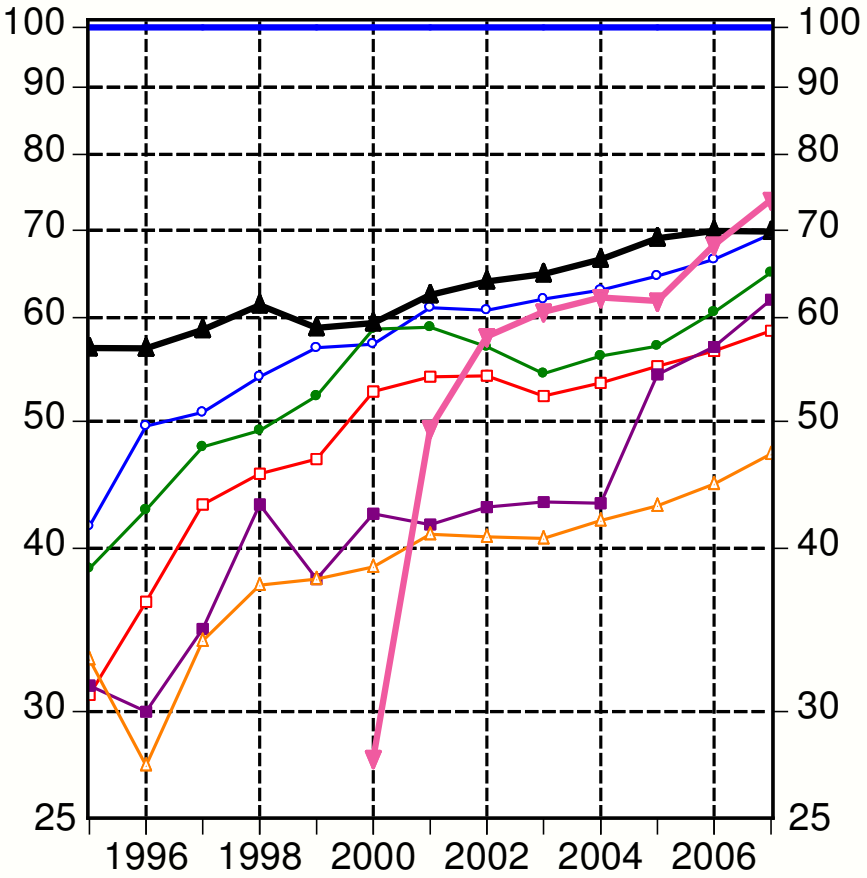**Per capita GDP at purchasing-power-parity (% of USA)**
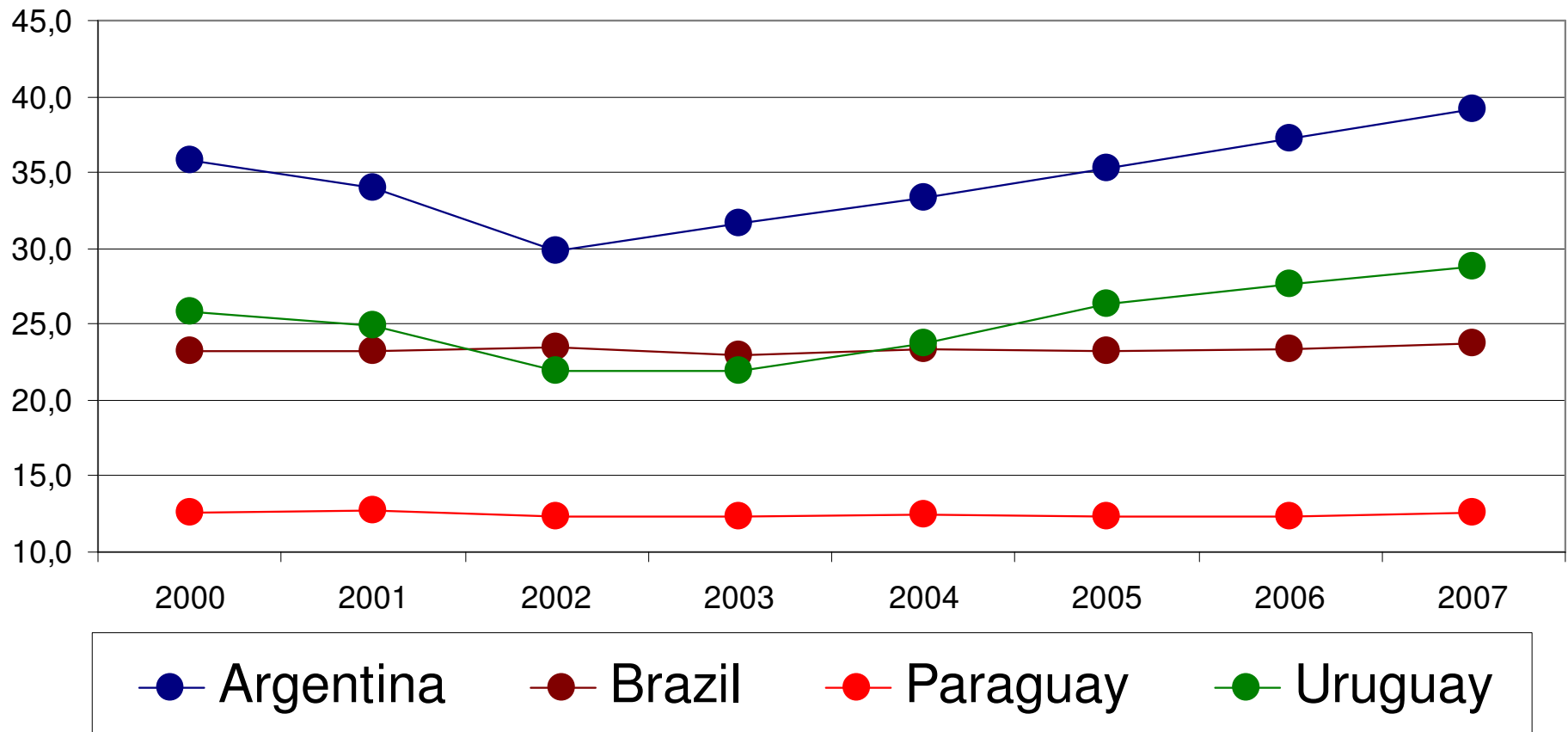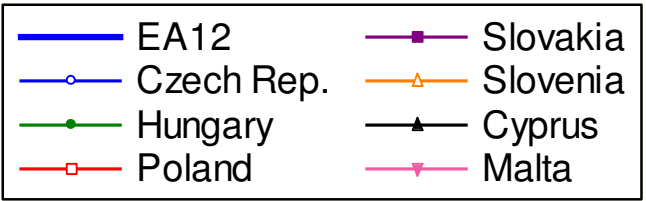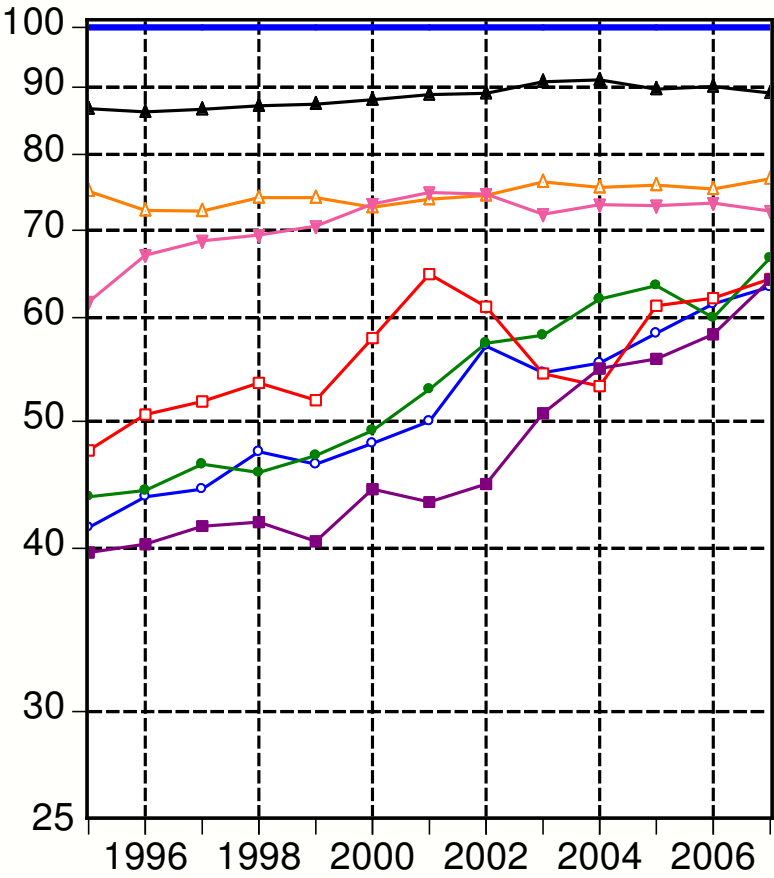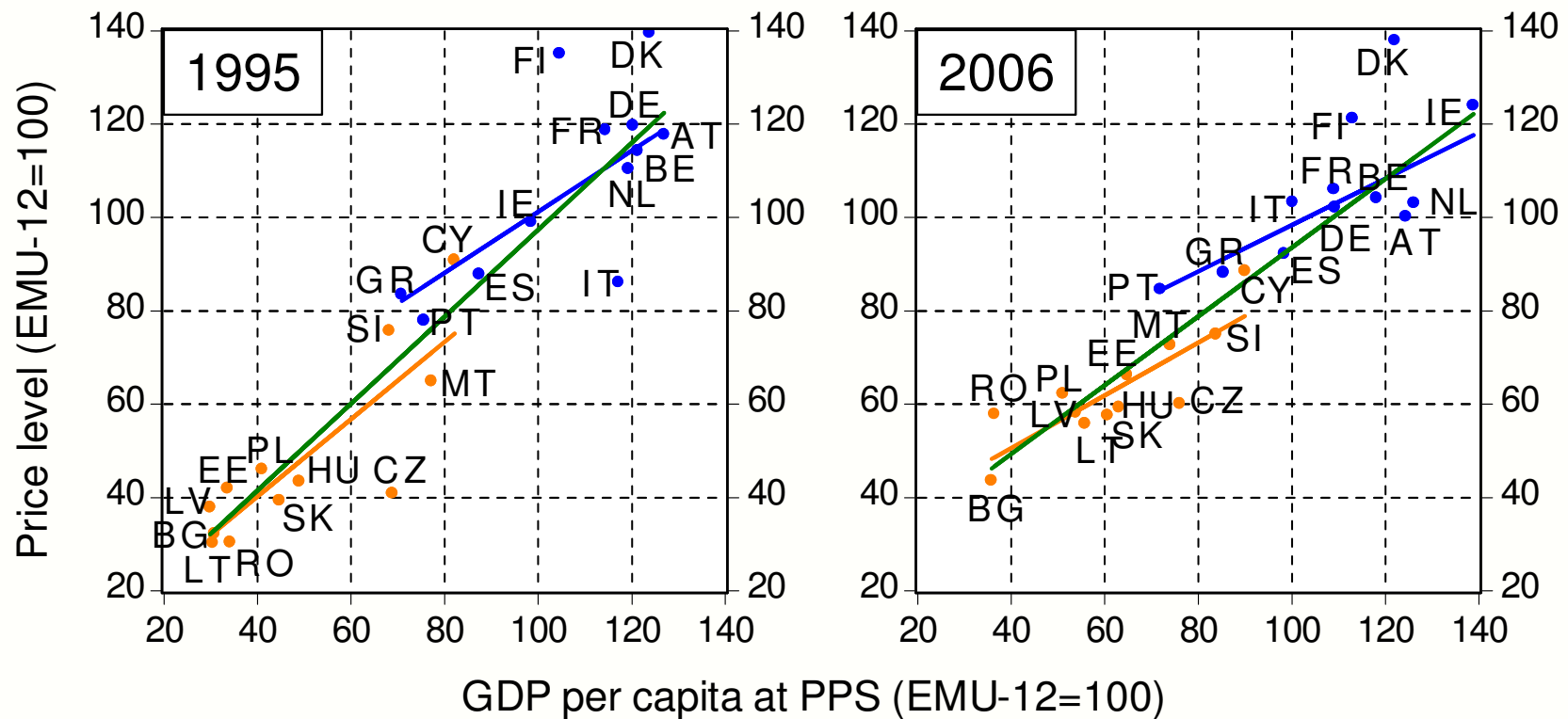
GDP per Capita (2)

Per capita GDP at purchasing-power-parity (% of USA)

GDP per Capita at PPP in the EU New Members (in percent)

Price level convergence (EMU12=100)

Left chart legend: EA12, Czech Rep., Hungary, Poland, Slovakia, Slovenia, Cyprus, Malta

Right chart legend: EA12, Estonia, Latvia, Lithuania, Romania, Bulgaria, Croatia, Serbia
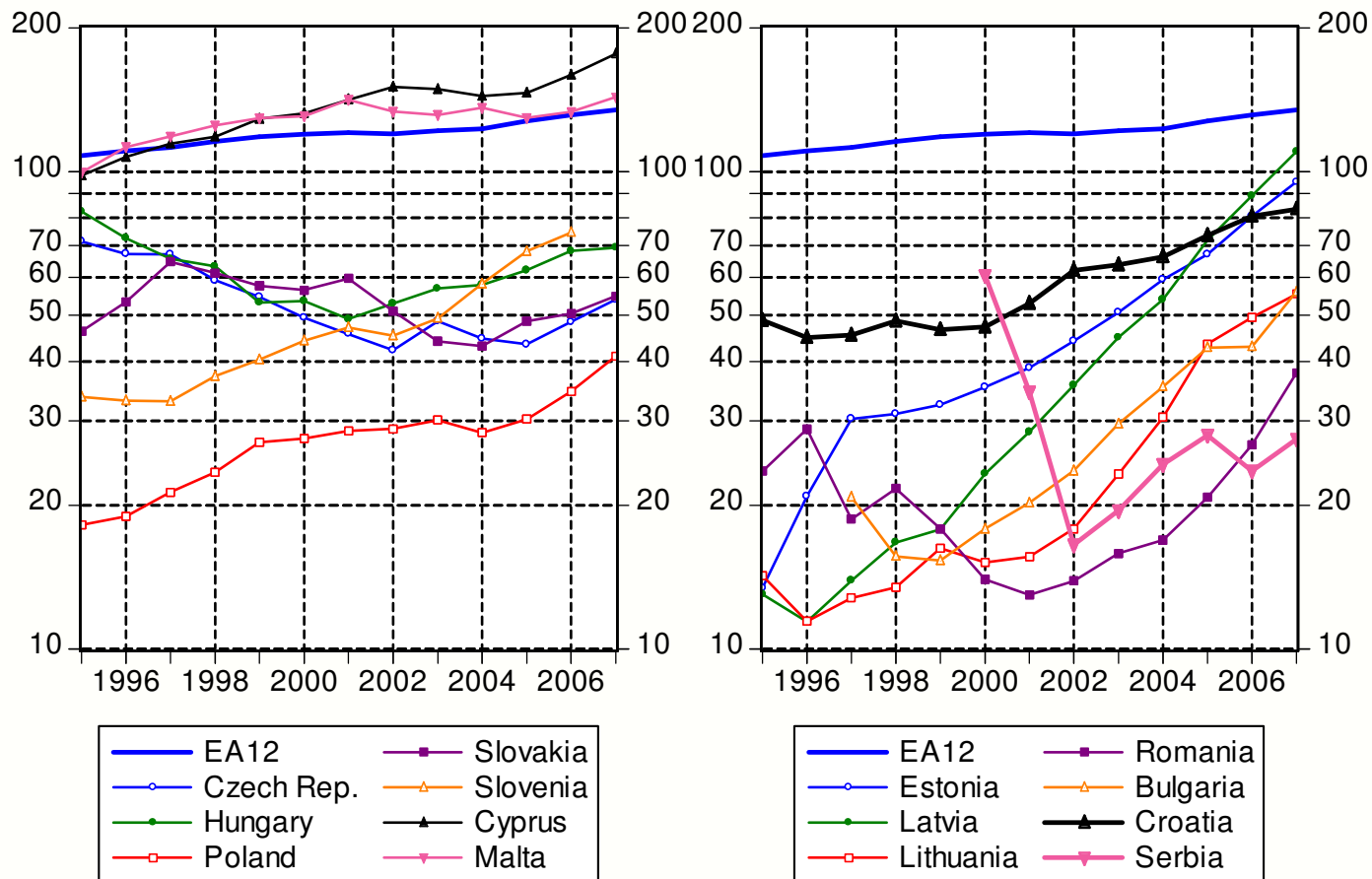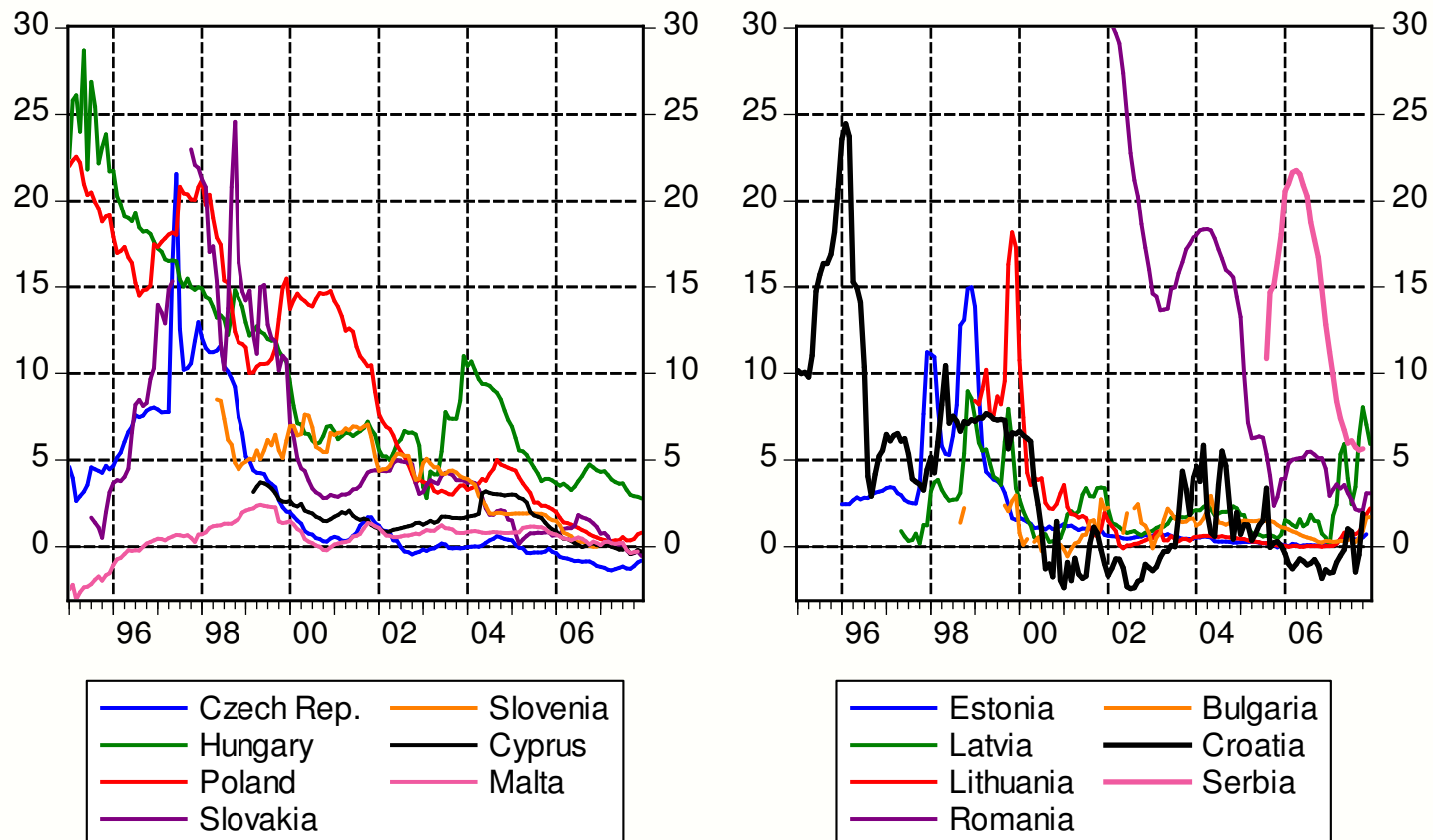
Illustrative model of price level convergence: *the key determinant of price level is GDP per capita*
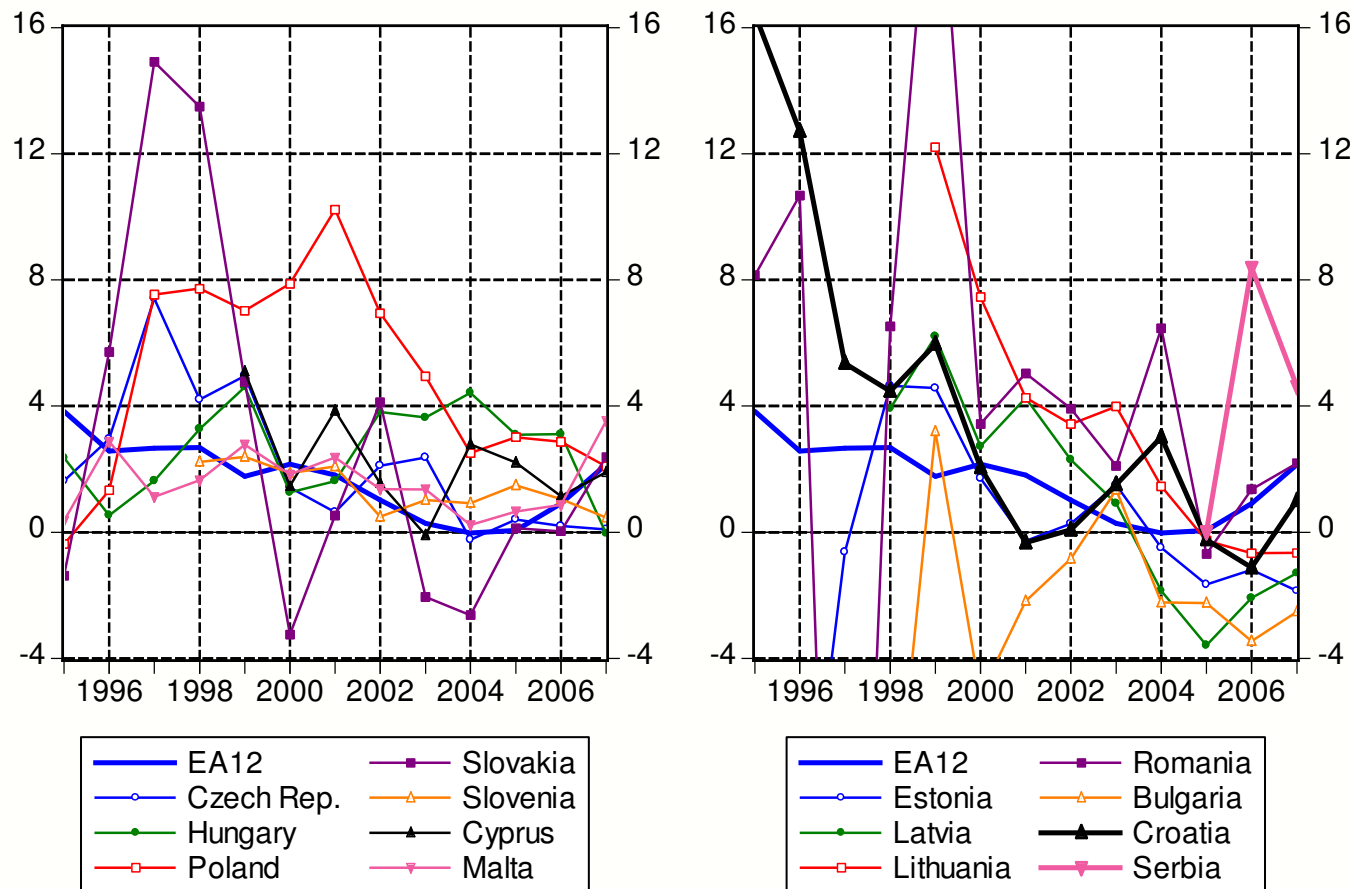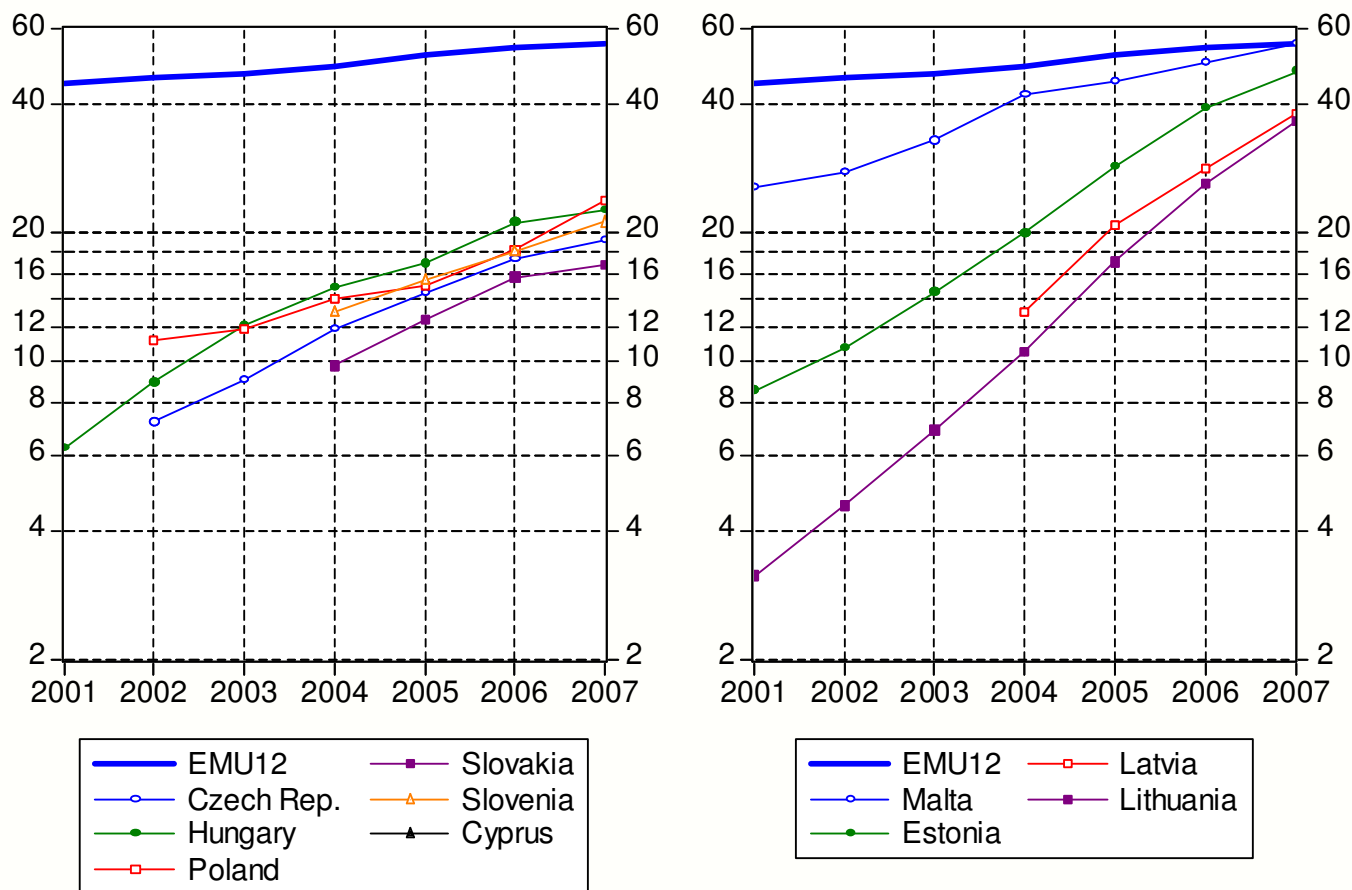
Domestic **credit** / **GDP**

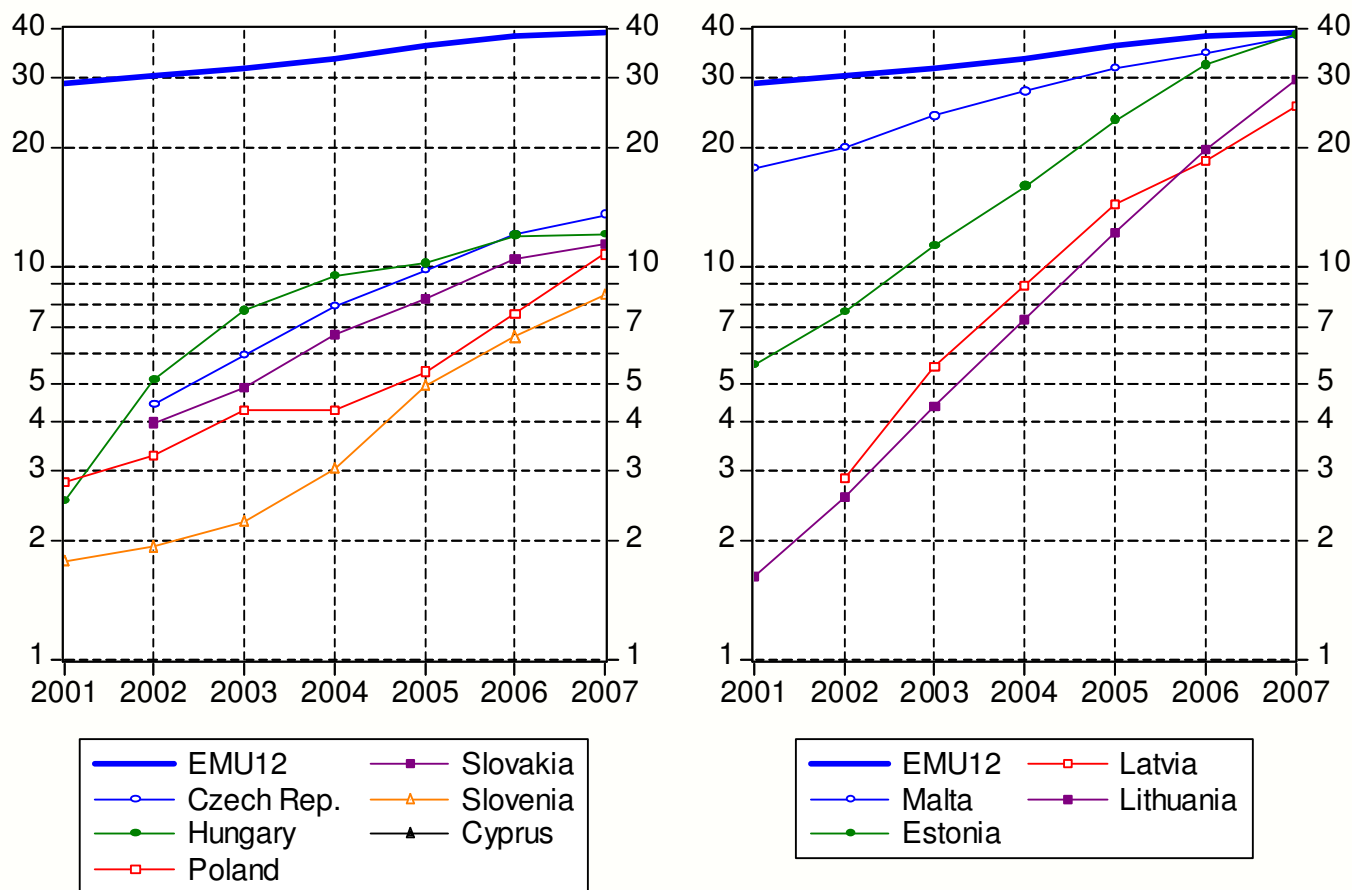# 3-month interbank interest rate differential

3-month interbank real interest rate

Household loans / GDP

# Household mortgage loans / GDP

GDP per capita, credit growth, inflation

	GDP per capita at		Credit growth	Inflation
	1995	2007	average of 2004-2007	
Cyprus	82	88	11.2	2.0
Malta	77	74	7.4	2.0
Czech Rep.	69	78	11.6	2.1
Slovenia	68	85	23.8	3.0
Hungary	49	64	13.3	5.7
Slovakia	45	64	17.1	4.1
Poland	41	54	17.5	2.3
Lithuania	34	58	42.6	3.1
Estonia	34	69	34.8	4.3
Bulgaria	31	36	29.5	6.3
Romania	30	38	47.2	7.9
Latvia	30	57	52.9	7.1
EMU12	100	100	3.9	2.1

Contribution to GDP Growth, averages of 1997-2001 (left column) and 2002-2006 (right column)
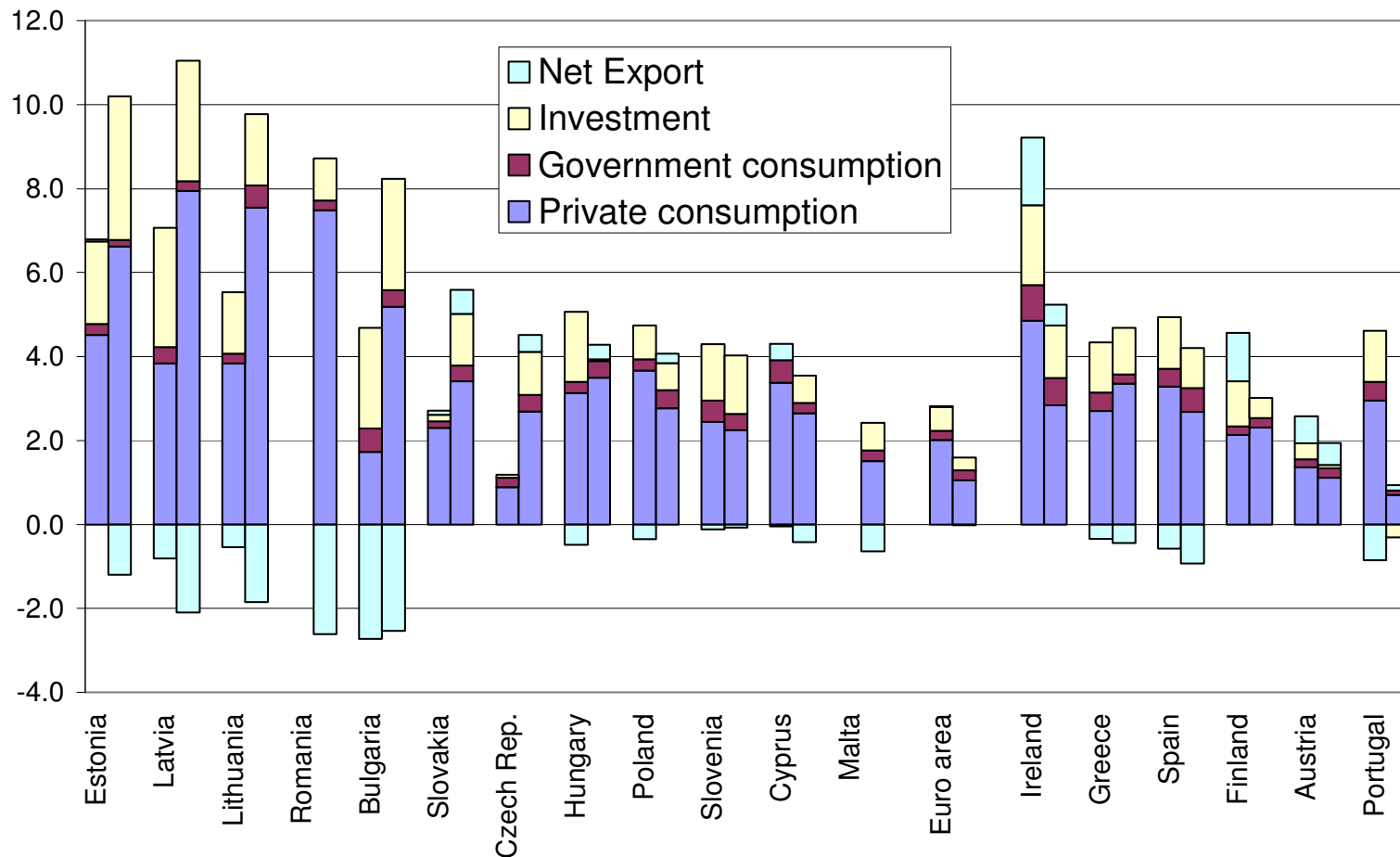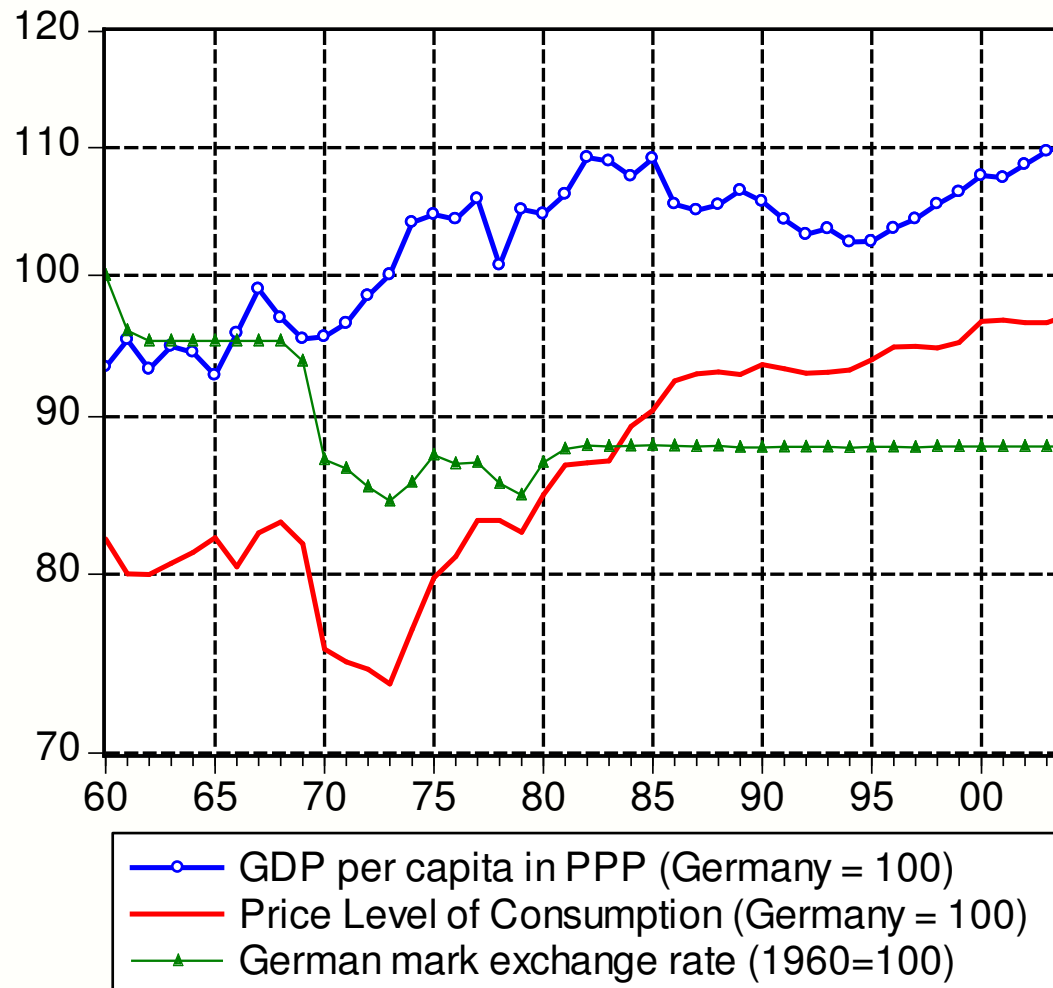
Current account balance / GDP
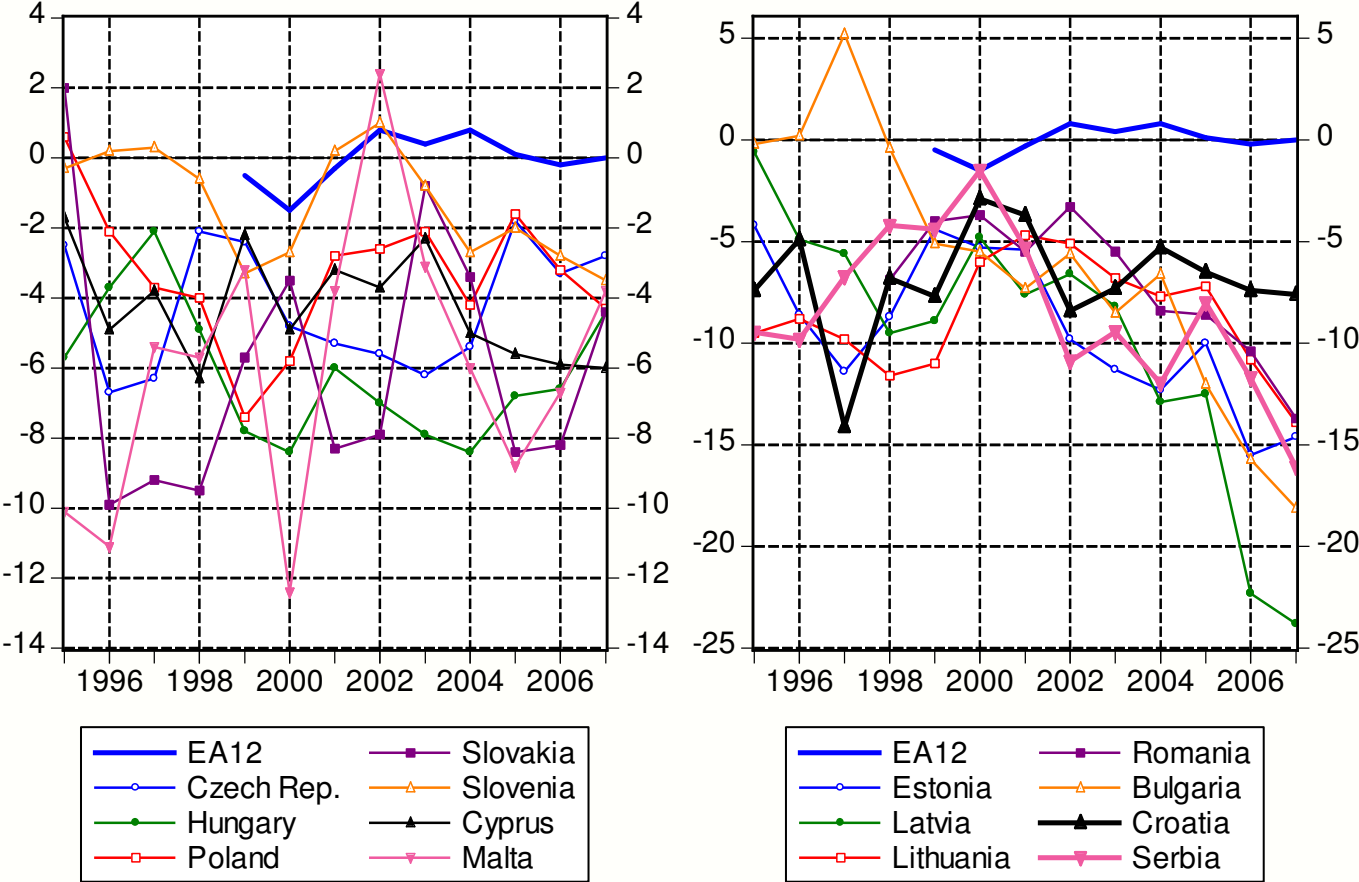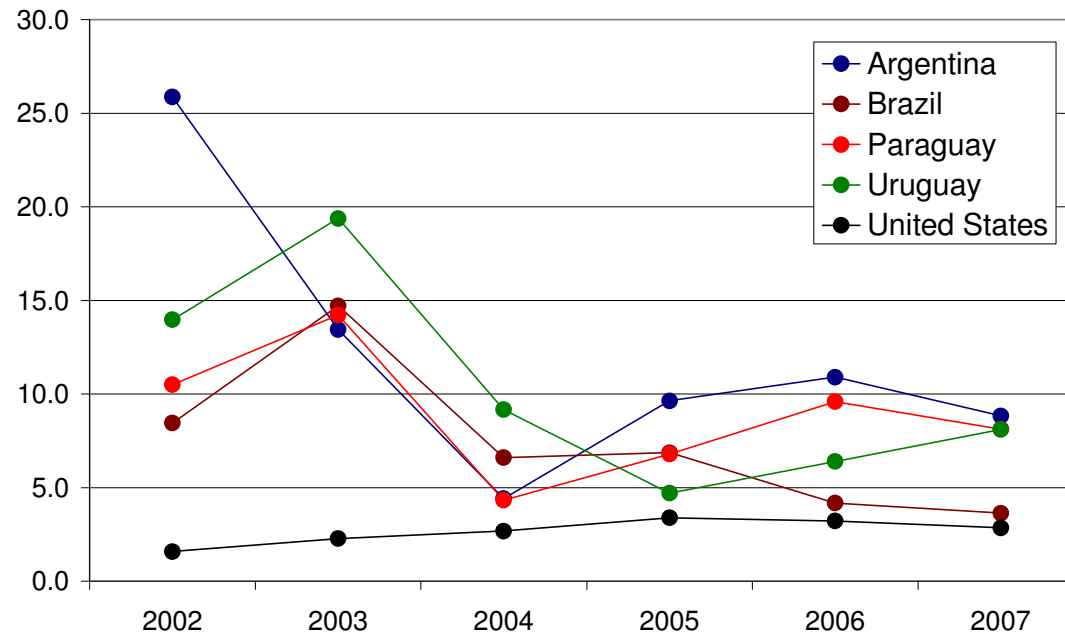
Catching-up

- Risks of credit boom, inflation , large current account deficits.

- Catching-up is easier to manage with floating rate when real GDP gap is large.

- What is a reasonable gap to irrevocably fix the exchange rate? Difficult to say *ex ante.* Some guide: Austria's experience.
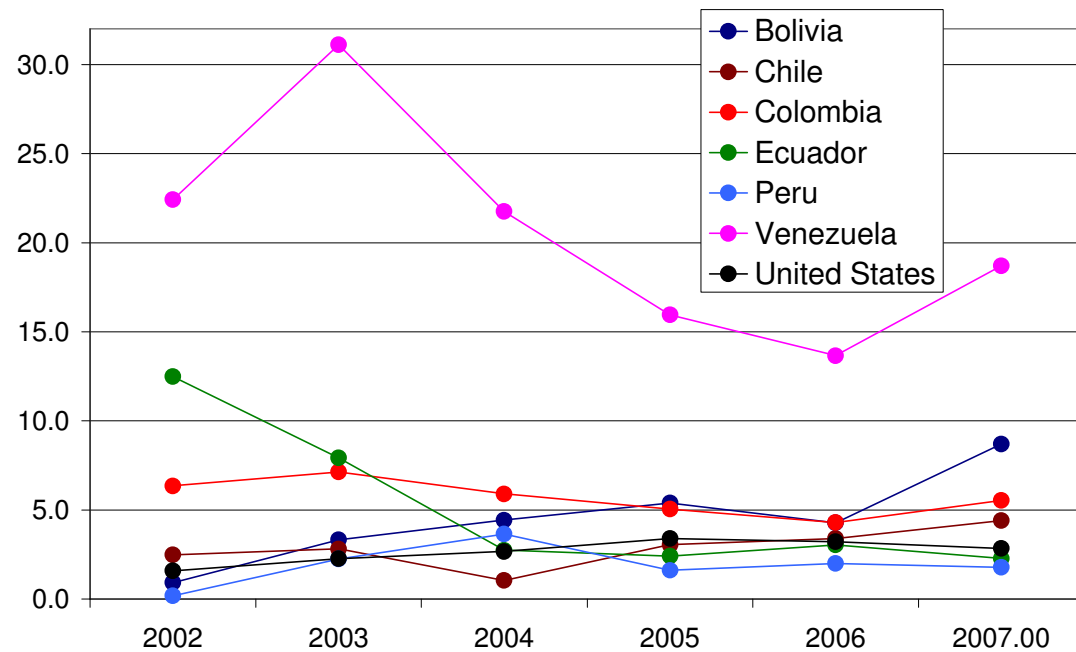
Catching-up of Austria to Germany

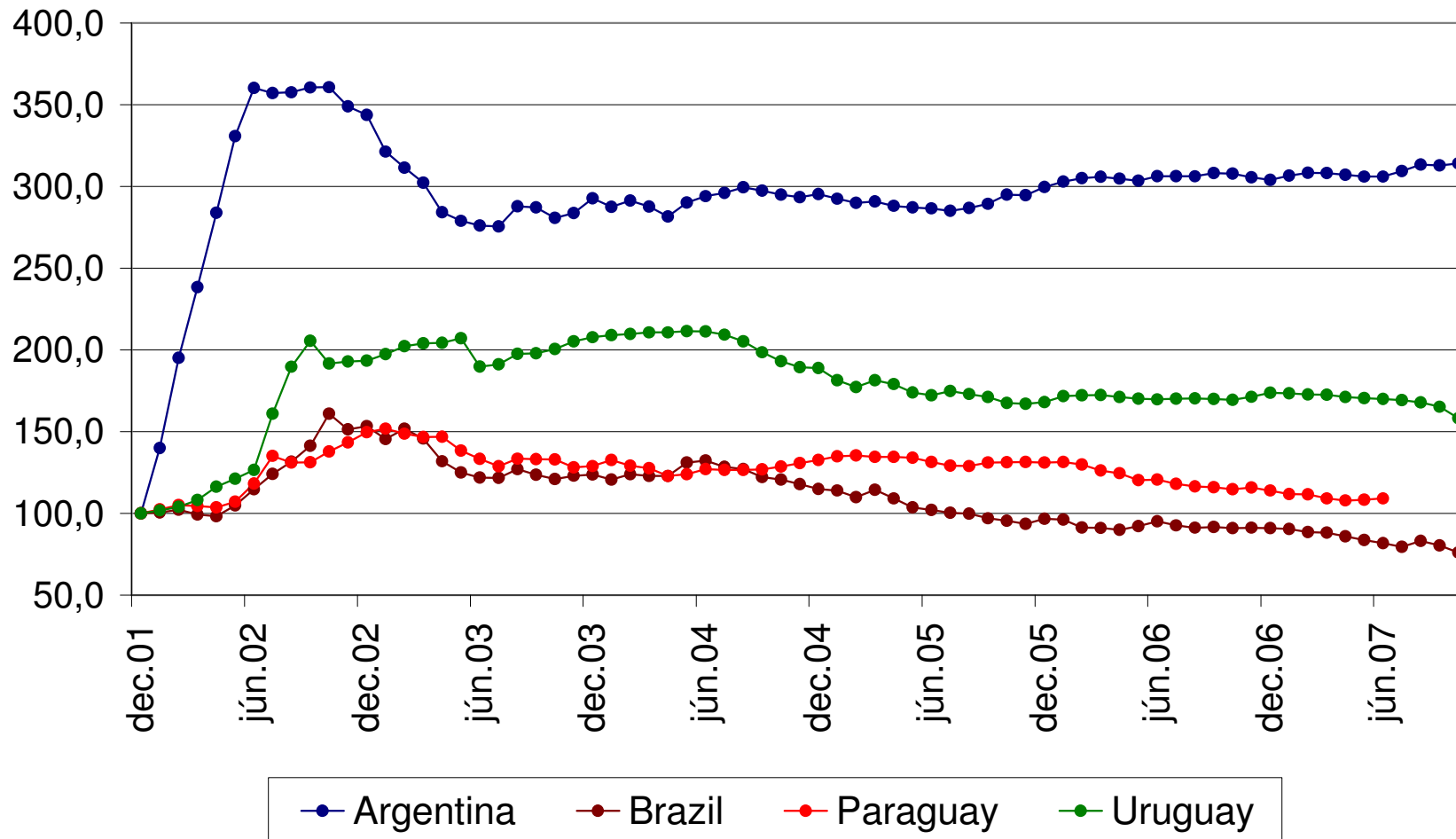# Infaltion (1)
(in percent)

Iflation (2)
(in percent)

Exchange Rate Developments in Latin America (1)

Exchange rate against the US dollar (December 2001=100)

Exchange Rate Developments in Latin America (2)

Exchange rate against the US dollar (December 2001=100)
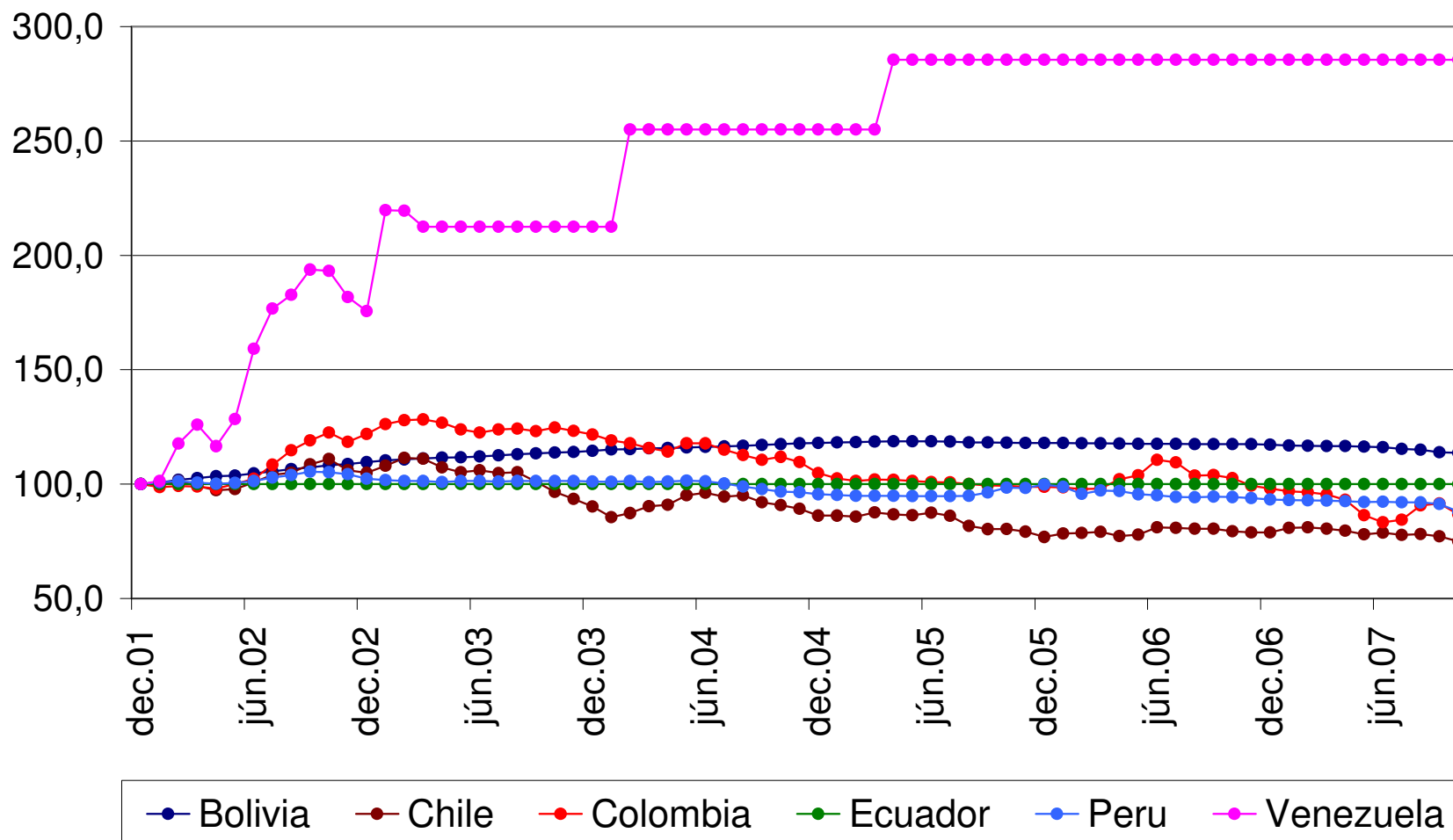
US Dollar-Asian Exchange Rates

Legend:
- INDONESIA/@ELEM(INDONESIA,"1999M01")
- KOREA/@ELEM(KOREA,"1999M01")
- MALAYSIA/@ELEM(MALAYSIA,"1999M01")
- SINGAPORE/@ELEM(SINGAPORE,"1999M01")
- PHILIPPINES/@ELEM(PHILIPPINES,"1999M01")
- THAILAND/@ELEM(THAILAND,"1999M01")

György Szapáry Central European
University Budapest

Yen-Asian Exchange Rates

INDONESIA_JPY/@ELEM(INDONESIA_JPY,"1999M01")
KOREA_JPY/@ELEM(KOREA_JPY,"1999M01")
MALAYSIA_JPY/@ELEM(MALAYSIA_JPY,"1999M01")
SINGAPORE_JPY/@ELEM(SINGAPORE_JPY,"1999M01")
PHILIPPINES_JPY/@ELEM(PHILIPPINES_JPY,"1999M01")
THAILAND_JPY/@ELEM(THAILAND_JPY,"1999M01")

Current Account (1) (in percent of GDP)
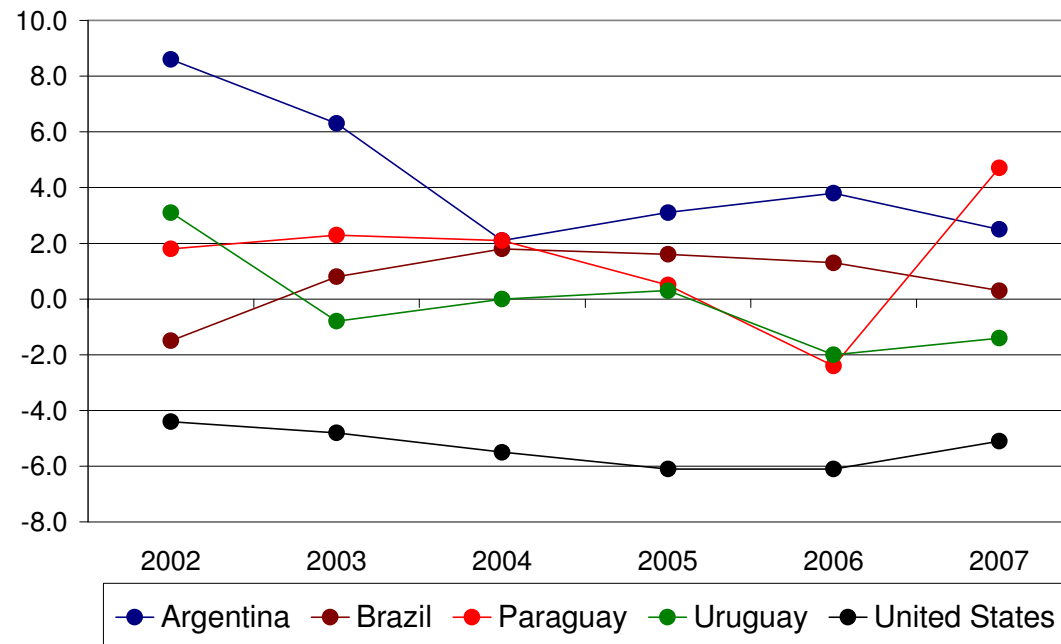
Current Account (2) (in percent of GDP)

Budget Balance (1)
(in percent of GDP)

Budget Balance
(in percent of GDP)

Conclusions (1)

- ***Conditions for countries contemplating to enter into a monetary union:***
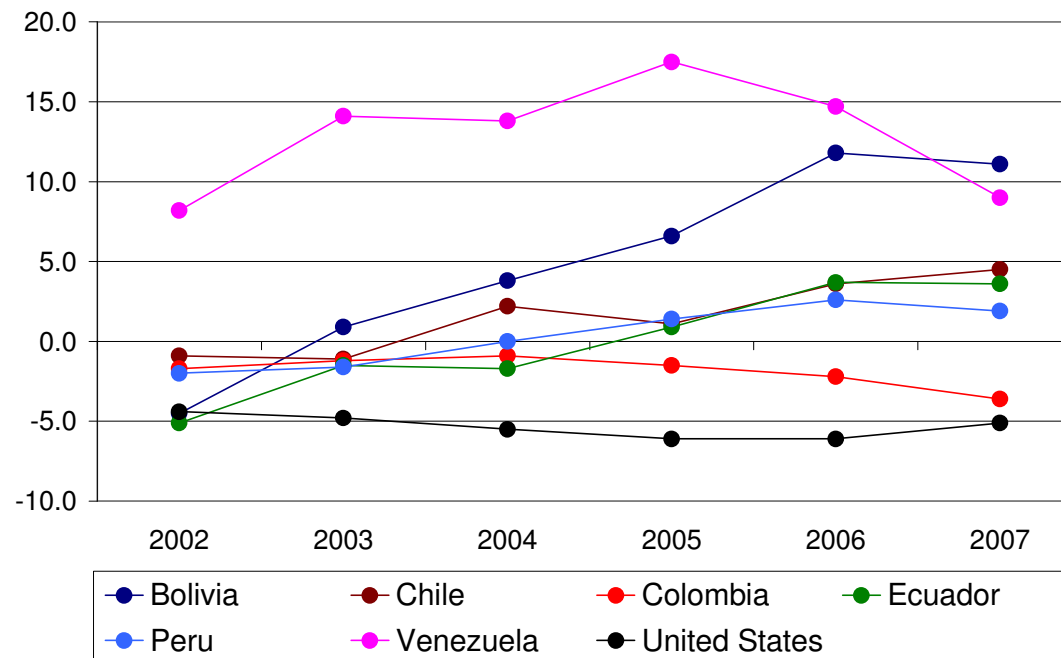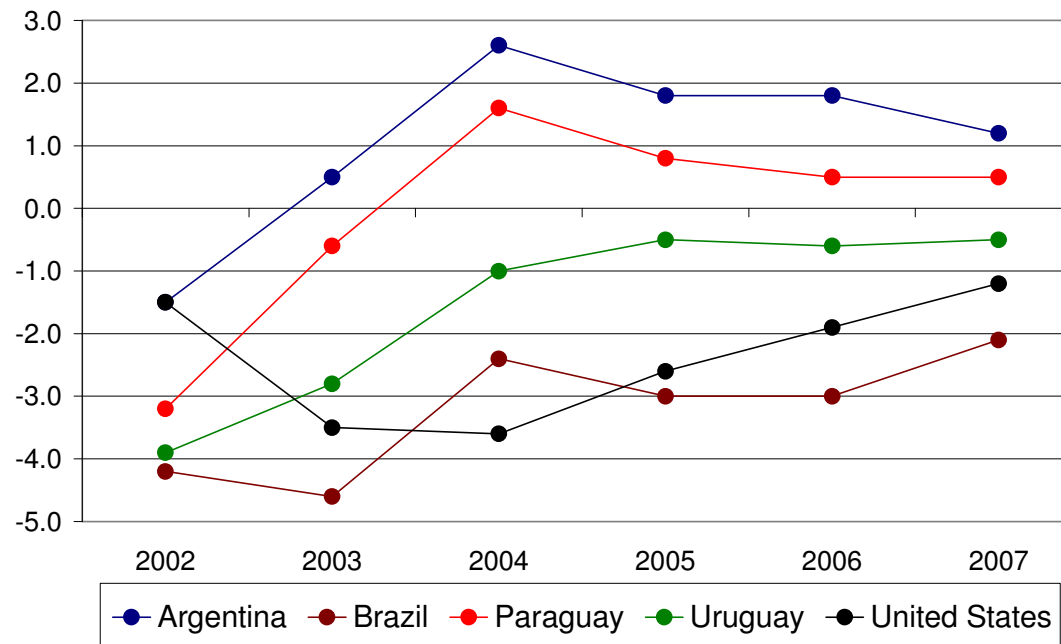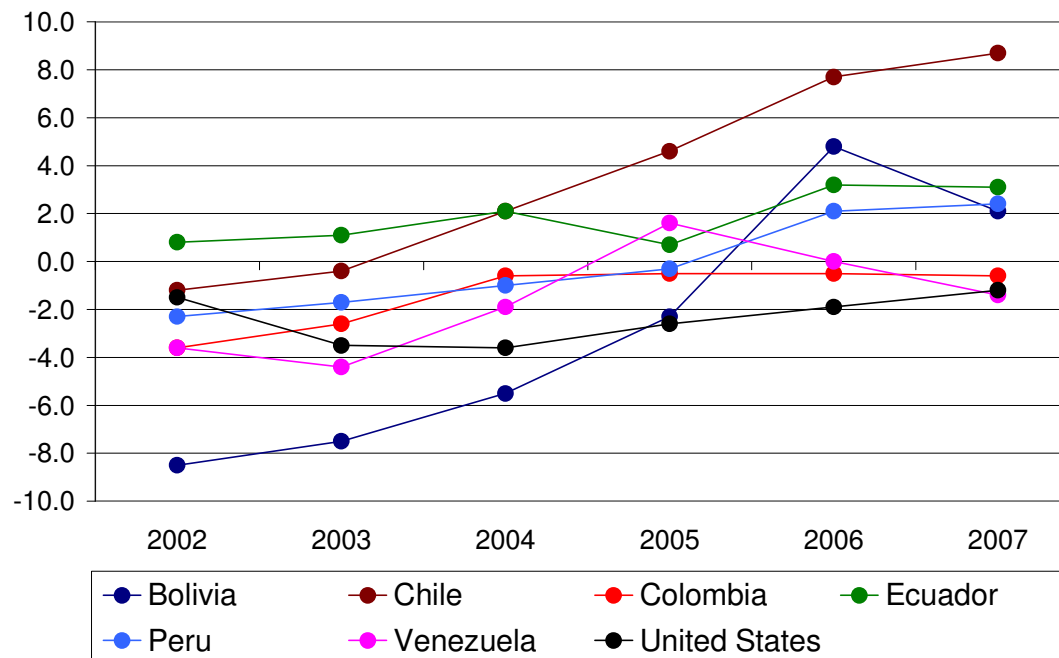- No substantial differences in trend GDP growth, but then what about catching-up?
- Free movement of goods and capital.
- A fair degree of trade integration and BSC, but there is also endogeneity.
- Convergence of monetary and fiscal policies that leads to convergence of inflation, interest rates and fiscal deficits (as a ratio of GDP).
- A period of free capital mobility preceding entry is essential to avoid entering with the wrong exchange rate (*raison d'etre* of ERMII).

Conclusions (2)

- Strong competitive banking system to handle global capital flows and to ensure efficient monetary transmission.
- No substantial difference in production structures and in the degree of real convergence.
- Liberalize prices before entering, if necessary.
- **Main risks:** within a currency union, the main channel of adjustment is the competitiveness channel through wages and prices, a tough act for regaining lost competitiveness.

Conclusions (3)

- Need **coordination** of policies. In the EU this is done by:
- **Rules**: Maastricht criteria, Stability and Growth Pact.
- **Surveillance** frameworks: Excessive Deficit Procedures, Convergence Reports, Stability Reports. Lisbon Agenda.
- **Frequent meetings** at different levels: eg, Finance Ministers (ECOFIN), Deputies (EFC).
- Political coordination at broader level.
- Coordination took several decades in EU and still needs much strengthening.

References

- Frankel, J.A. and Rose, K.A.,(1998), '"The Endogeneity of the Optimal Currency Area, *The Quarterly Journal of Economics, May*

- Darvas, Zs. and Gy. Szapáry (2008a), "Euro Area Enlargement and Euro Adoption Strategies", *European Economy, Economic Papers, Number 304, EU Commission.*

- Darvas, Zs. and Gy. Szapáry (2008b), "Business Cycle Synchronization in the Enlarged EU", *Open Economies Review, Vol. 19(1), pp. 1-19*

- Darvas, Zs., A. Rose and Gy. Szapáry (2007): "Fiscal Divergence and Business Cycle Synchronization: Irresponsibility is Idiosyncratic", in Frankel, J. and C. Pissarides(eds.), *NBER International Seminar on Macroeconomics 2005, MIT Press*