TALLINNA TEHNIKAÜLIKOOL
TALLINN UNIVERSITY OF TECHNOLOGY

DG ECFIN Seminar

"Joining the euro and then? How to ensure economic success after entering the common currency"

16 June 2015, Vilnius, Lithuania

Economic Growth and Convergence in the Baltic States: Caught in a Middle Income Trap?

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All viewpoints personal!

Menu

1) Setting the scene
2) Growth performance in the Baltics
3) Capital flows and economic growth
4) Puzzling data
5) The middle income trap

1) Setting the scene

Figure A.3: GDP per capita, Latin America, index, USA = 100

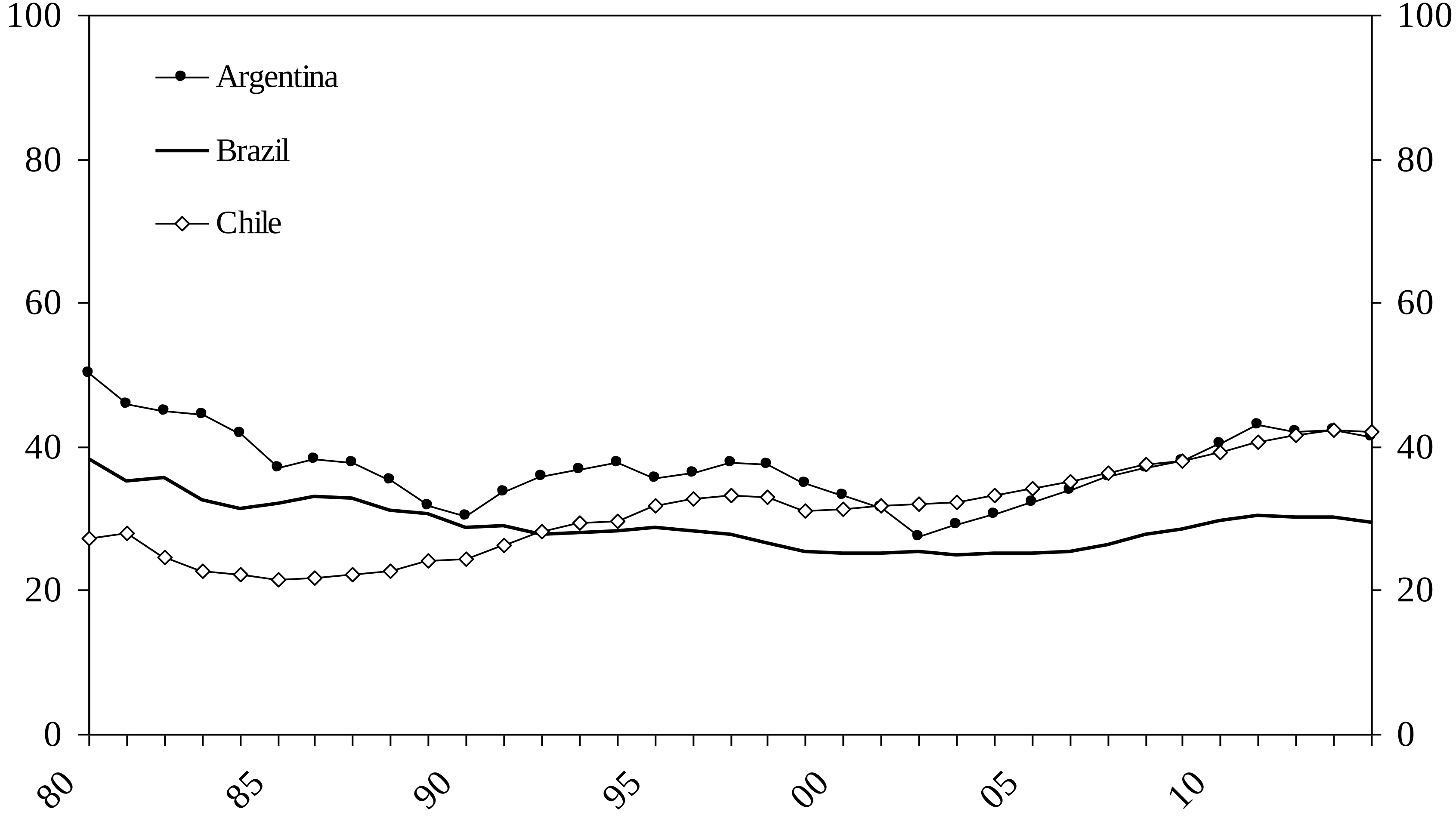


Figure A.2: GDP per capita, Asia, index, USA = 100

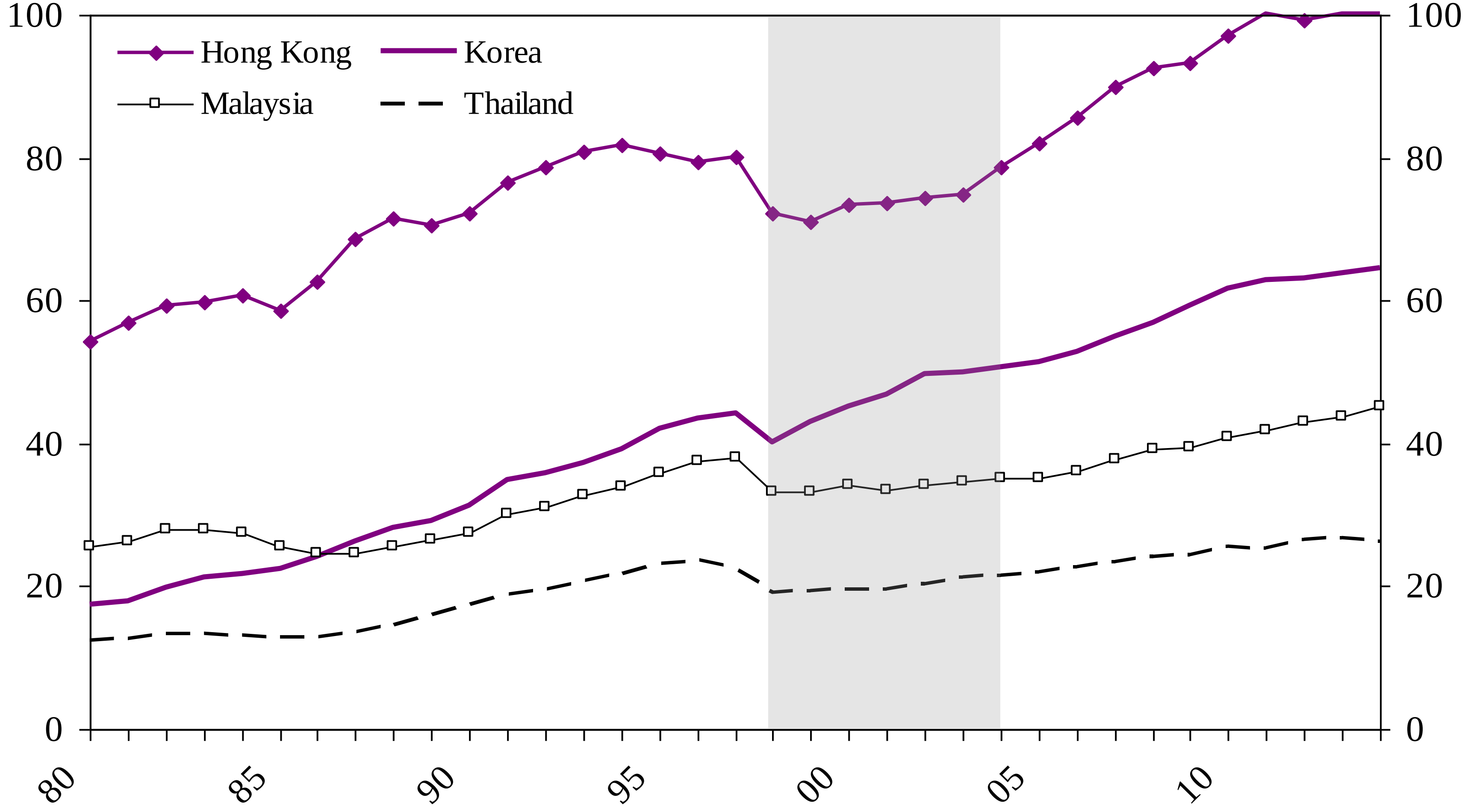
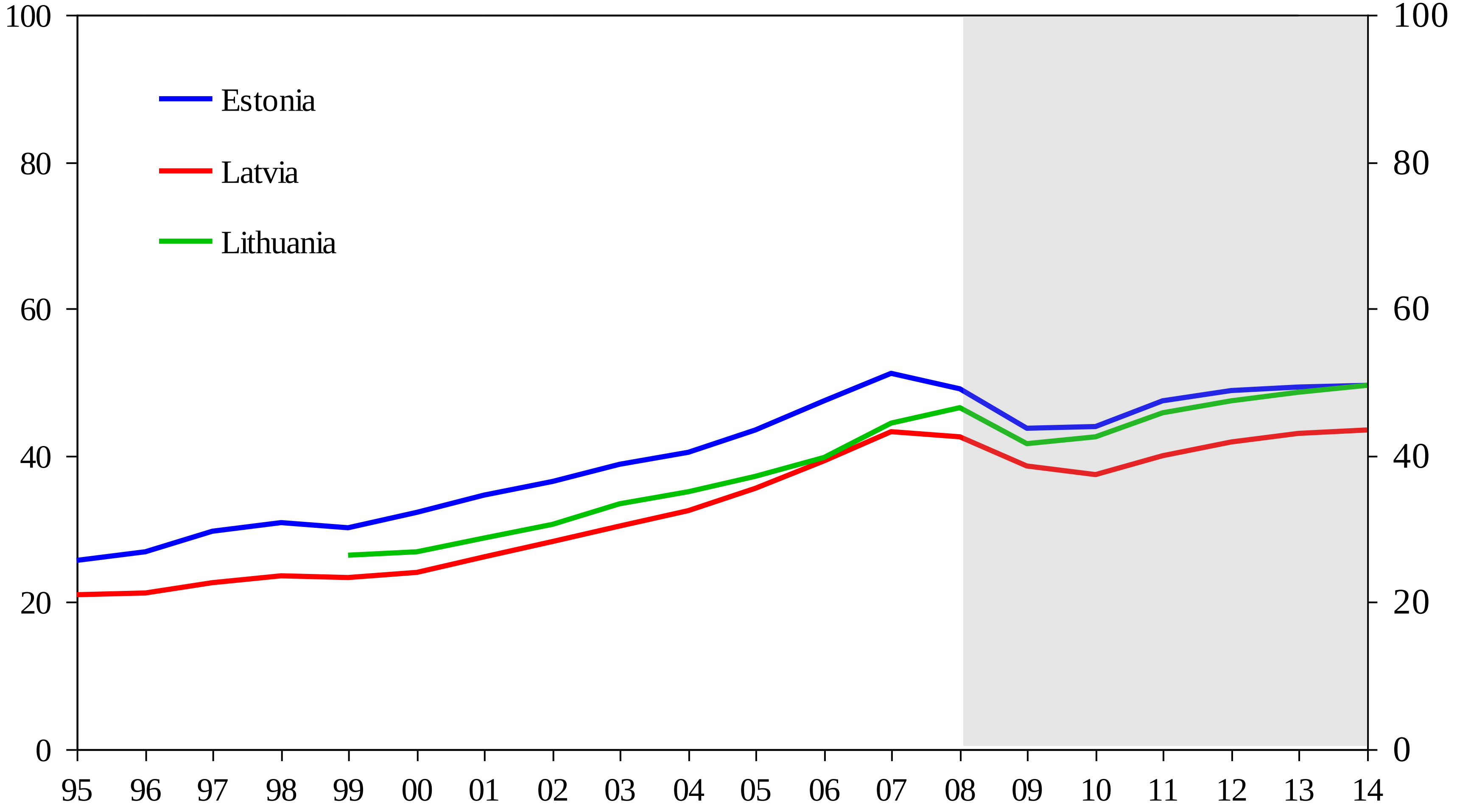


Figure A.1: GDP per capita, Baltic states, index, USA = 100



World Bank (2007)

- Middle income trap in some Asian countries…
  - Growth spurt followed by growth slowdown
- Vivid academic and policy-oriented debate

Next 17½ minutes

- Risk that Baltic states are / will be caught in middle income trap?

2) Growth performance in the Baltics

Figure 1: GDP growth, Baltic states and EU15, percent per year

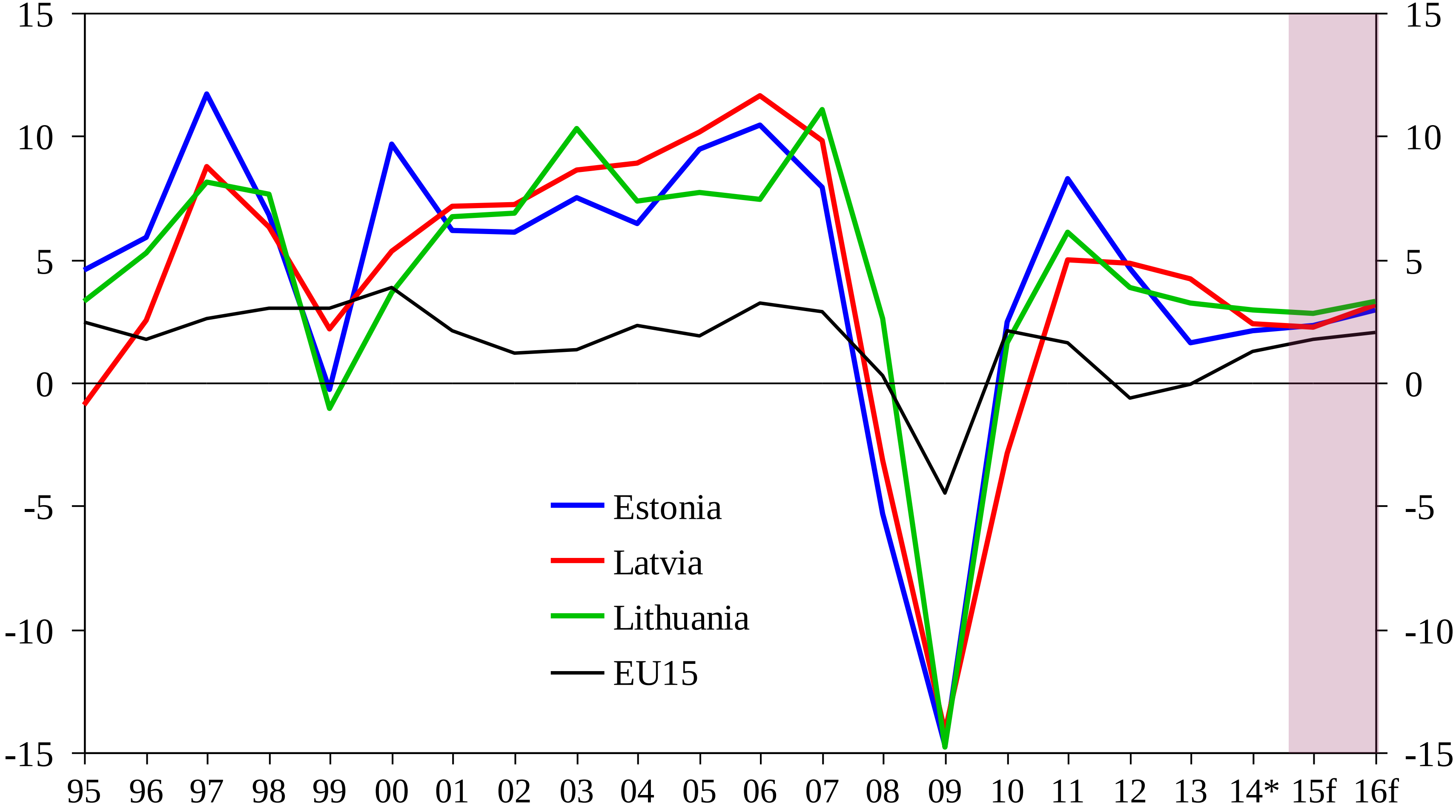


Figure 2: Average GDP growth in CEE, 1995-2014, percent per year

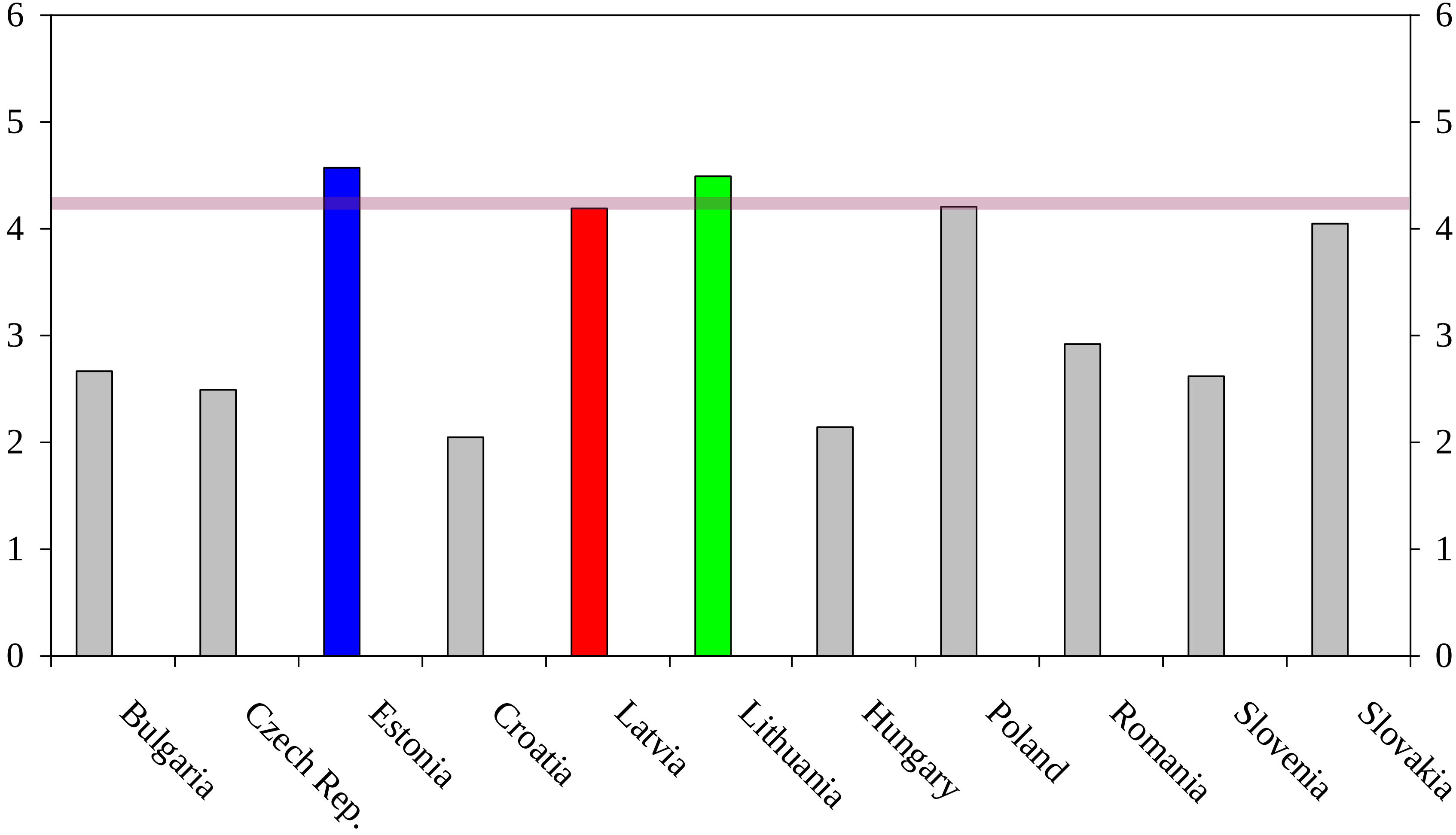
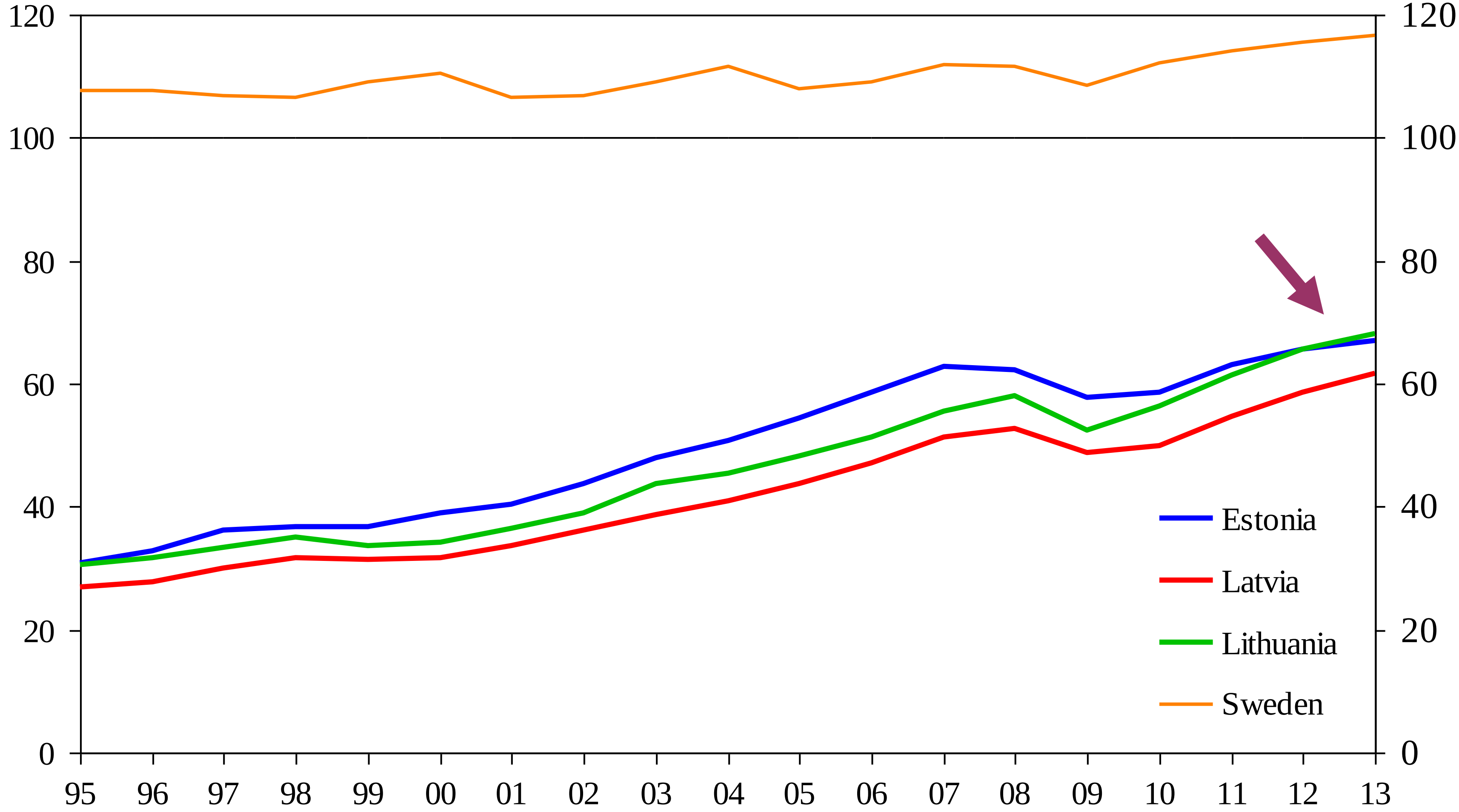


Figure 3: GDP per capita, Baltic states and Sweden, index, EU15 = 100



2) Capital flows and economic growth

But what about the pre-crisis boom?

- Rapid economic growth → potential for rapid growth?

Reconstruction after WWII

→

If fast growth

⇒

CA ↓

⇒

Measures to stop growth

"Balance of payments constraint" on short-term growth

- Thirlwall (1979), World Bank two-gap model (1960s)
- Bajo-Rubioa & Díaz-Roldán (PCE, 2009)

Short-term growth facilitated by capital flows

- Economic boom $\uparrow$ $\Rightarrow$ import $\uparrow$ $\Rightarrow$ CA $\downarrow$
- Capital inflow (CA $\downarrow$) $\Rightarrow$ short-term demand $\uparrow$ $\Rightarrow$ non-traded production $\uparrow$ $\rightarrow$ demand-driven economic boom

Baltic countries $\rightarrow$ often large current account deficits

Figure 5: Current account balance, Baltic states, percent of GDP

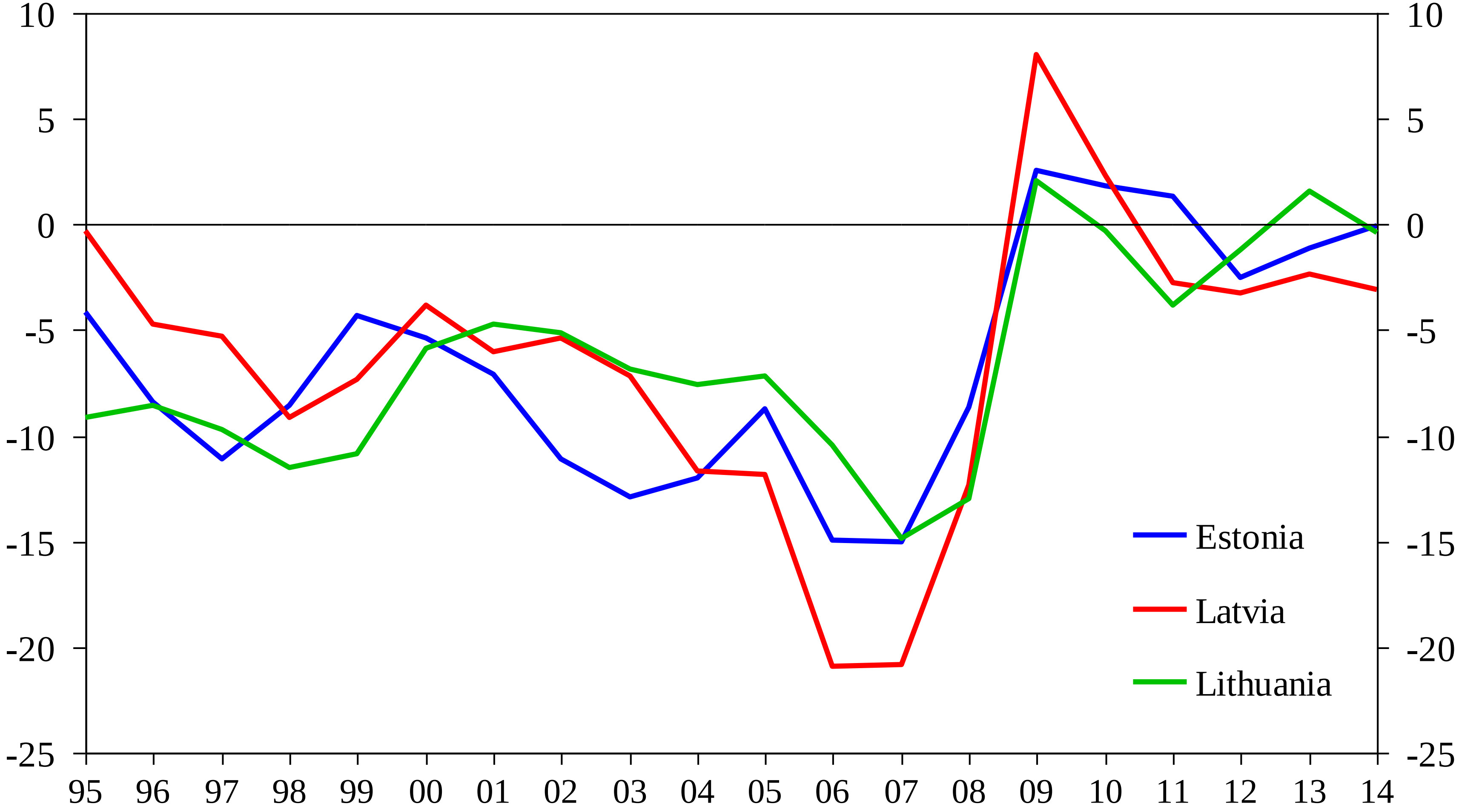
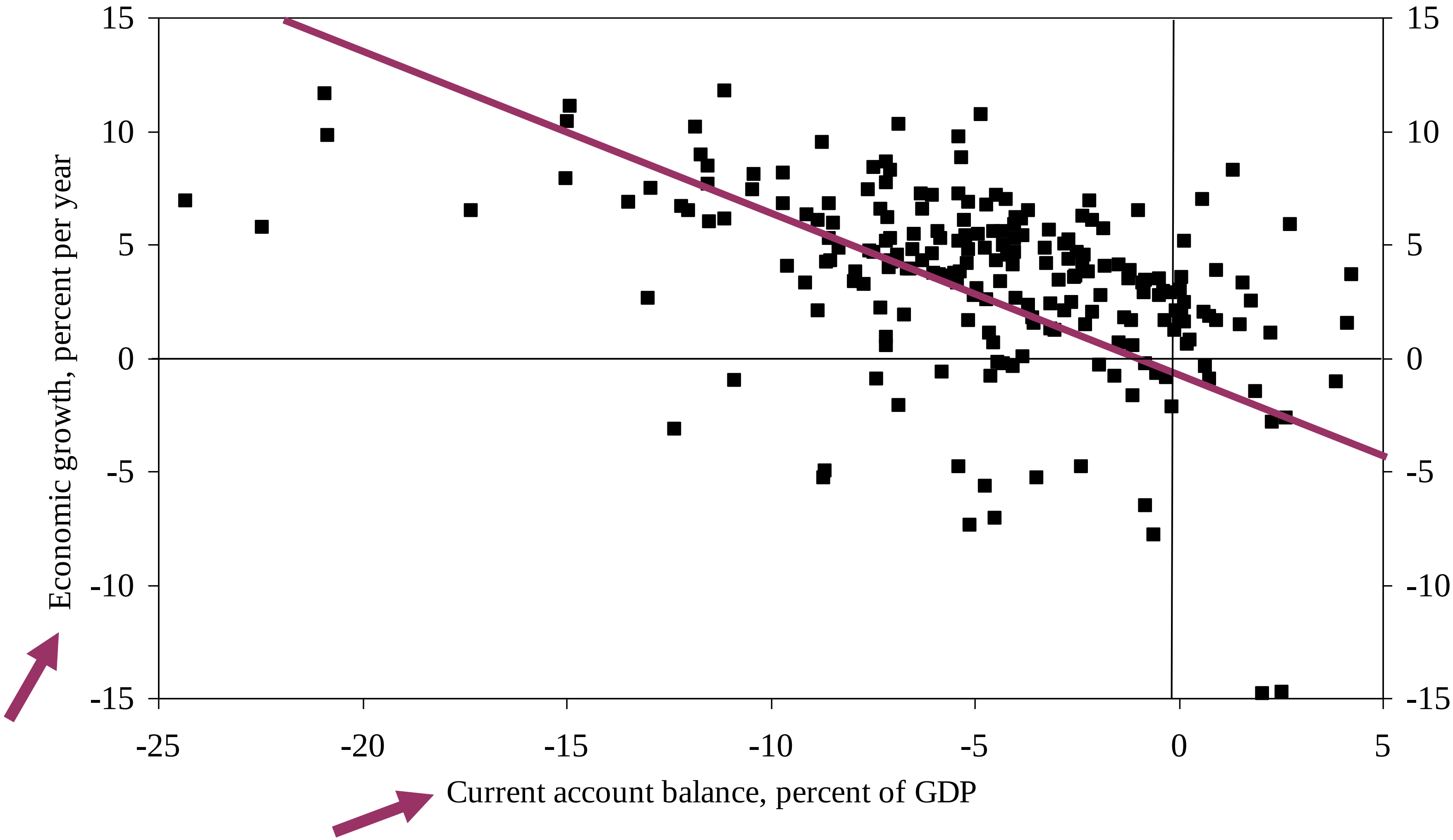


Figure 6: Current account balance and economic growth, CEE countries, annual data 1995-2014



Panel data estimations

- 11 CEE countries
- 1995 to 2014

Dependent variable → year-to-year economic growth

Explain by:

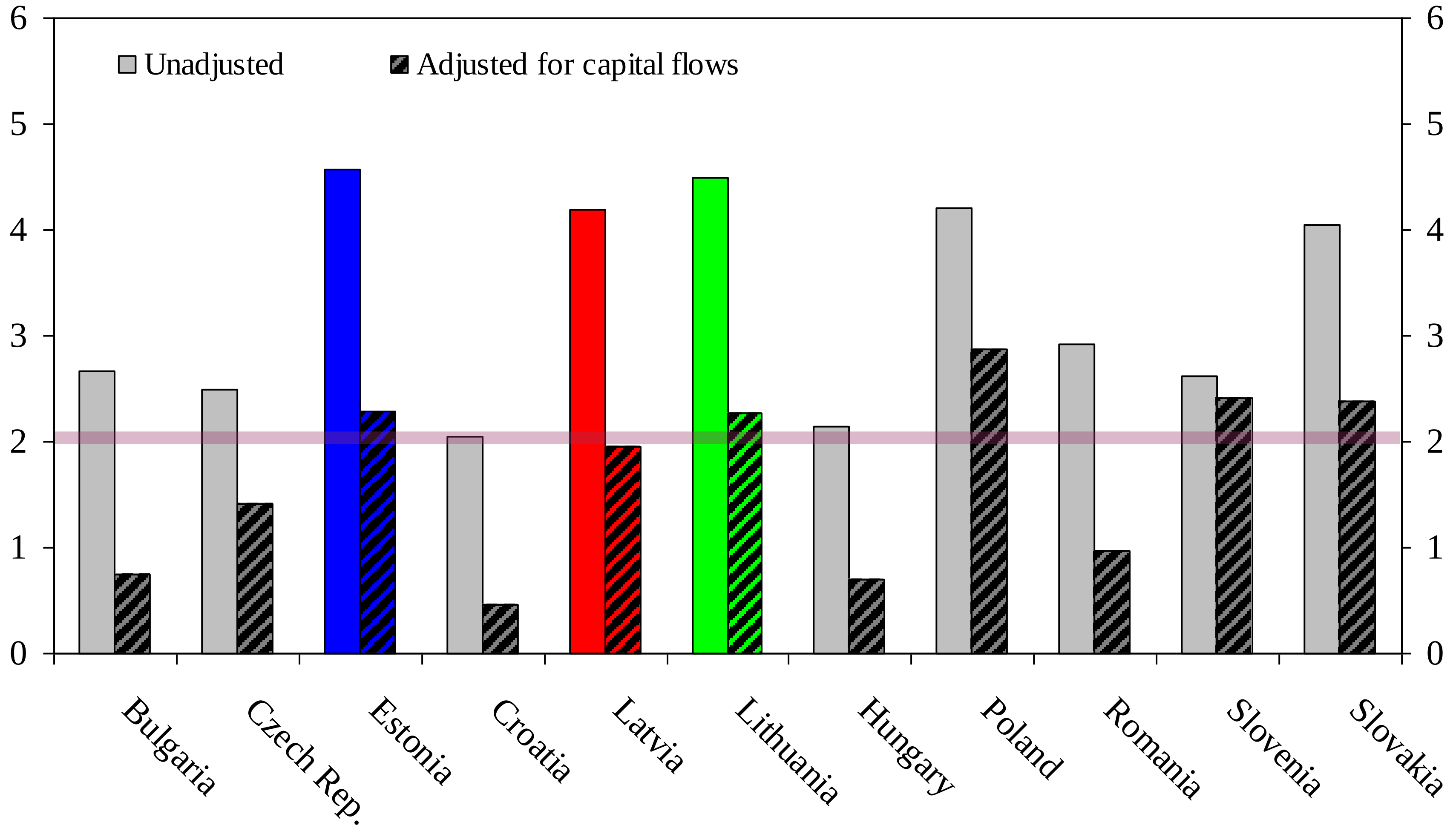
- Current account balance (percent of GDP)
- FE + time dummies + control variables

Table 1. Fixed effect estimations of economic growth in the CEE countries

	(1.1)	(1.2)	(1.3)	(1.4)	(1.5)	(1.6)
CA	-0.385*** (0.053)	-0.294*** (0.103)	-0.288*** (0.049)	-0.339* (0.184)	-0.349*** (0.061)	-0.319*** (0.044)
DUM2008	-3.512*** (0.410)	..	..	-2.652 (1.681)	-9.727*** (0.348)	-0.805** (0.357)
DUM2009	-10.601*** (0.369)	..	..	-10.110*** (0.472)	-16.920*** (0.928)	-8.407*** (0.355)
DUM2010	-1.969*** (0.369)	..	..	-1.477*** (0.507)	-2.965*** (0.789)	-1.802*** (0.372)
R^2	0.621	0.699	0.352	0.684	0.829	0.527
Countries	11	11	11	11	3	8
Time	96-14	96-14	96-07	08-14	96-14	96-14
Obs.	209	209	132	77	57	152

- Robust to control variables and specification changes
- CA ↓ 1 %-point ⇒ short-term growth ↑ 0.35%-points

Figure 8: Average GDP growth, 1995-2014, unadjusted and adjusted for capital flows, 11 CEE countries, percent per year



4) Puzzling data

Growth accounting

Share of per capital output growth explained by:

- Growth of capital stock
- Total factor productivity (TFP) growth

Figure 10: Gross fixed capital formation, percent of GDP

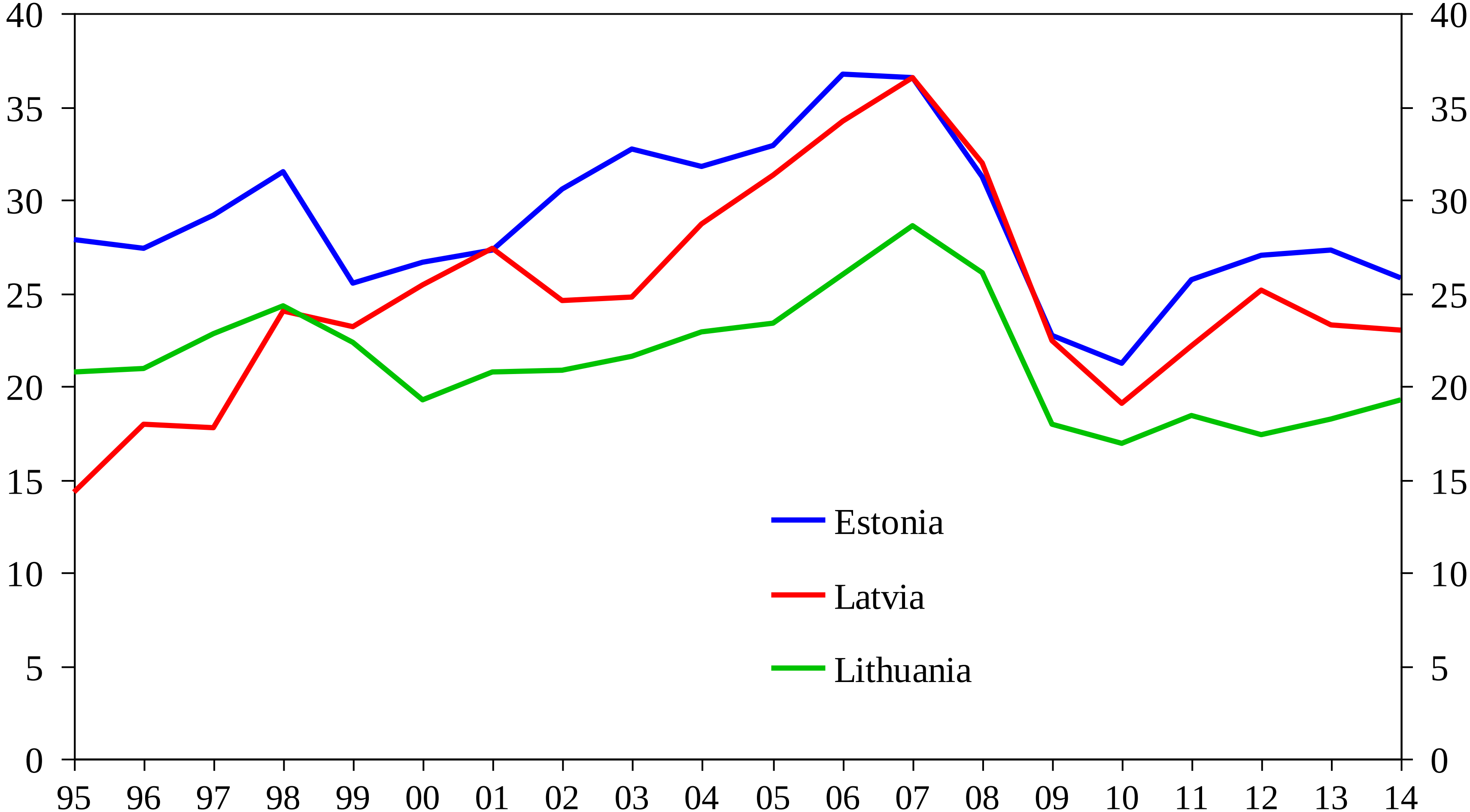
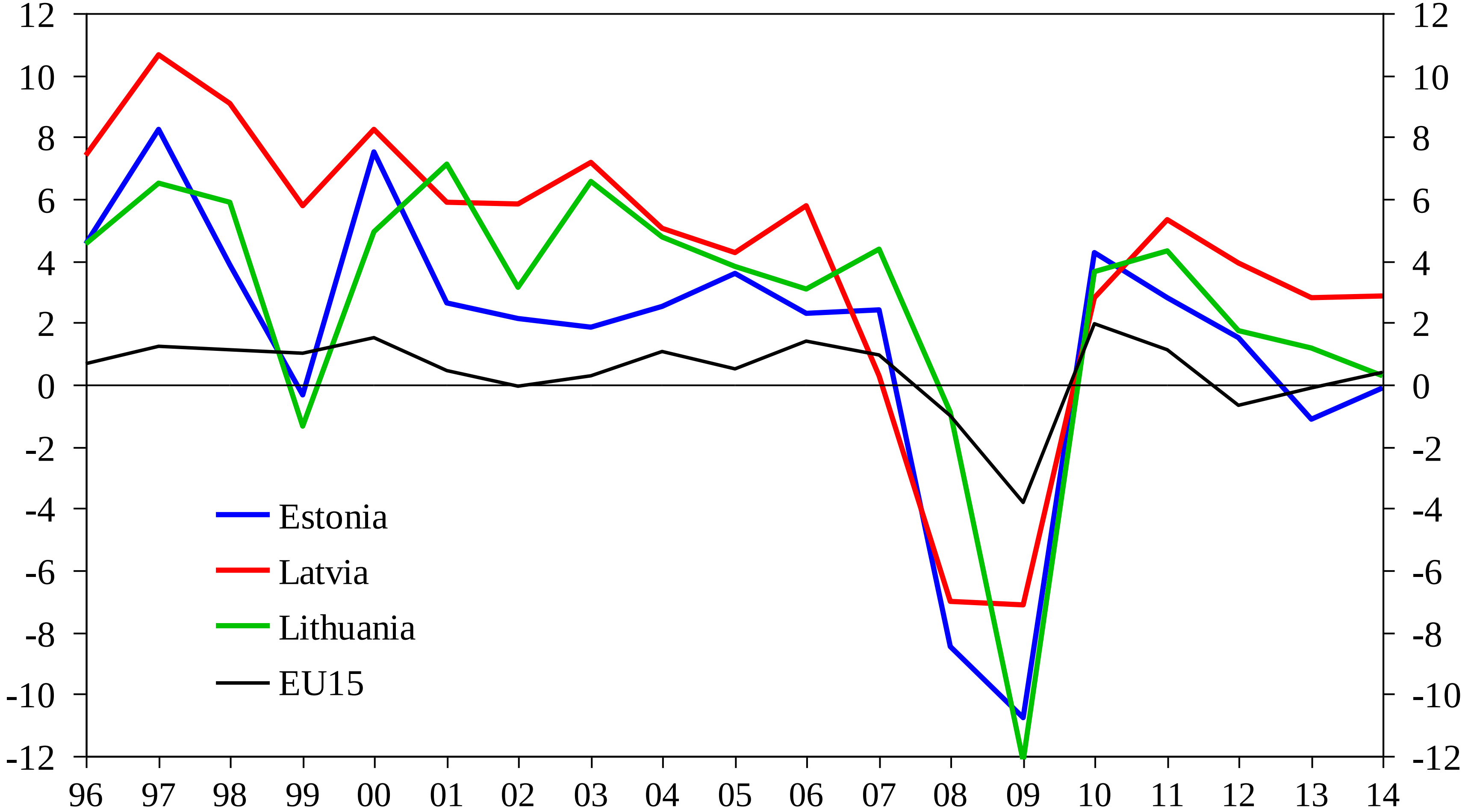


Figure 11: Growth in total factor productivity, percent per year



5) The middle income trap

Findings

- High average growth in the Baltic states ☺
- High volatility ☹
- Pre-crisis boom made possible by accumulation of net foreign liabilities 😐
- Growth slowdown after crisis ☹

If economic growth slowdown

- Why?
- Could it be long-lasting…
  - … or will Baltic states return to 5-8% growth?

The middle income trap!

Theoretical rationalisation of the middle income trap (Agenor *et al.* 2012)

- Simple production because no highly educated specialists
- Little education because few knowledge-based jobs

→

Trap!

Same reasoning

- Infrastructure, honest business practices, intellectual property rights, flexible labour markets

Empirical evidence (Eichengreen *et al*. 2013, Aiyar *et al*. 2013)

- Logit estimations on panel data for “all countries” from 1955
- Middle income gap <u>more likely</u> if:
  - Emerging from financial crisis **(++)**
  - Small share of population with <u>tertiary</u> education **(+)**
  - Large old-age dependency burden **(0/+)**
  - Low-tech export **(++)**
  - Low investment ratio **(?)**
  - Weak institutions **(+)**

My conclusion

→

Risk that current slowdown could evolve into longer-lasting middle income gap

Measures to lower risk of middle income gap

- …
- Tertiary education
- Developing universities as research centres
- Lifelong learning
- Macroeconomic stability
- Public investment (roads, city infrastructure)
- Anti-corruption

Final comments

- Time to augment the “neoclassical growth model”?
- Time to invest into future?
- Time for more inclusive societies?
- “War of attrition”
  - Tripartite agreements in Ireland (1980s), Finland (early 1990s), South Korea (late 1990s)
- “Productivity commissions”
  - Suggestions for productivity enhancing policies

Last page

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