

# Determinants of growth in the EU Member States of central and eastern Europe

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*The views expressed in this presentation are solely those of the presenter and do not necessarily reflect those of the European Central Bank*

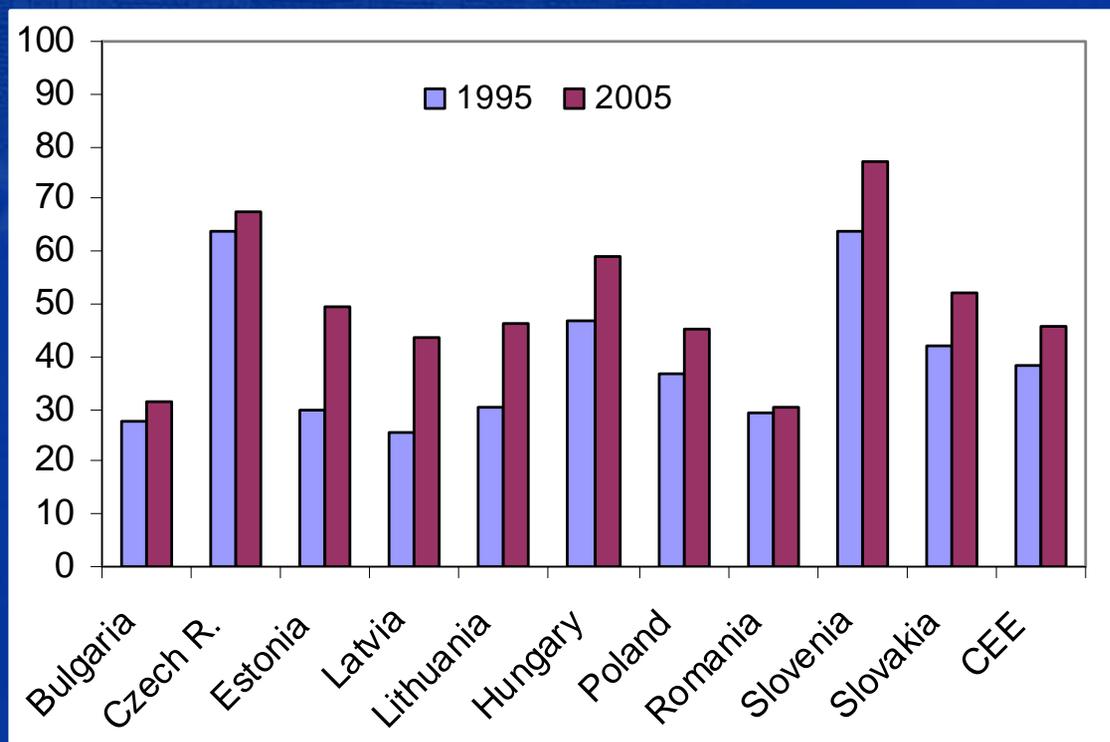
# Outline

- **Recent progress with real convergence in the CEE countries**
- **Labour markets**
- **Investment and capital accumulation**
- **Conclusions**

# Recent progress with real convergence

**GDP per capita levels compared to the euro area average increased but gaps remain significant.**

GDP per capita levels (in %, euro area = 100)



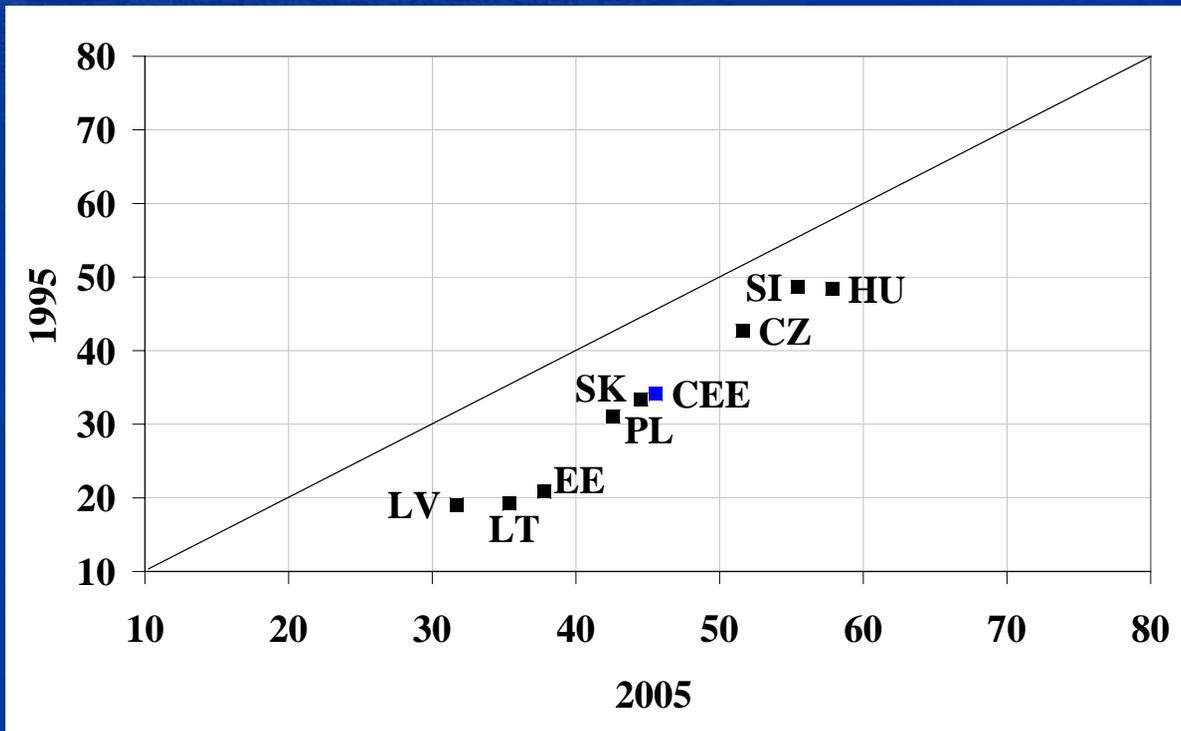
Source: ECB staff calculations based on GGDT Total Economy database.

Note: in PPP terms.

# Recent progress with real convergence (cont.)

Labour productivity levels improved, but remain diverse across the CEE countries.

Relative labour productivity levels (per hour, euro area = 100)

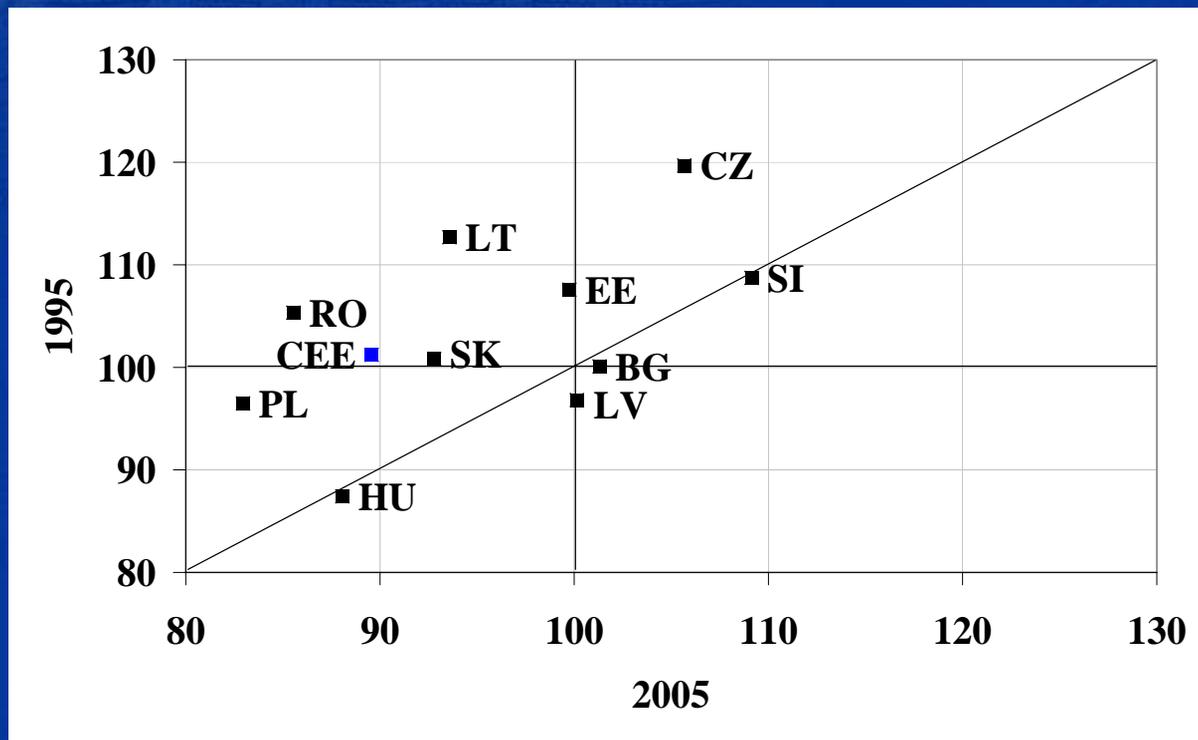


Source: ECB staff calculations based on GGDT Total Economy database.  
Note: Data on Romania and Bulgaria were not available.

# Recent progress with real convergence (cont.)

However, labour utilisation deteriorated in most CEE countries.

Labour utilisation (in %, euro area = 100)



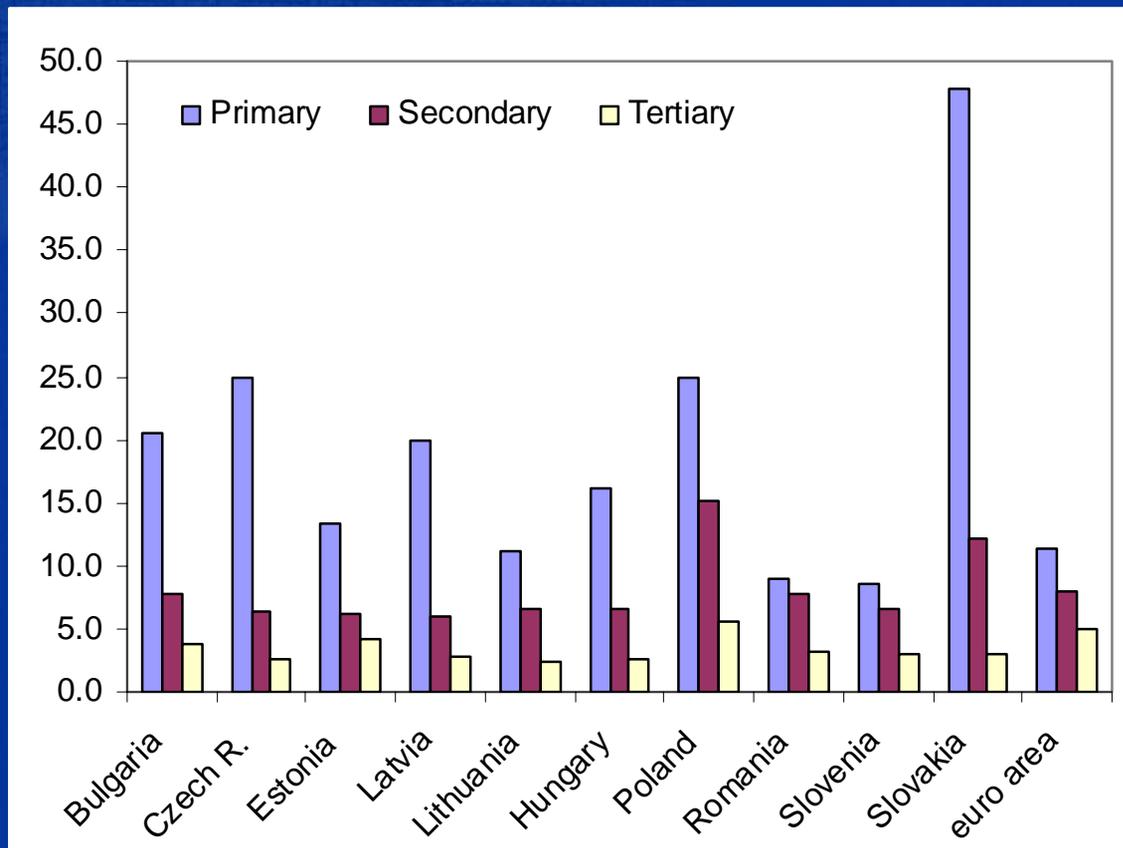
Source: ECB staff calculations based on GGDT Total Economy database.

Note: Labour utilisation is defined as the ratio of total employment to the total population.

# Labour markets

**Sectoral transition increased educational mismatch, which possibly created growth bottlenecks.**

Unemployment rates by level of education, 2006 (in %, ages 15-64)

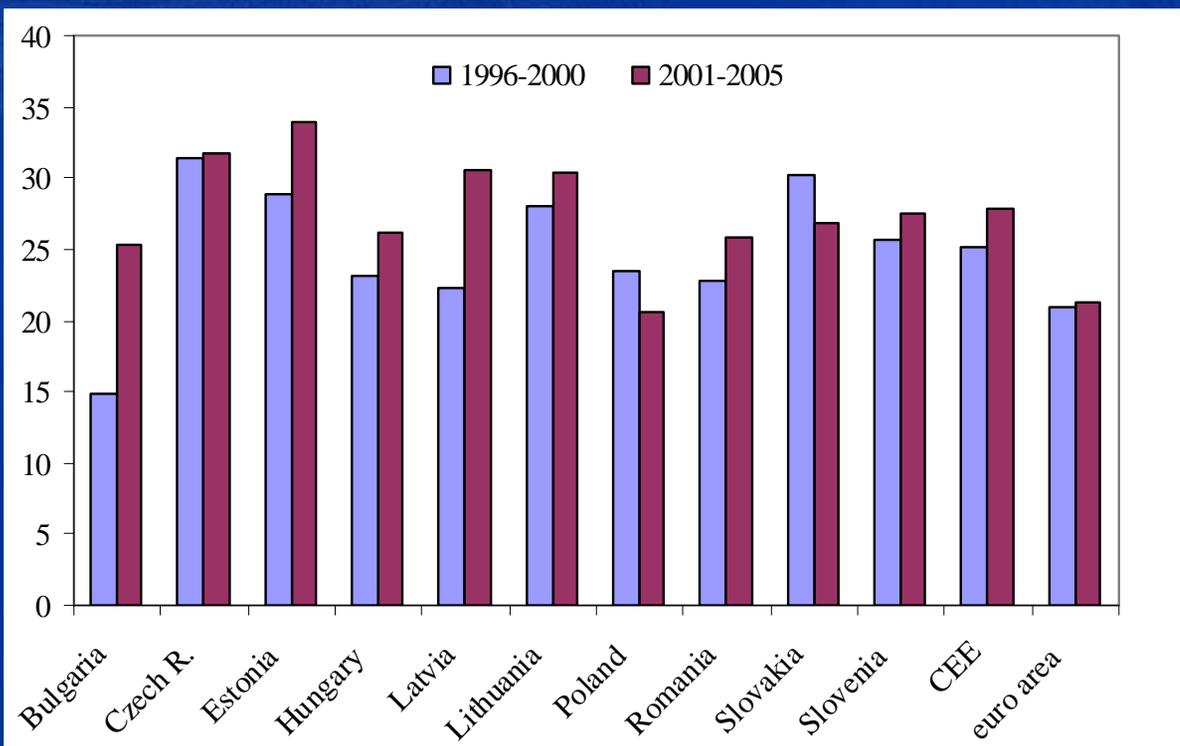


Source: Eurostat.

# Investment and capital accumulation

Investment ratios in CEE are well above the euro area level, and in most countries increased noticeably since the second half of the 1990s.

Gross fixed capital formation to GDP ratios (as % of GDP)

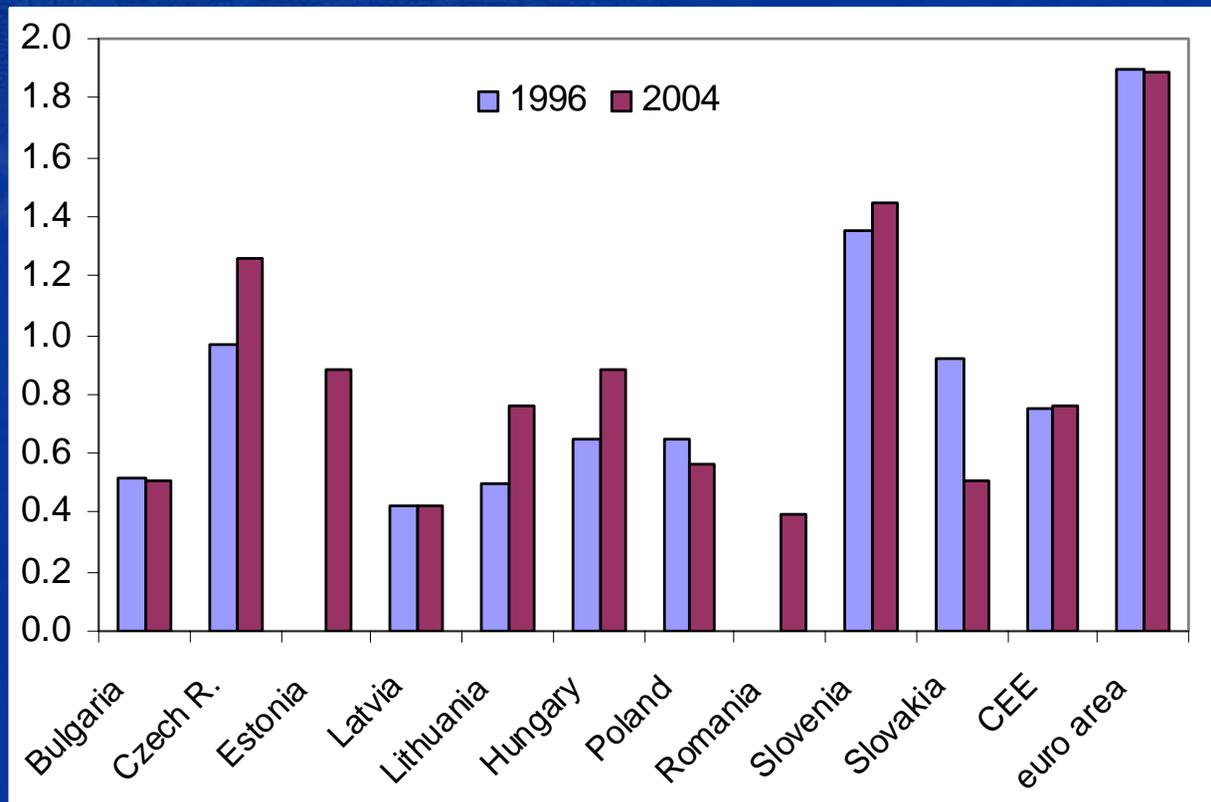


Source: ESA 95.

# Investment and capital accumulation (cont.)

**R&D expenditure is low compared to the euro area, mainly due to weaker involvement of the business sector.**

Gross expenditure on R&D (as % of GDP)



Source: Eurostat. 1) Changes in percentage points

# Summary and conclusions

- **In spite of fast growth the income gap remained large compared to the euro area in most CEE countries.**
- **In order to support catching up, the CEE countries need to address labour market problems, in particular regional and skill mismatches.**
- **Continued capital accumulation and R&D inflows depend on an improved business environment and human capital formation.**
- **Sound macroeconomic policies are essential to ensure the appropriate conditions for further convergence.**

**Thank you for your attention!**