

# PRODUCTIVITY IN GERMANY: RECENT TRENDS AND OUTLOOK

---

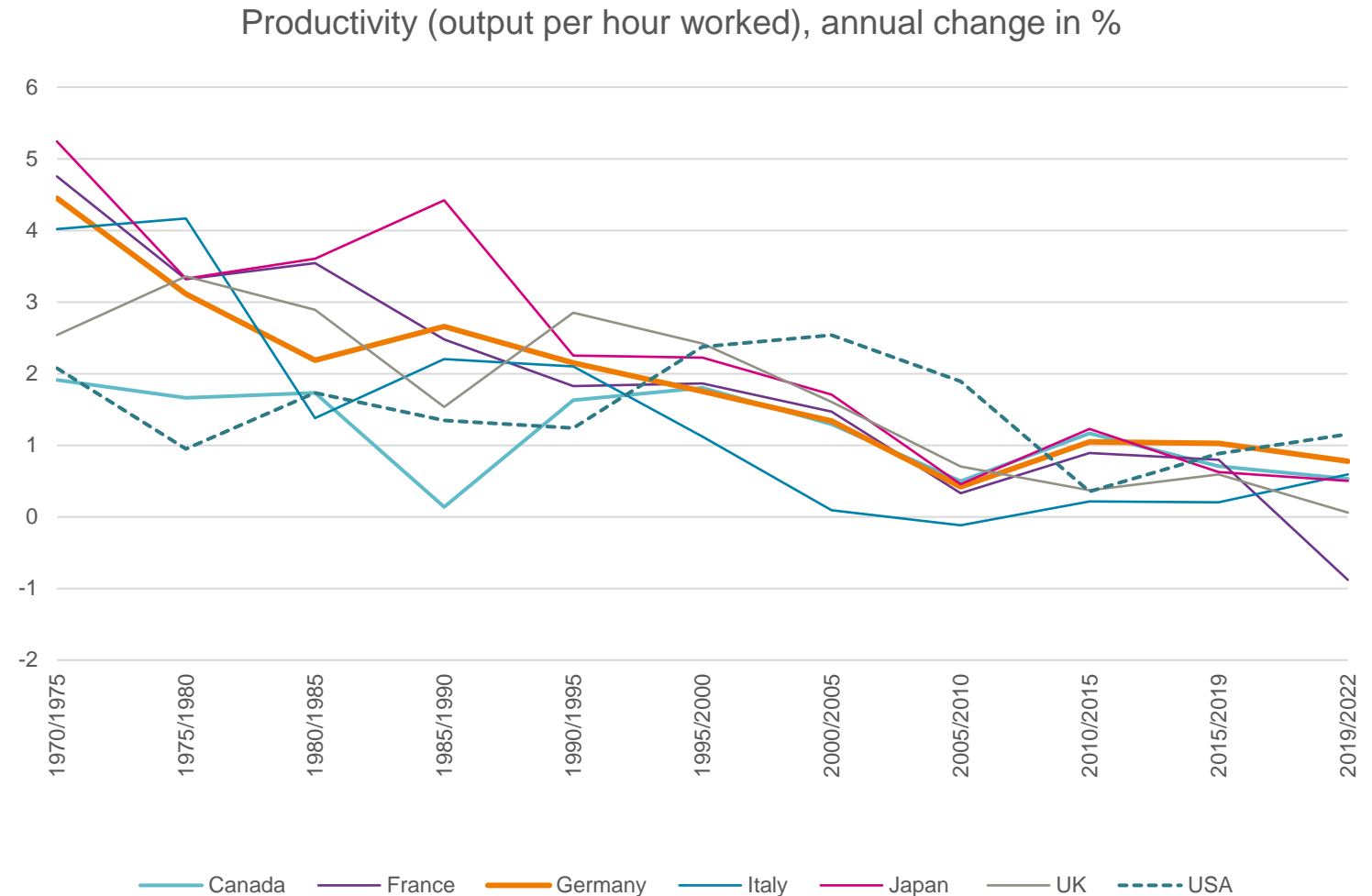
OFCE/LEAP Workshop: (Missing) Productivity and the Growth  
Challenge, Panel: Europe facing an Existential Challenge

Prof. Dr. Sebastian Dullien

Paris, May 25, 2025

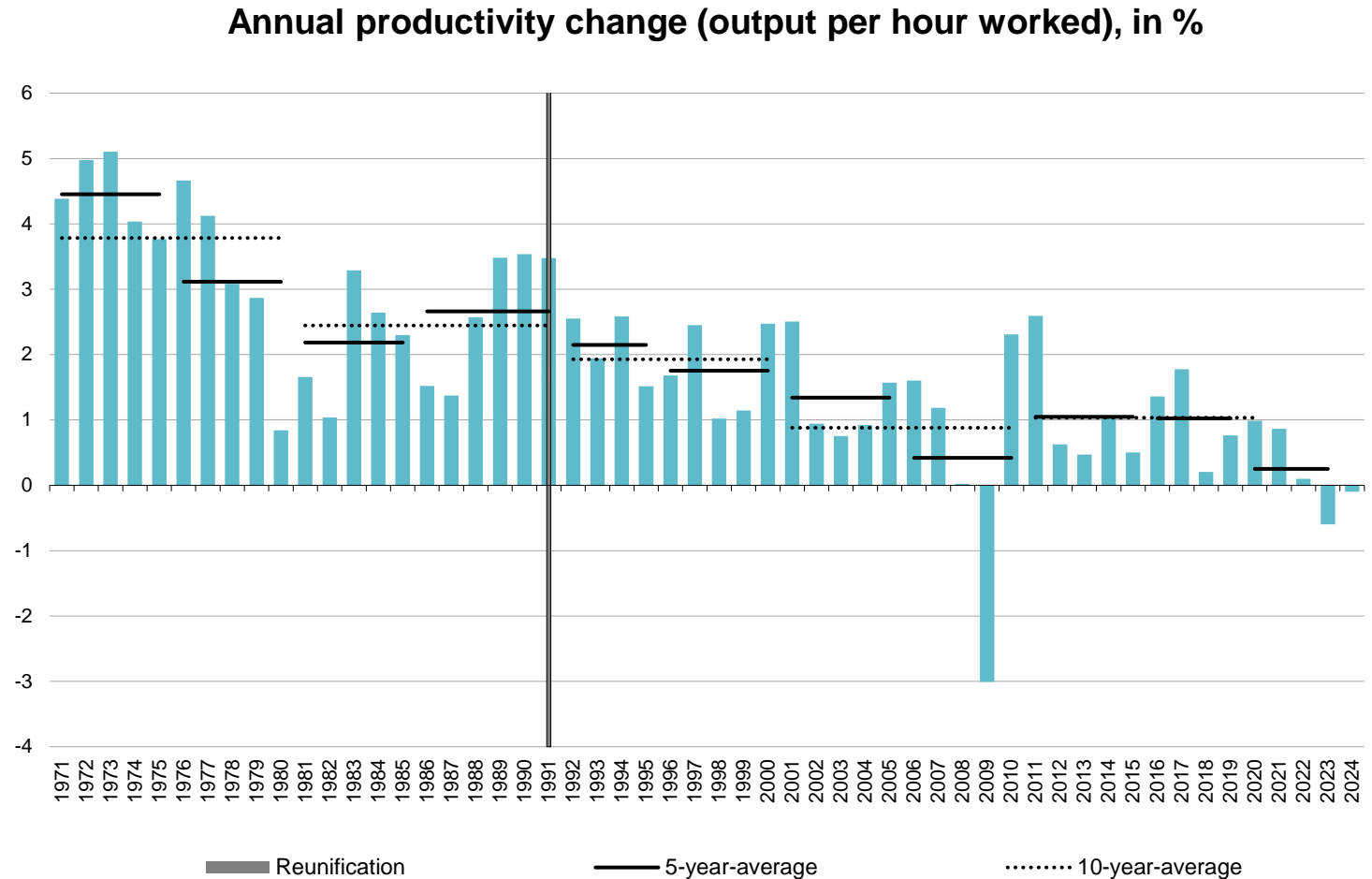
# German productivity: A long-term decline in line with OECD trends

- Productivity growth has declined in all OECD countries since the 1970s
- Germany has followed the trend
- Extremely weak productivity growth since Covid (only partly in the graph)



# German productivity in detail

- Since 2020, productivity growth has been on average around 1 % annually
- Since 2022, there has been no productivity growth (and negative growth in 2023 and 2024)

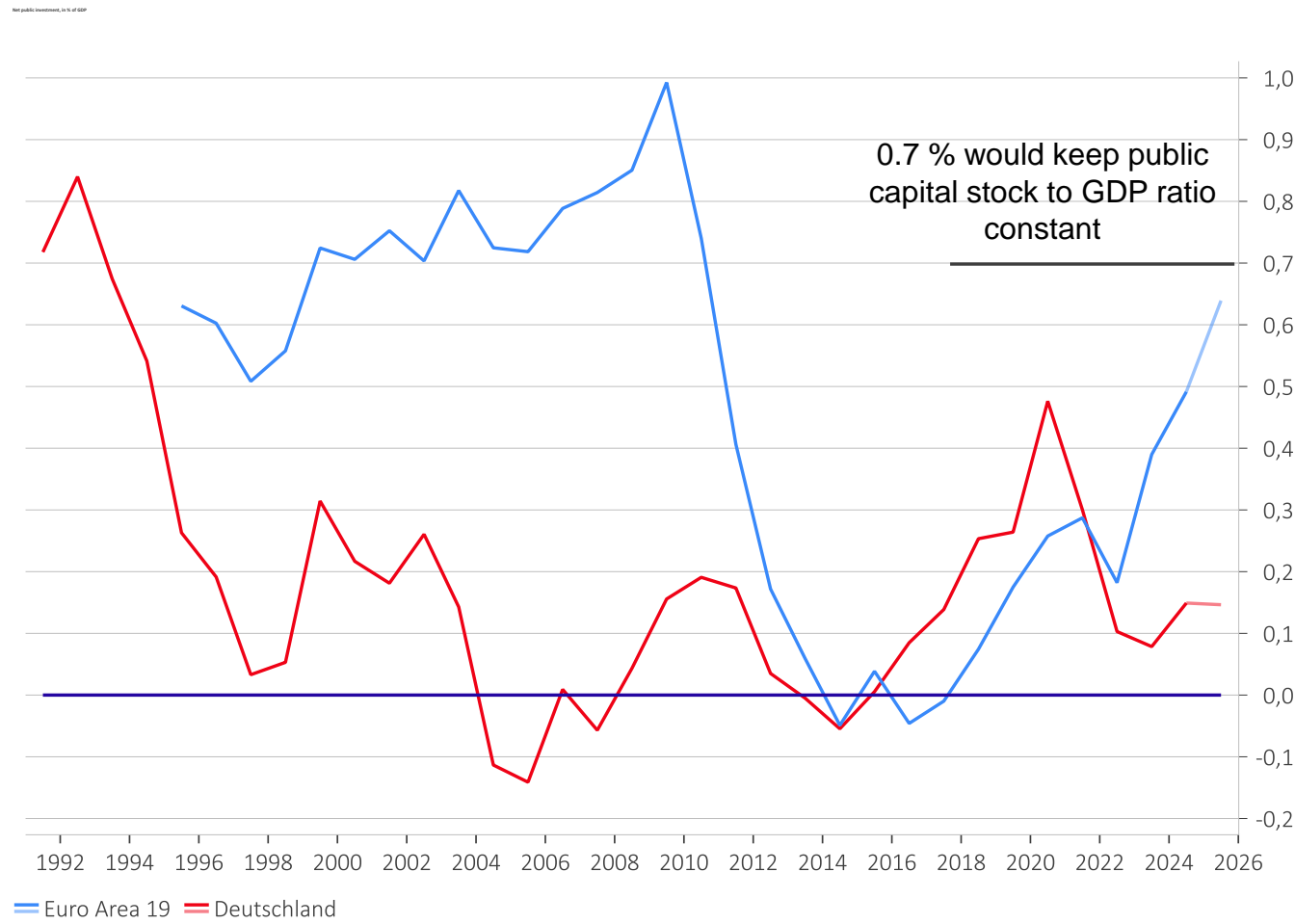


## Specific reasons for weak German productivity growth

---

- Beyond traditional explanations (R&D, structural impediments,...), there are a number of very specific factors for the German productivity weakness in recent years
  - Persistent underinvestment in public infrastructure
  - Manufacturing crisis
    - Labour hoarding
  - Decarbonisation investment and obsolescence of non-depreciated capital stock
  - Large inflow of (relatively uneducated) foreigners
    - From 2013 to 2024, population with foreign passport increased from 7.6 million to 14.1 million
    - Largest group of newcomers: Ukraine, Syria, Afghanistan

# The German government has not invested much for 30 years



MACROBOND

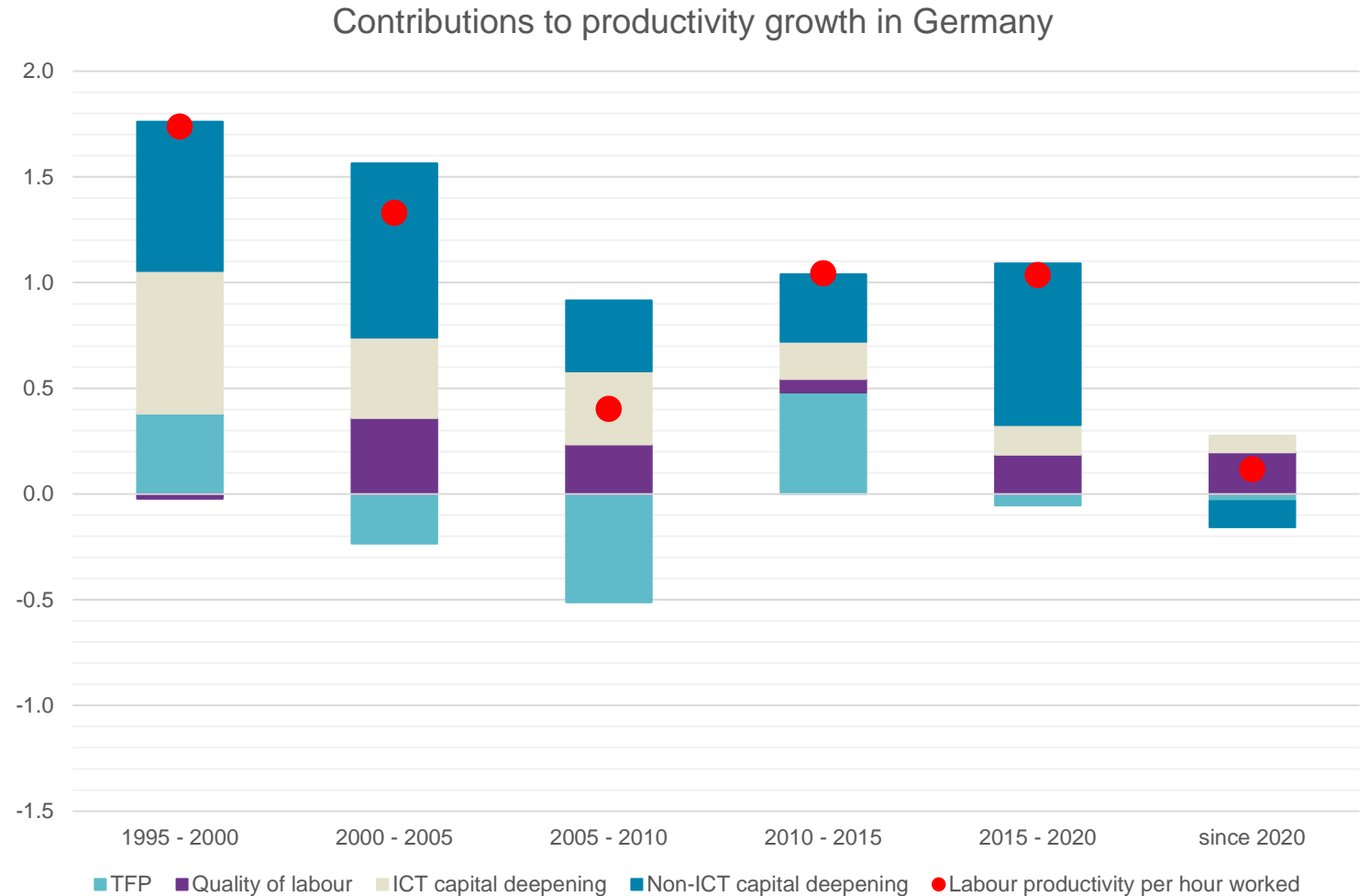


Elsenbrücke, Berlin

# Statistical decomposition of German productivity growth

Since 2020:

- Low TFP growth
- Negative non-ICT capital deepening



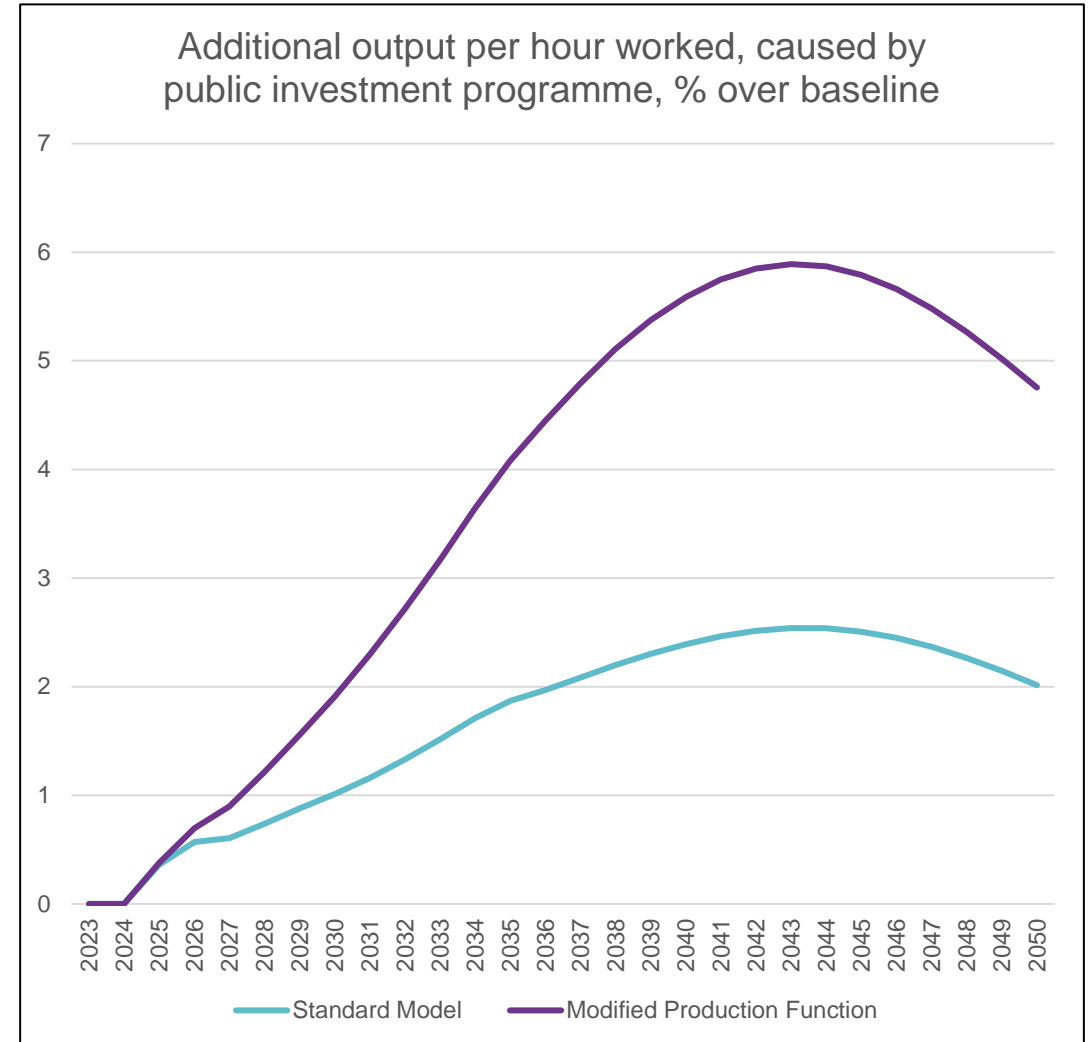
## What does that mean for the future?

---

- German government has just changed the debt-brake in the constitution
  - Increased debt-financed spending for defense
  - Increased debt capacity for federal Länder
  - Additional €500 bn debt capacity for public investment
- There are still question marks about compatibility with EU fiscal rules, but government plans to ramp up spending
- One-off effects might also dissipate

# What does that mean for productivity

- Public investment increases public capital stock
- Simulation with NiGEM with two different production functions
  - Public capital as substitute for private capital (standard)  
$$Y_t = A_t F(K_t, E_t L_t)$$
  - Public capital as additional production factor  
$$Y_t = A_t K_{P,t}^\alpha (E_t L_t)^{1-\alpha} K_{G,t}^\theta$$
- Result: Productivity increases by up to 6 %
  - Equivalent of 0.3 percentage points productivity growth per year





# Conclusions

---

- German productivity growth has been weak...
- ...but beyond factors widely discussed and similar across the EU (R&D spending, low startup dynamic), there are some one-offs and specific German factors
- There is hope that productivity growth picks up once these factors dissipate

---

**THANK YOU FOR YOUR ATTENTION!**

---