



# Luxembourg's Labour Productivity Slowdown in a Comparative Perspective

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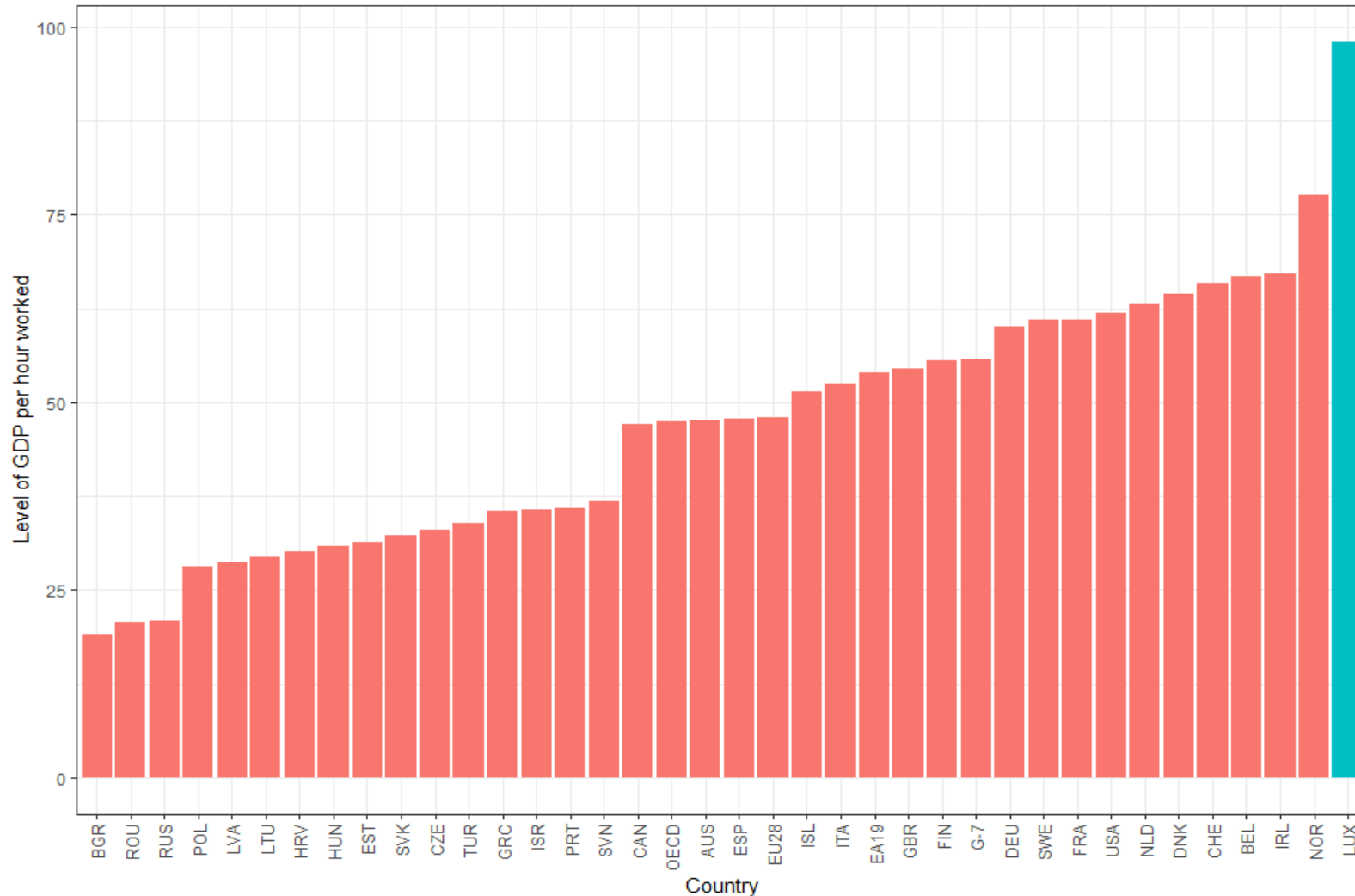
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# A comparative analysis of labour productivity

- **Trends of labour productivity** in Luxembourg compared to selected countries.
- **Possible explanations** for the observed trends of labour productivity.

# Labour productivity in Luxembourg: high level

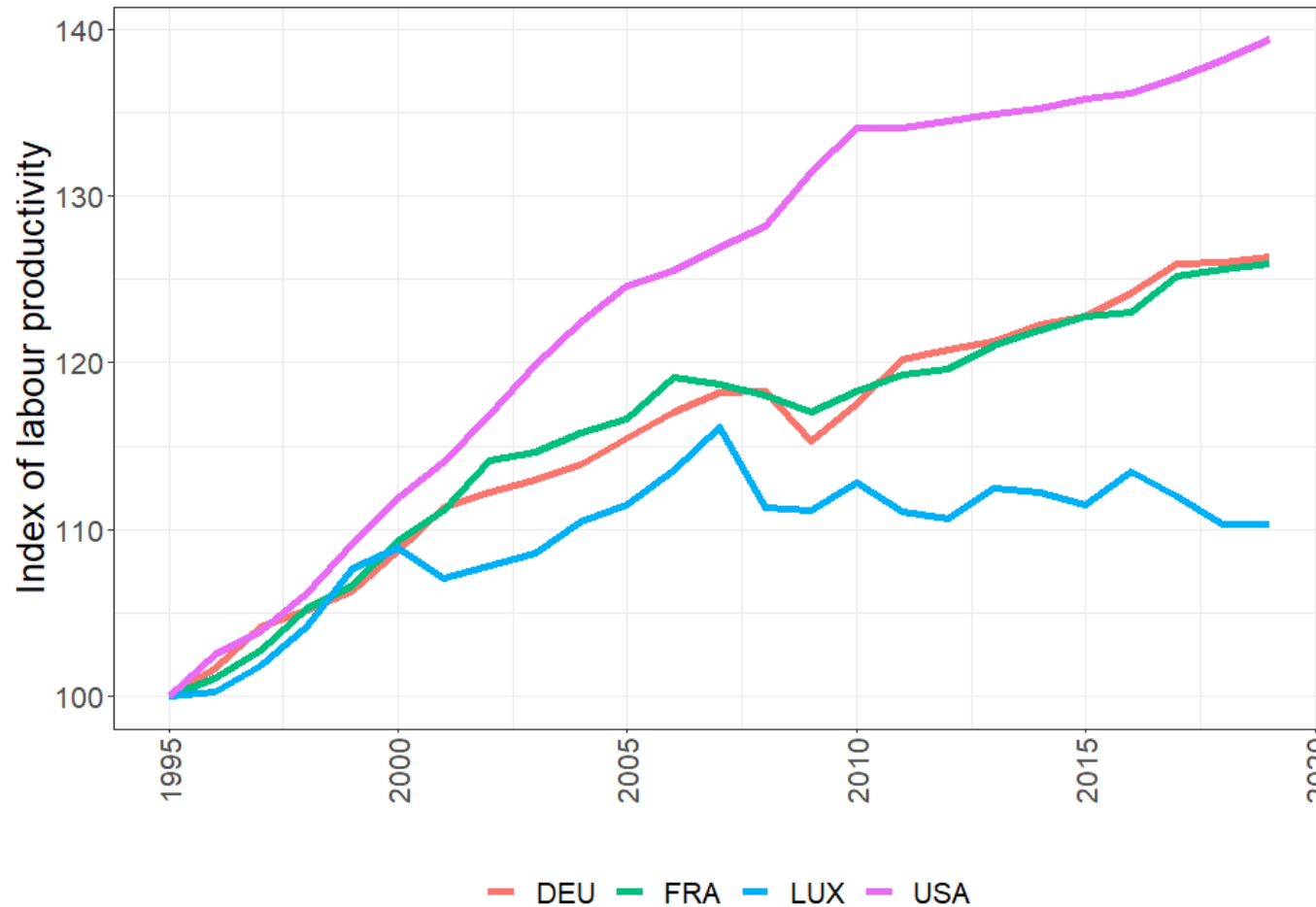


Labour productivity is GDP per hour worked.

Source: OECD Productivity Database, country-level data.

Figure 1: Average level of labour productivity 1995 – 2019 (expressed in US Dollar).

# Labour productivity in Luxembourg: slow growth



**Average annual growth 1995-2019:**

- LUX 0.4%
- FRA 1.1%
- DEU 1.1%
- USA 1.6%

**Figure 2:** Trends of labour productivity in Luxembourg, EA19, France, Germany and USA: 1995 – 2019 (1995=100).

# Productivity slowdown: possible explanations

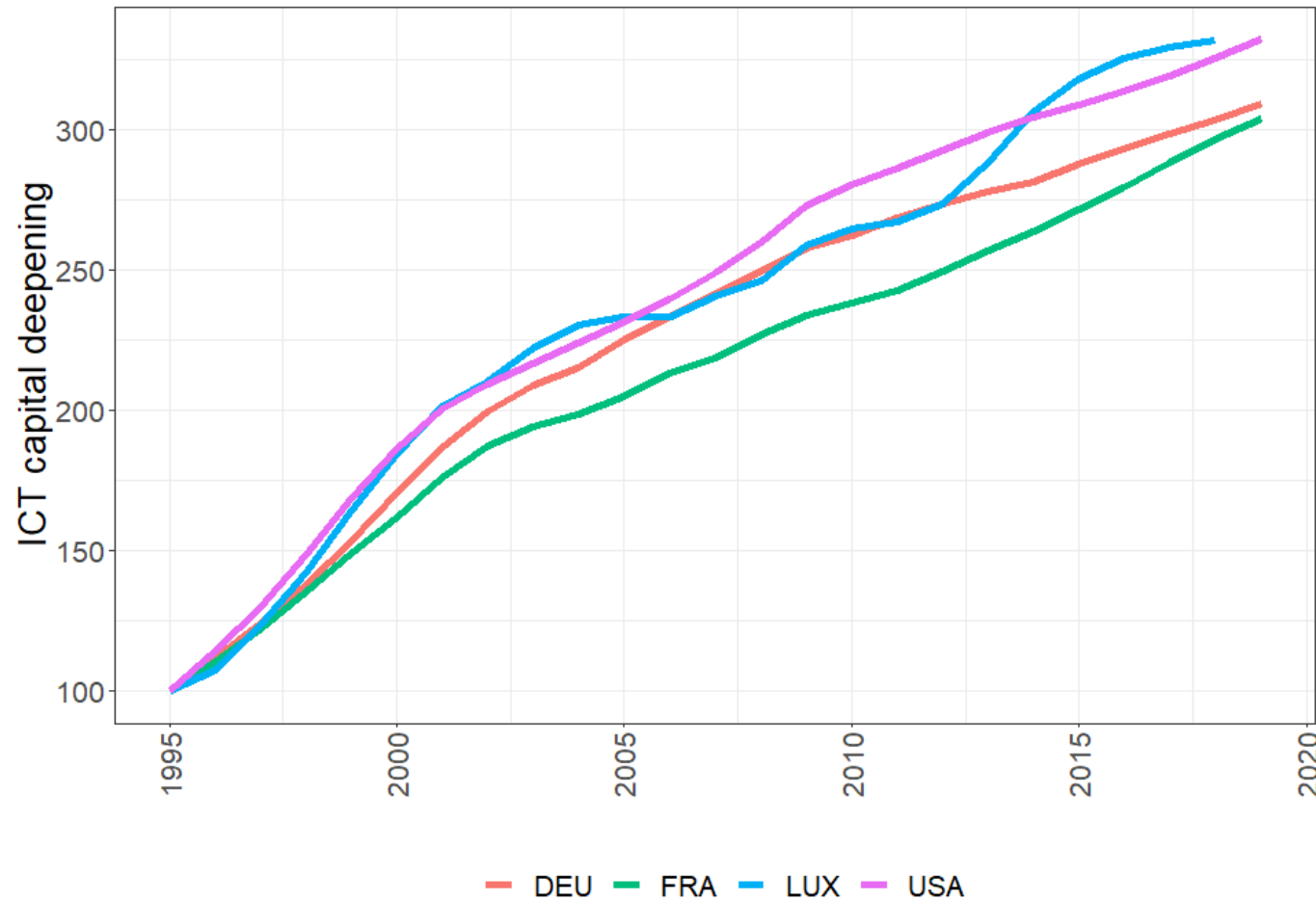
- **Convergence hypothesis:**

Economies with high productivity levels feature weaker growth rates.

- **Effect of Information and Communication Technology (ICT):**

- Adoption of new technologies is a source of productivity growth;
- ICT capital deepening captures workers' access to newer and better tools;
- Luxembourg has

# Strong ICT capital accumulation in Luxembourg



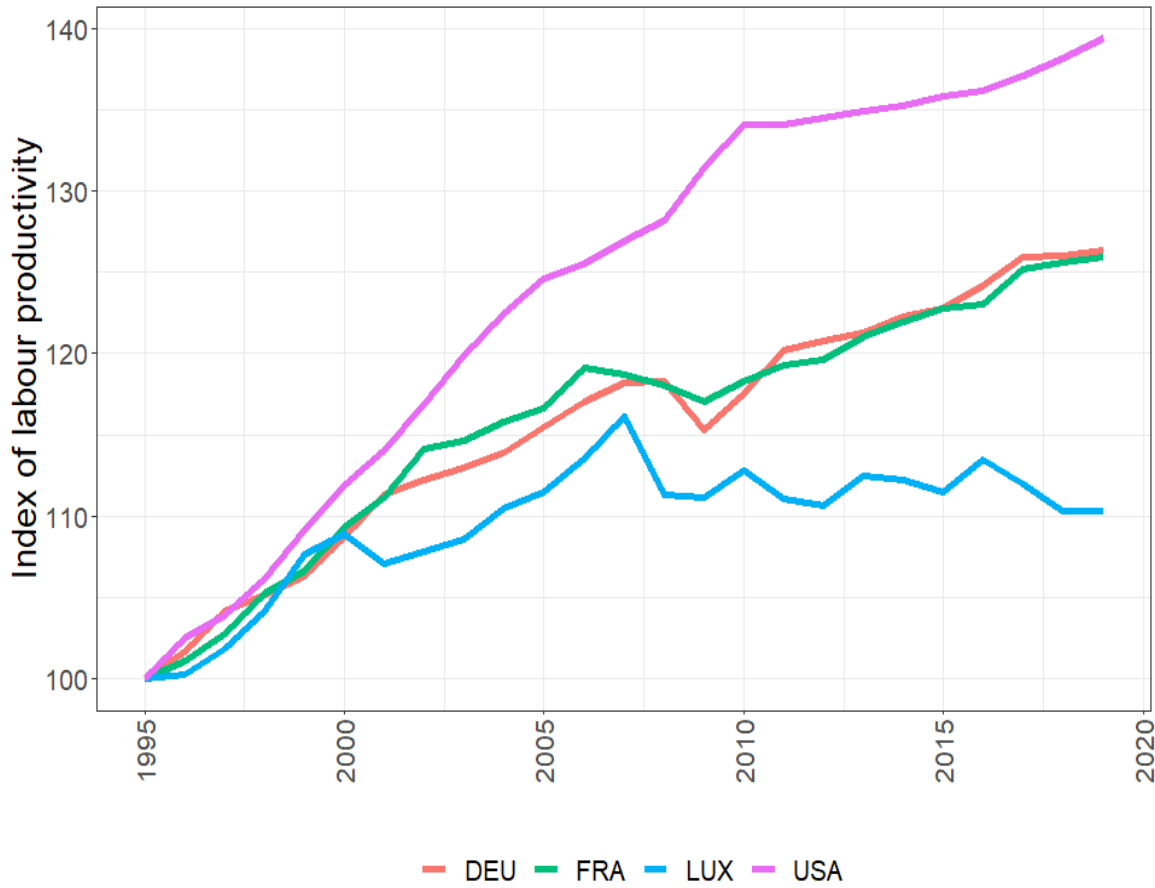
**Figure 3:** Trends of ICT capital asset per unit of labour in Luxembourg, France, Germany and USA: 1995 – 2019. Index of ICT capital deepening (1995=100).

# Limited evidence for convergence and ICT hypotheses

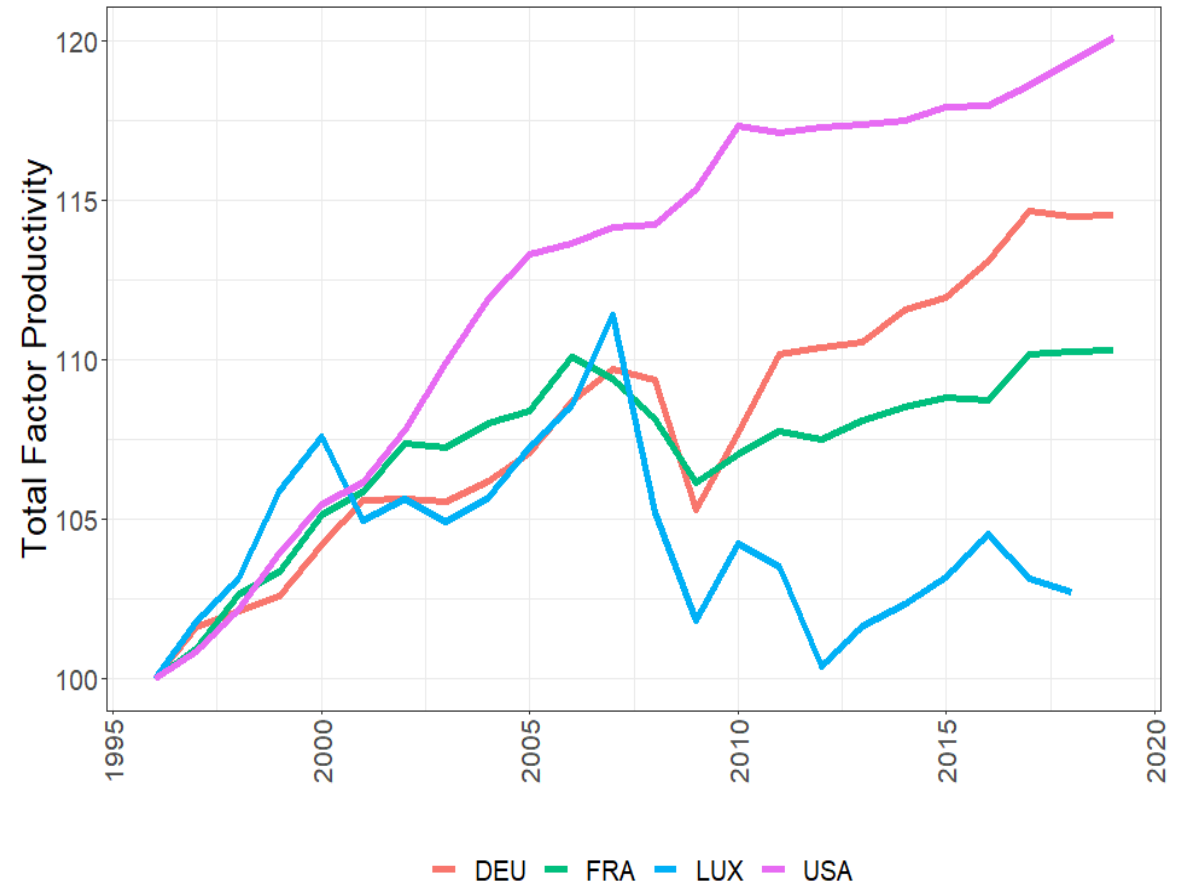
- **Weak evidence for the convergence hypothesis.**
- **The accumulation of ICT capital assets...**
  - contributes positively to labour productivity growth before the Great Recession;
  - does not correlate with productivity growth after the Great Recession.

# Weak TFP growth can explain the slowdown

## Labour productivity growth



## Total Factor Productivity (TFP) growth





# Conclusions from country-level analysis

Luxembourg has comparatively high level of labour productivity, but low growth: **why?**

- Absence of evidence for the **convergence hypothesis**.
- **Accumulation of ICT capital** is not statistically associated with productivity growth after the Great Recession.
- **Weak TFP growth can explain** labour productivity slowdown.

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Thank you! / Merci !



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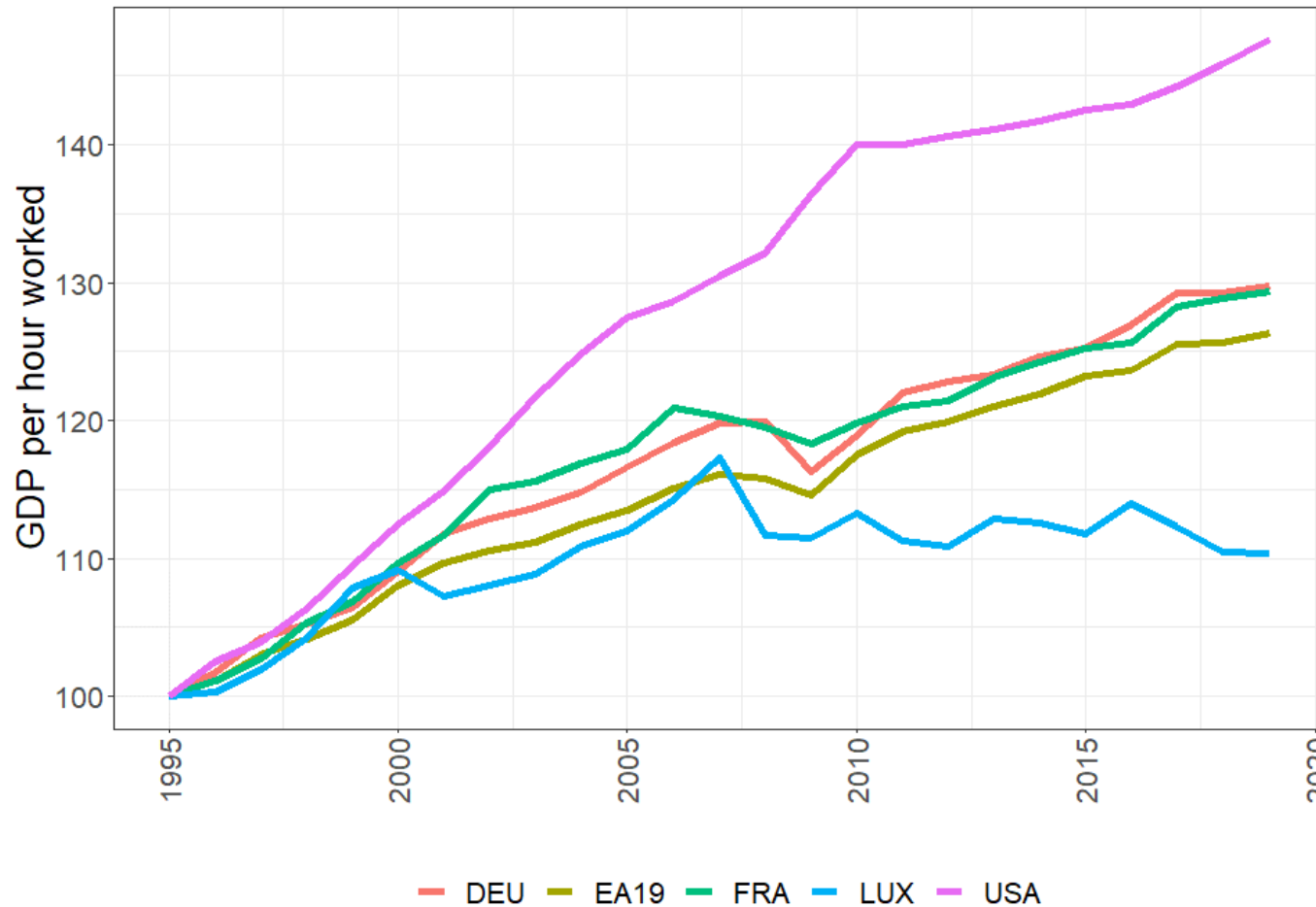


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# Labour productivity in Luxembourg: slow growth (OLD multiplicative....)



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