Quantifying spillover effects of Next Generation EU investment

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Our work in a nutshell

• Next Generation EU (NGEU) a EU-wide investment and reform programme:
  • Response to COVID crisis: unprecedented policy package worth up to 5.4% of EU GDP
  • Funds are unevenly allocated across EU Member States -> supports convergence
• Questions: What is its macroeconomic impact? Under which conditions will the impact be large? Which factors are important for policy?
  • Our tool: A rich 28-region macroeconomic model developed at the European Commission, DG ECFIN
• We find a significant impact positive impact (EU real GDP up by 1.5%)
• Cross-country spillover effects are central for many countries
Model complexity reflects the purpose …

• Dynamic and quantitative workhorse model with two main features:

1. Rich cross-country linkages:
   • A detailed macro structure for each of the 27 EU Member States & rest of the world based on optimising households and firms (rich second-round effects)
   • Trade in intermediate inputs (cross-border value chains), which is typically exploited only in static input-output-analysis

2. Detailed role for fiscal policy and public investment:
   • Productive public capital and time-to-spend/build delays
   • Stylised representation of NGEU financing (grants, loans, repayment)
... and requires abstraction

1. Principle of parsimony: analysis remains manageable despite model size

2. Missing information:
   - Not all information on recovery plans of the Member States was available -> we assume that all spending is public investment

3. Some aspects are hard to quantify or require strong assumptions:
   a) Sensitivity analysis lays out alternative assumptions. However, we are often asked to produce a single “headline” number
   b) Leave out some aspects: For example, NGEU has two legs: Investment and reforms; we did not quantify to the latter as it would have required (very) strong assumptions and blurred the main insights.
Modelling for policy support: Key results

- **Significant impact**: on average 1.5% increase in real GDP
  - Strongly supports convergence

- **Narrative**: Spillover is crucial.
  - Extrapolating from allocations to macroeconomic impact can, thus, be misleading
  - Particularly relevant for richer open economies

- We have also analysed **conditions for success**

Additional GDP generated by NGEU in 2024 (in % deviation from no-NGEU baseline)

Less open economies benefit mostly from impact of own allocation (RO, IT, PL)...

...while more open economies benefit from substantial positive spillovers (LU, IE, DE)
Annex: Spillover in more detail