Cross-country TFP estimation and productivity indicators

Jorge de la Cal Medina, Marco Miorandi

VU Amsterdam, Universiteit van Amsterdam

j.delacalmedina@uva.nl, m.miorandi@student.vu.nl

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Introduction

- Aim: harmonized cross-country estimates of firm-level productivity and input elasticities.
- Why: productivity gaps between countries remain large.
- Key insight: averages hide the action — even within the same industry, firms differ massively in productivity and size.
- Focus: distributional measures (dispersion, tails, covariance of size and TFP) to diagnose allocative efficiency.

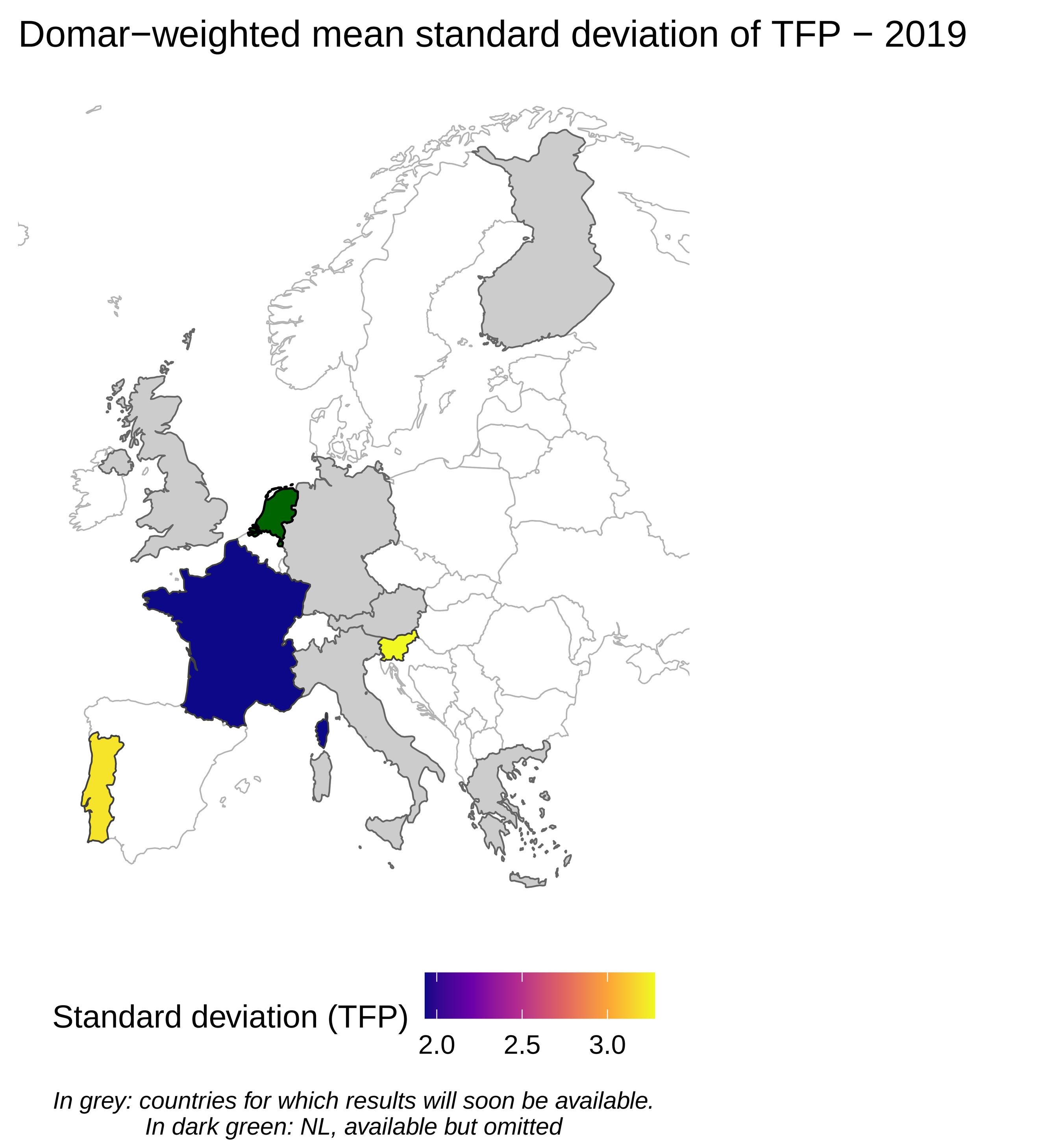
Comparing productivity

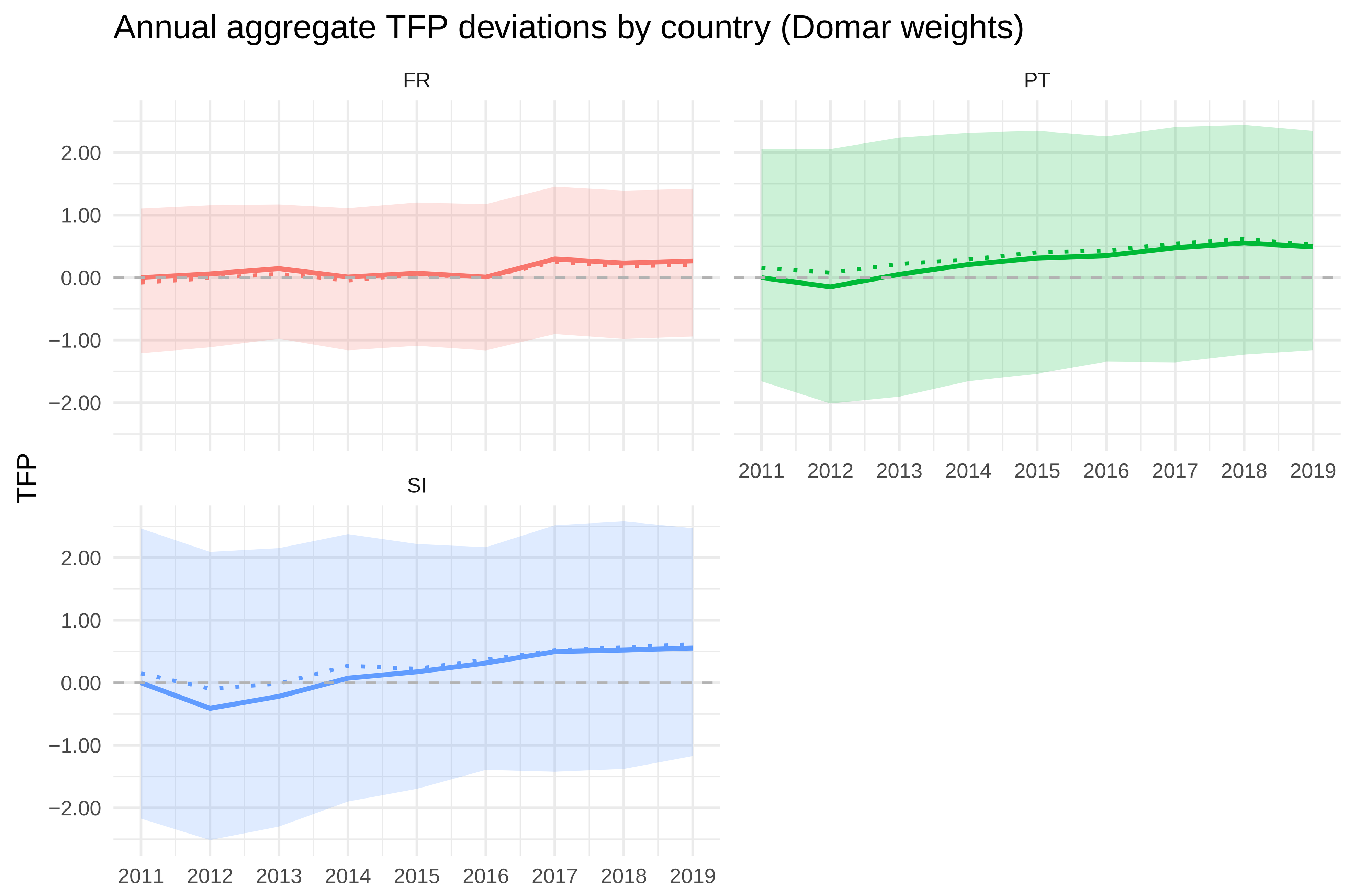
- Approach: distributed-microdata — code runs within each country to return comparable productivity moments.
- Indicators: TFP moments (mean, deviation, distribution of growth rates) give insights into misallocation and selection.
- Aggregation: Domar weights give each sector weight proportional to its impact on aggregate GDP, capturing reallocation margins missed by simple averages.

Data and methods

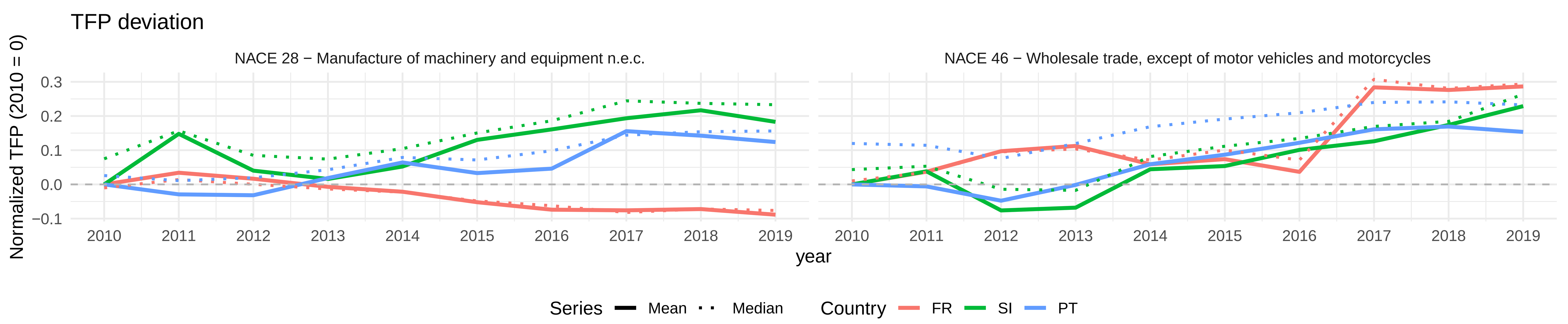
Data: BR, BS, SBS; monetary series deflated
Observation unit: NL = enterprise group; PT = enterprise; SI/FR = legal unit
Estimation: Input elasticities (cost-shares, OLS, OP 1996, ACF 2015) at 2-digit NACE–year level; TFP from residuals

Aggregate and growth of TFP





Sectoral analysis



Conclusions and Future Work

Conclusions

- Productivity growth close to zero on average
- Much higher spread in SI and PT compared to FR

Future work

- Better manage firm observation unit before estimation
- Extend (Wooldridge, allow standard error computation and testing) and fine-tune already existing methods

Contact Info

j.delacalmedina@uva.nl;
m.miorandi@student.vu.nl

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