

CompNet The Competitiveness Research Network

**CompNet Annual
Conference**

Luxembourg, 14-15 September 2022

Jointly organized with EIB

Filippo di Mauro (*)
IWH
Chairman of CompNet

(*) thanks very much to Laura Lufay for assisting in the preparation

Introduction

- Huge thanks to the European Investment Bank for hosting this conference
- A lot has been going on last year in CompNet and will summarize what we achieved and plan to do:
 - Datasets
 - Research
 - Events

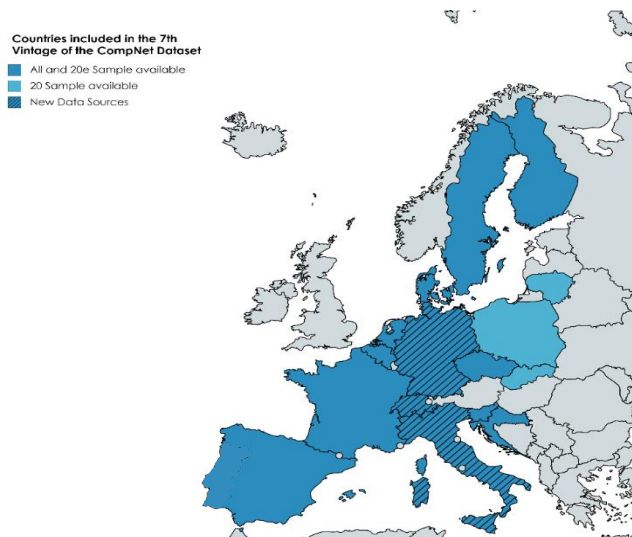
CompNet in a nutshell

1. **Self-managed research Network** with a double mandate:
 - Provide a Forum for, as well as Do research on **productivity**
 - Create and manage *TWO top standard firm-level based datasets*
2. We are hosted at *IWH-Halle*, supported by major European institutions (ECB, EU Commission (EC-Grow and EC-EcFin), EIB, EBRD, ESM); academic bodies (IWH-Halle and Tinbergen) and two Productivity Boards (German Council of Economic Experts (SVR), and France Strategie). **THANKS to IWH and the other supporters**
3. Our **data providers** are *Statistical institutes* and *National Central banks*. **THANKS TO THEM FOR SUCH OUTSTANDING INPUT**

1 – Our two Datasets

- The **Traditional CompNet dataset** now on its 9° Vintage, including 21 EU countries, plus CH and UK, available annually
- The **Micro-Data Infrastructure (MDI)**, a much more granular dataset now available for 6 countries (FR,NL,DEN,FIN,NOR,SWE), eventually available directly to researchers for periodical use

The traditional CompNet Dataset



- Unbalanced panel of productivity indicators of 19 European countries for the period 1999-2018, soon up to 2020 for 23 countries.
- Our data providers (**statistical institutes, central banks and research institutions**) run our codes on the best existing national datasets cross-country harmonized

Countries	Aggregation levels
Belgium, Croatia, Czech Republic, Denmark, Finland, France, Germany, Hungary, Italy, Lithuania, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland. New: Latvia, Malta, Lithuania, UK	Country, Macro-Sector, Macro-Sector-Size-Class, Industry 2-digits ⁸ , and NUTS 2

The Traditional CompNet Dataset – variables

Productivity	Financial	Trade	Competition	Labour
Labour productivity	Investment ratio	% permanent exp.	Price-cost margins	% firms that change employment between t and t+3 (t+1)
VA and revenue TFP; various estimation techniques	RoA	% sporadic exp.	Mark Ups –various estimation techniques	Share of high-growth firms
ULC	Cash holdings	Export intensity	Herfindahl index	Job creation and job destruction rates
Firm size	Leverage	Characteristics of top exporters	Concentration of sales in top 10 firms of a sector	Wage premium (proxy for human capital)
Capital Intensity	Financing gap	Productivity premium of exporters		Firm entry and exit
Marginal revenue productivity of inputs	Collateral	Characteristics of firms that export AND import		
Static and dynamic allocative efficiency	Equity to Debt	Exports by destination		
Energy cost	Cash flow			
	Interest coverage ratio			
	Trade Credit/Debt			
	Debt burden			
	Credit constraint index			
	Share of “distressed” firms			

Previously we had added

- Zombie firms
- Regional dimension
- Intangibles proxies

In the 9^o we are adding

- Business dynamism indicators

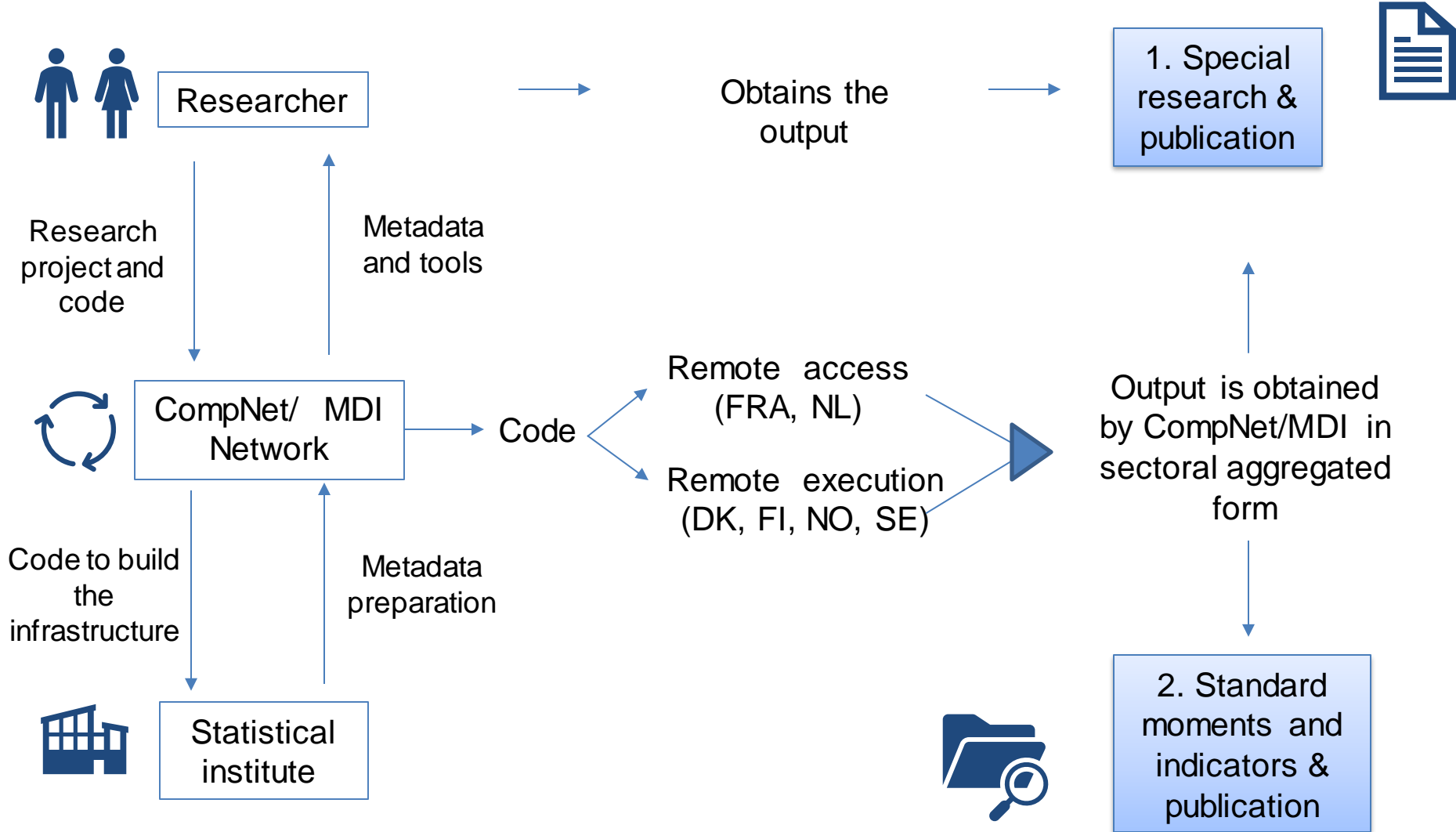
The MDI

Cross-country Homogenized **dataset** (sourced from Eurostat tables):



- **Time coverage:** for now 2007-2017
- We will expand variables included (e.g. green transition) and country participating

Researcher can run its codes periodically in autonomy, such variables.



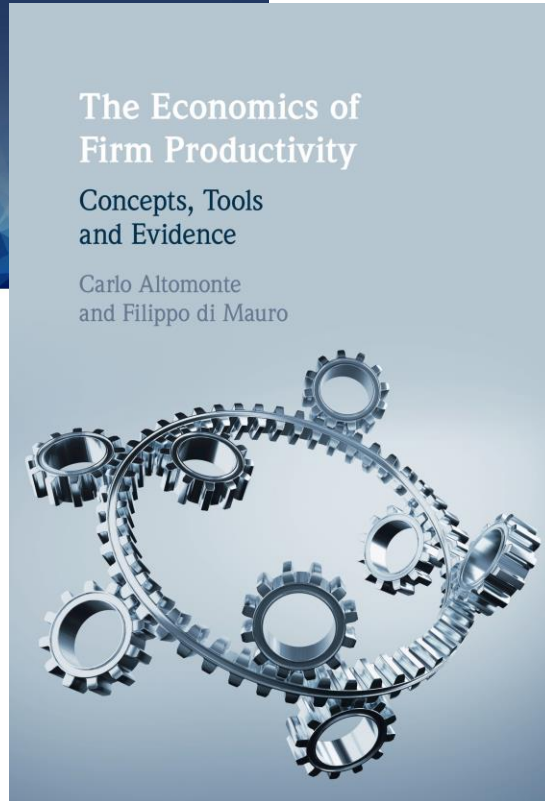
2) – Research ongoing

- We are working on several research projects related to *competitiveness*, *productivity*, and *firm performance*:
 - ***“European Business dynamism, market power and technology”*** Javier Miranda, Matthias Mertens, Sergio Inferrera.
 - ***“Labor Market power and Wage Inequality”*** Matthias Mertens.
 - ***“Input Market Power”*** Matthias Mertens, Bernardo Mottironi, Alessandro Zona Mattioli, Filippo di Mauro.
 - ***“Productivity and pay”*** Paolo Mengano, Matthias Mertens, Tommaso Bighelli.
 - ***“Intangible investments and productivity”*** Eric Bartelsman, Mirja Hälbig, Alessandro Zona Mattioli.
 - **With the staff of the EIB are connecting the CompNet dataset with the EIB investment survey**
- We produce periodically policy output (VOX EU and alike) to market our research

2) – Research recently published



- Bighelli et al (with M. Melitz)
On *Firm concentration and resource reallocation*
→ Forthcoming in JEEA



- Book by Altomonte and di Mauro on
The Economics of Firm productivity
(Cambridge University press)

3) - Conferences and Workshops in 2022

- Two major CompNet events:
 - **The 5th Data Provider Forum** (4 May);
 - **The Second Finance and Productivity (Finpro2) Conference** (5-6 May)
hosted in Halle by the IWH in cooperation with the EBRD
- Our (virtual) **ProdTalk** monthly series
 - Some 15 episodes already broadcasted
 - Some 100 participants on average
 - The last included *Bob Koopman, Kalina Manova, Davin Chor* (6 September 2022).

CompNet going forward – Two exciting news

European Commission Grant

- *CompNet/IWH* and *DG REFORM* (of the EU Commission-EC) are finalizing a **grant agreement** under the **EC's Technical Support Instrument** for a *2-year* collaboration to support France, Germany, Latvia, Portugal, Slovakia and Slovenia on using and further developing the above two micro-data datasets for research and policy use

Creation of a CompNet unit at IWH

- Negotiating permanent financing from the German Government
- Confirmation expected mid-next year
- Unit to be led by Professor Javi Miranda

CompNet going forward – additional services and events

Improved and more easy to use datasets

- Reduced (CompNet) dataset, carefully ‘cleaned’, with easy to access interfaces aimed mostly at policy users
- Improving the quality of the datasets via continuous discussion with providers and identification of the best ones available country by country

Training and application workshops

- Within the Commission grant we will increase our offer of training on the use of microdata, at different levels in accordance to needs, as well as
- organise periodical workshops on applications of our datasets for research/policy purposes.

Conferences

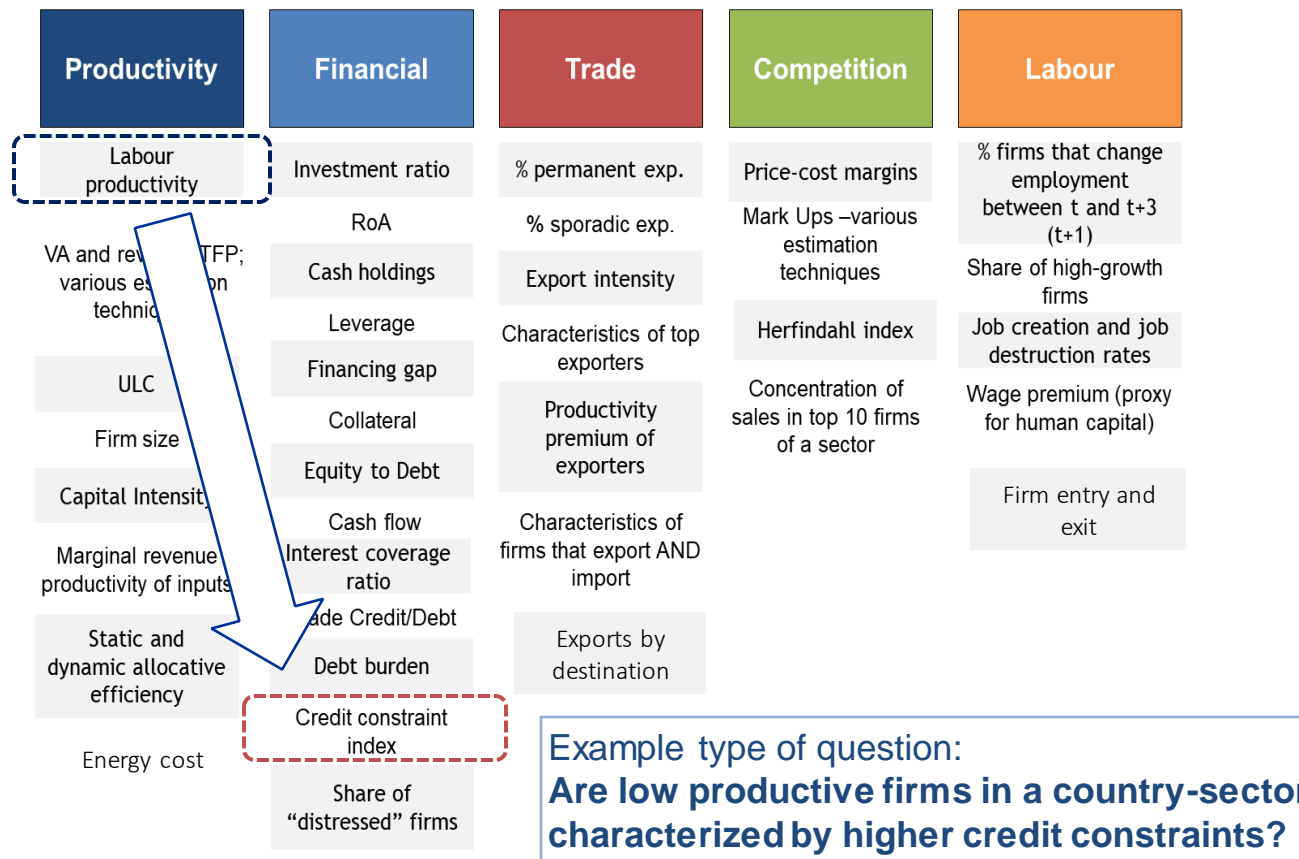
- Next Annual conference 2023.....Proposals are welcome
- FINPRO3.....possibly at Bank of Italy in June 2023

Conclusions

- New and exciting research projects → do ***contact us*** if you are interested in collaborating!
- **New data:** 9th vintage soon available, also in a reduced format easy to download and to use
- **CompNet is thriving** ...thanks for your support and great contribution to the common work

**THANKS, AND
ENJOY THE
CONFERENCE**

Example of joint distributions



MDI motivation - Current status with many hurdles



To do research, a
Researcher has to go
through:

1. Research proposal
2. Data access procedure
3. NSI technical restrictions
4. Fixed costs of getting to know the data
5. Decisions on data handling (e.g. outliers treatment)
6. Programming the code



The NSI, for each research project has to:

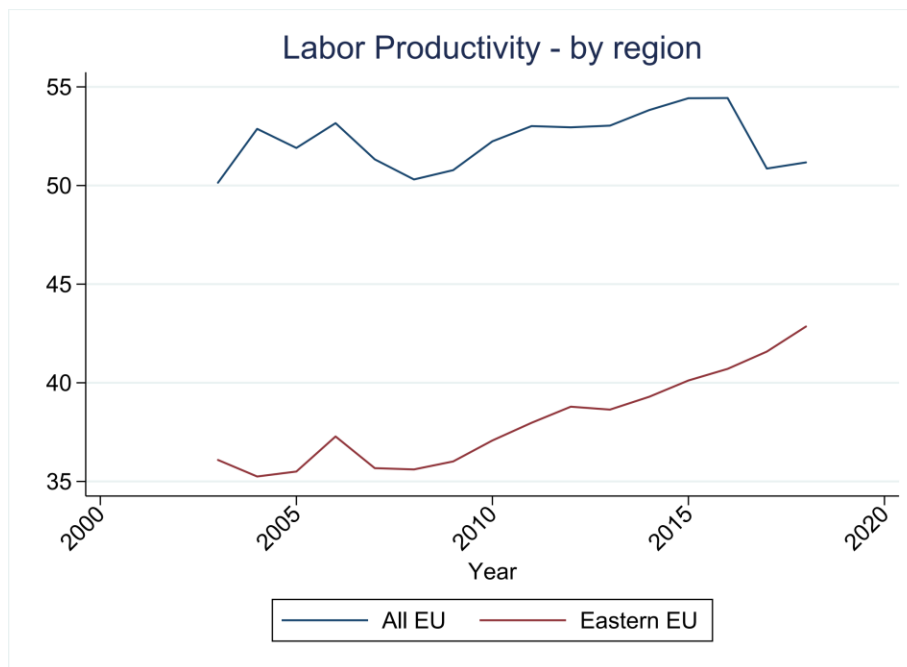
1. Provide access procedures
2. Provide dedicated assistance
3. Provide Microdata research support
4. Do a disclosure analysis
5. Sometimes host researchers



The resulting disclosure-free output will be used in a publication, **virtually impossible to replicate in other countries** after many hurdles!

Application 1: Labor productivity – by region

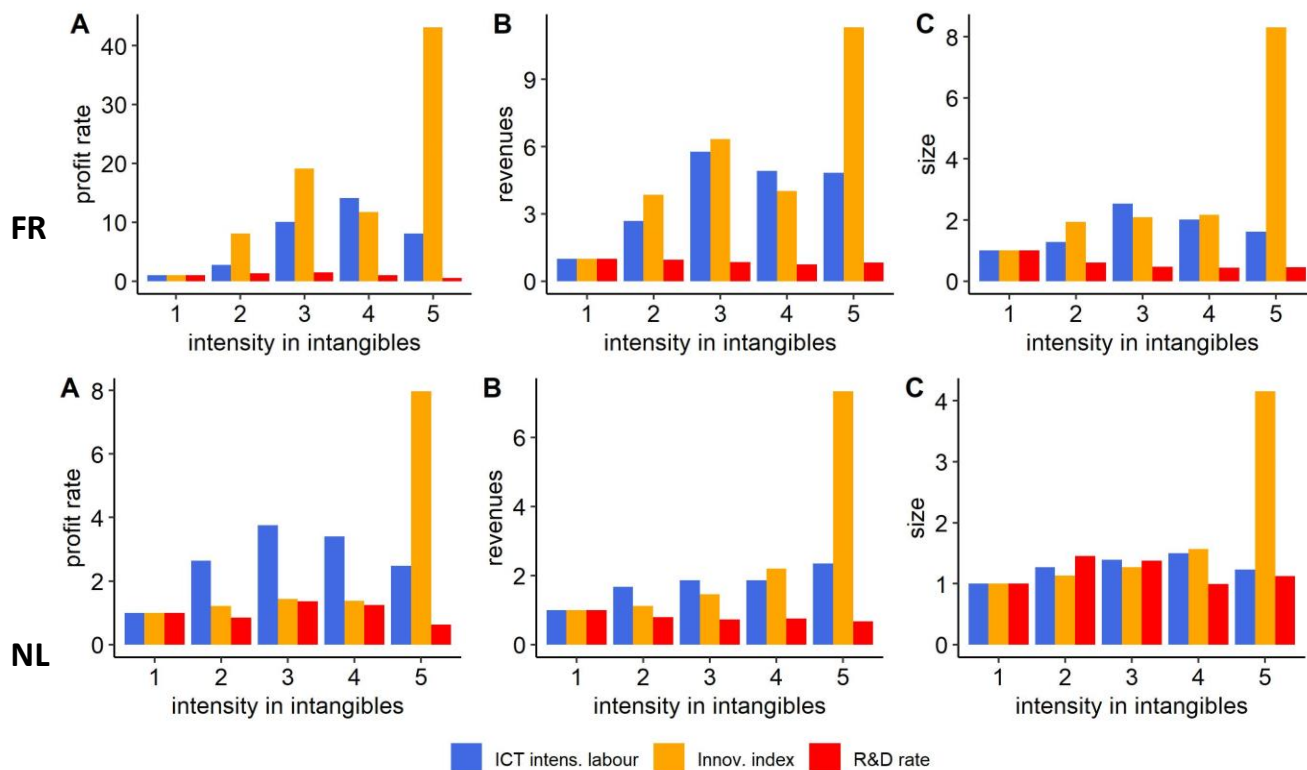
1) Productivity convergence in Eastern Europe



- Using the **CompNet dataset**, labor productivity shows a *convergence* between **Eastern EU** and the **EU average**, while maintaining similar growth in GDP per capita.
- This is happening at both the average **regional level** and at the **individual country levels**.

Application 2: More granular data (MDI) give a more nuanced picture

2) Intangibles and productivity

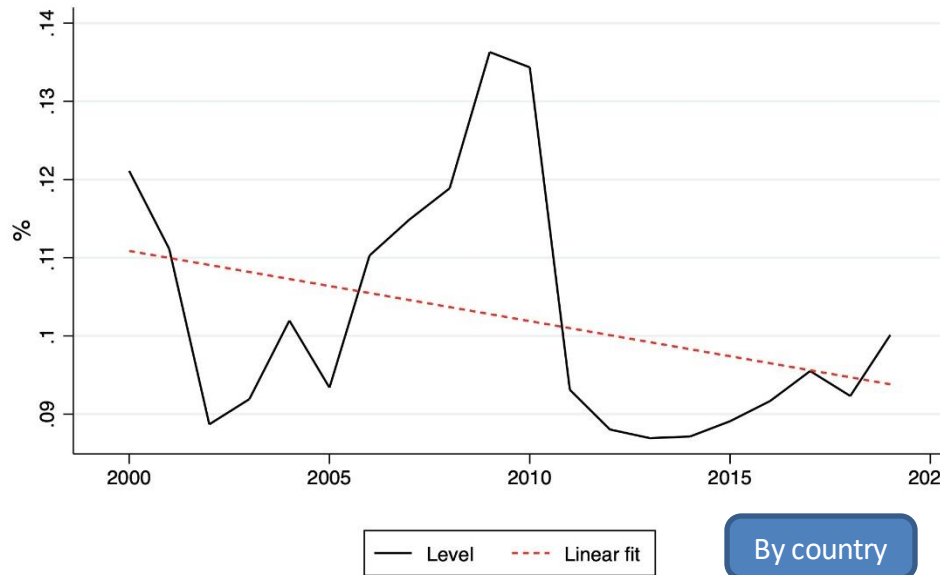


Firms results (profit, revenues) are highly skewed when using innovation index as a proxy for intangibles

Application 3: Business dynamism is declining

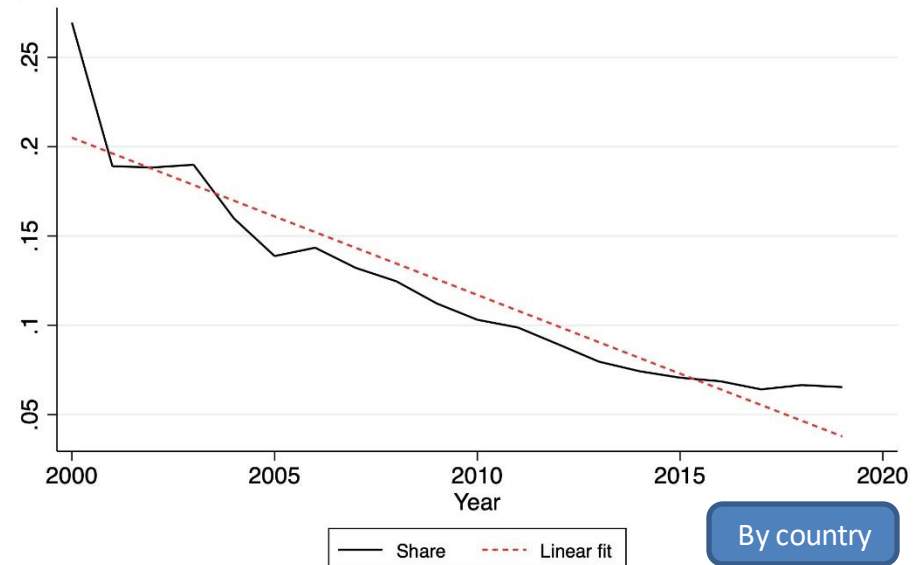
3) Business dynamism in the EU

Job Dynamism in Europe – 20e sample



Average weighted by total number of employees in a sector. Sectors considered: Manufacturing, Construction, Wholesale and retail trade, Transportation and storage, Accommodation and food service activities, Information and communication, Professional, scientific and technical activities, Administrative and support service activities

Share of employment in young firms over total employment – 20e sample



- Job dynamism (sum of job creation and job destruction) is declining across the board
- The importance of young firms in terms of employment is falling, too