CompNet The Competitiveness Research Network

# Enabling Policy and Research in Europe: The CompNet Dataset

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*Chairperson CompNet*

**Valletta, 27th October 2023**

*With input from Marco Matani*

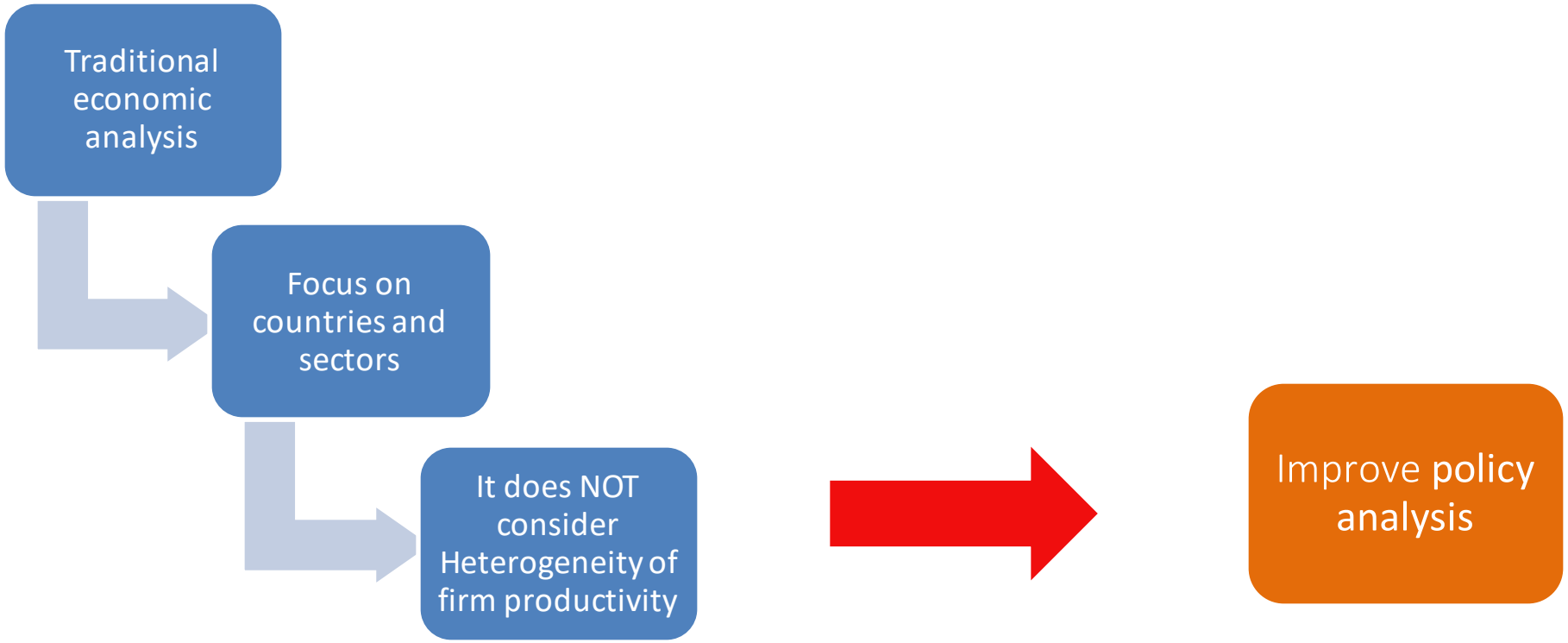
# Roadmap

- Micro-based policy and academic analysis: Motivation
- The CompNet Dataset
  - Overview
  - Confidentiality Guarantees
- The 2023 CompNet Firm Productivity Report
- Research application: Concentration and productivity
- CompNet going forward

# Introduction

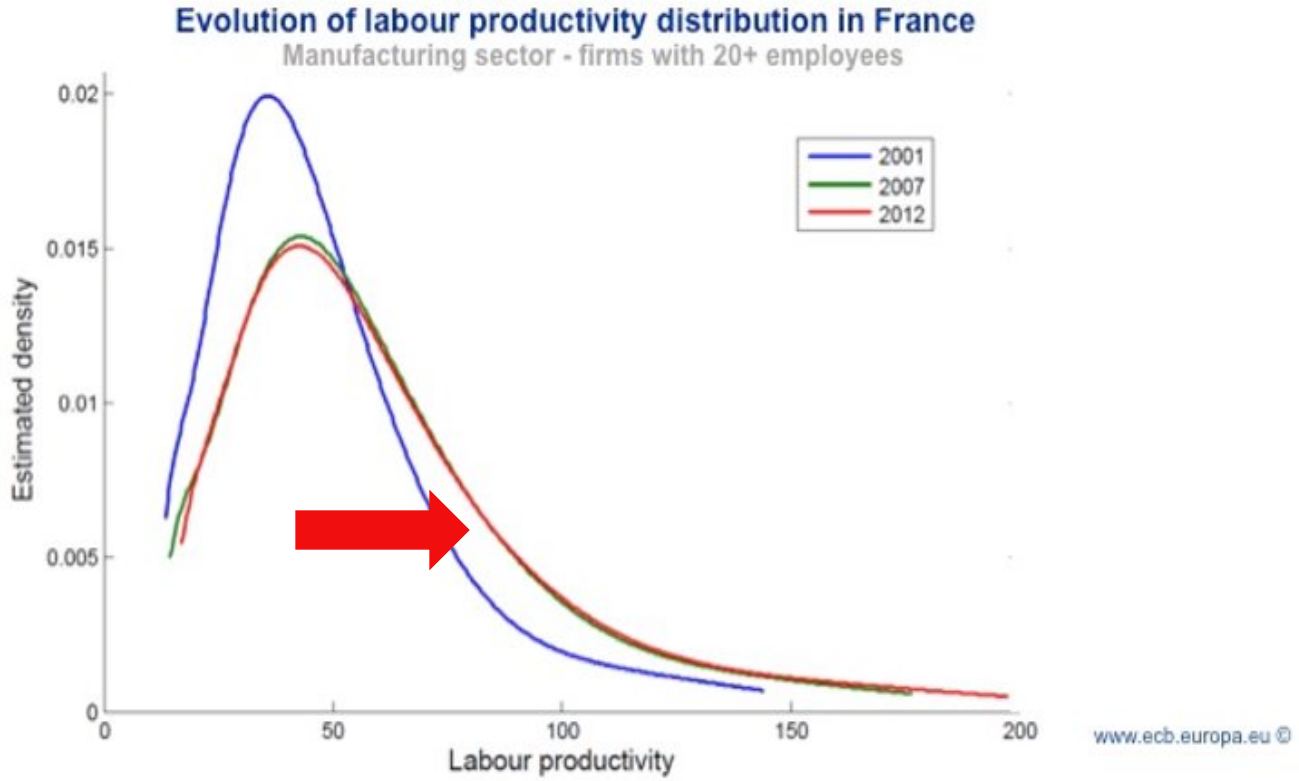
- **Thanks a lot** to the Malta **National Statistical Office** for hosting us today
- After having pioneered **CompNet**, **Malta** has recently **rejoined** our 9th Vintage
- What we will be presenting can be **very useful** for:
  - **Malta productivity analysis**
  - **Cross-country comparison**

# Micro-based data analysis: Motivation



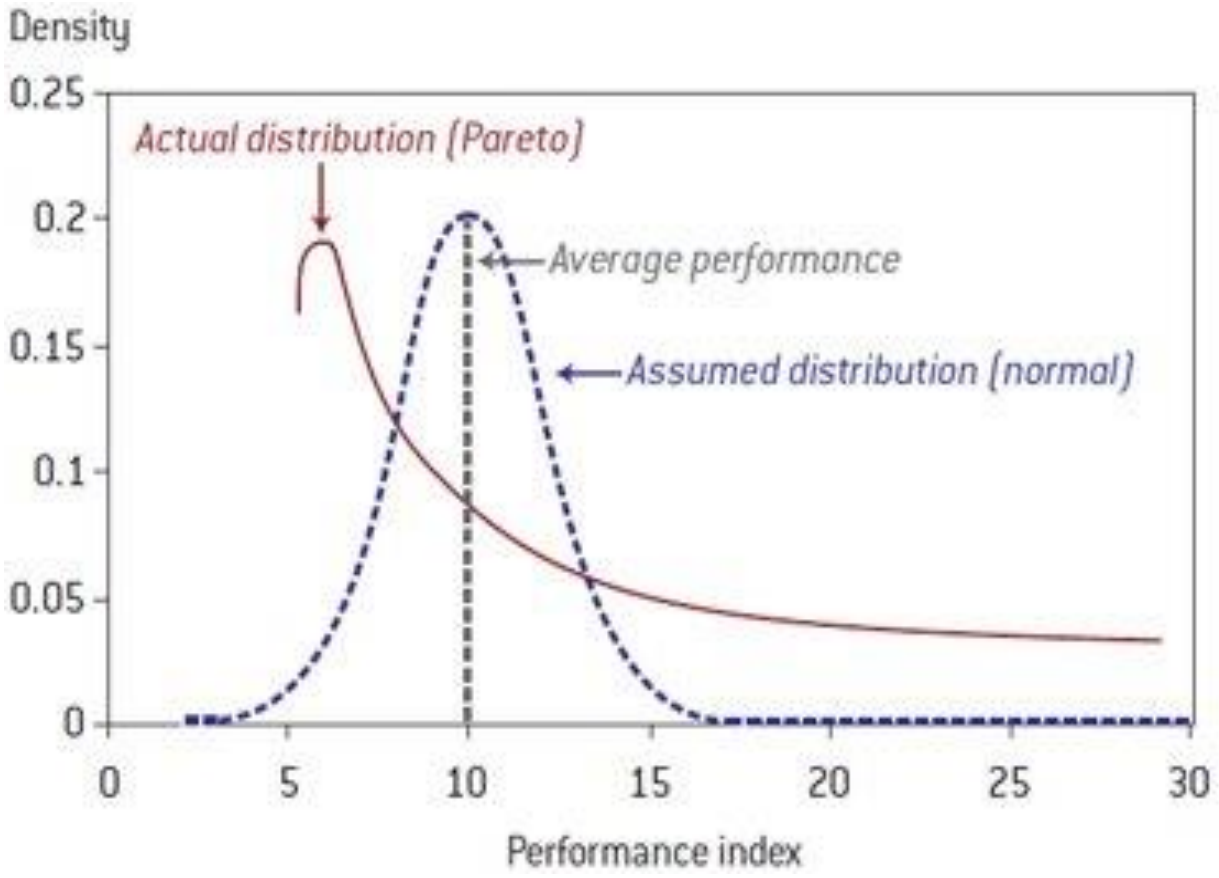
# Micro-based data analysis: Motivation

- Productivity analysis is key for **welfare**
- Firm performance distribution is very **disperse and asymmetric**
- There are a **lot of firms with low productivity** and only a **few** in the "**right-tail**" that are very productive (the "*happy few*").
- In the case of France the curve shifted **to the right direction**
- Higher productivity for more firms and thus **higher AVERAGE aggregate productivity**



# Micro-based data analysis: Motivation

- Aggregate indicators alone, when interpreted as if generated by a **representative firm**, give **partial messages**...
- ...and may generate wrong **policy recommendations**
- For instance impacts of a macro shock or policy will depend on the shape of the **actual underlying distribution**
- CompNet allows **cross-country comparisons** along these dimensions leveraging on **official balance-sheet information** of European firms...
- ...while **preserving confidentiality**
- **QUALITY is key (cannot say the same for private providers such as Orbis)**



# Micro-based data analysis: Motivation

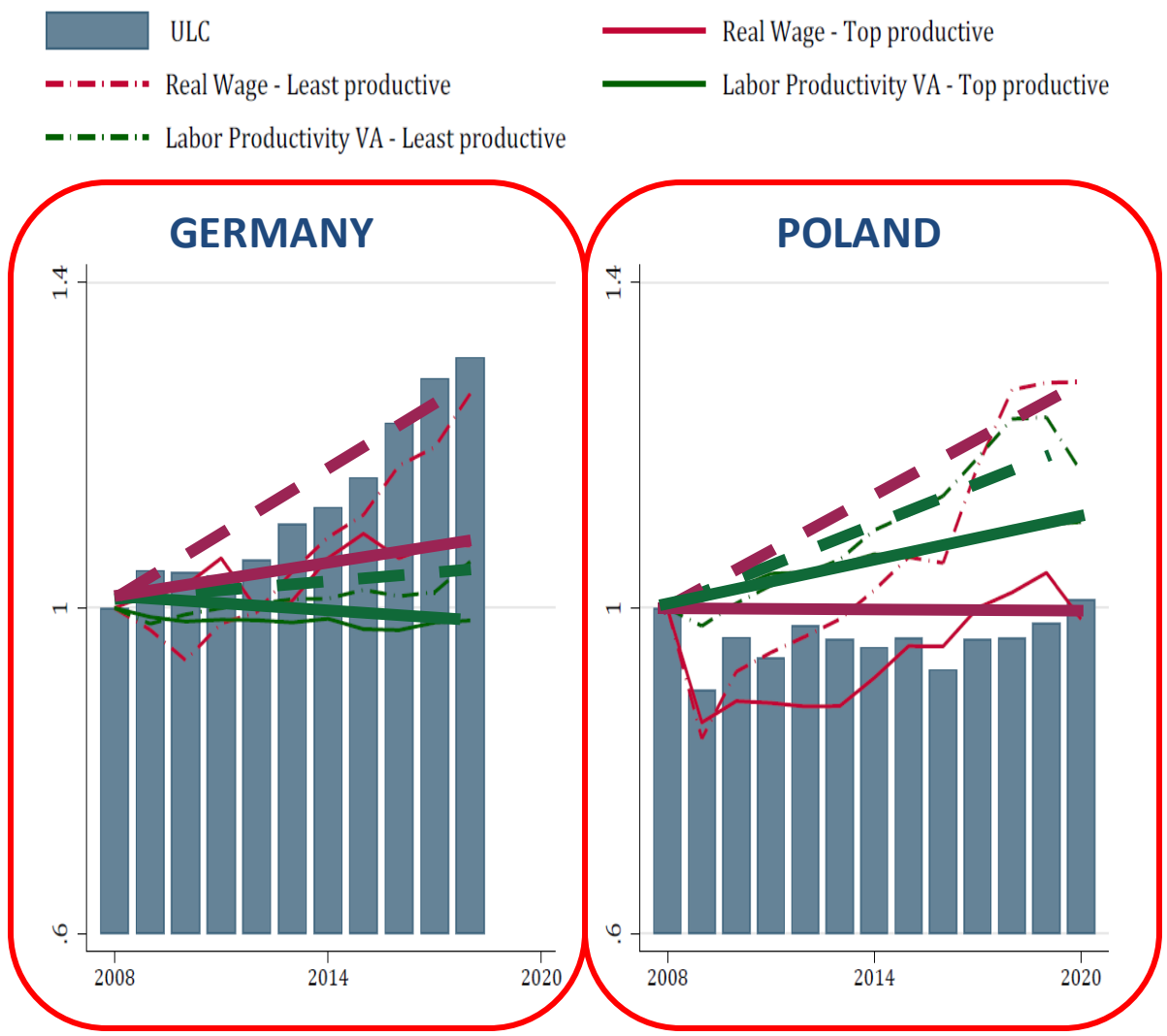
- **Let's take the case of Unit Labour costs (ULC)**

  ULC = tot labor cost / productivity

  ➔ When ULC ⇧ Competitiveness ⇩

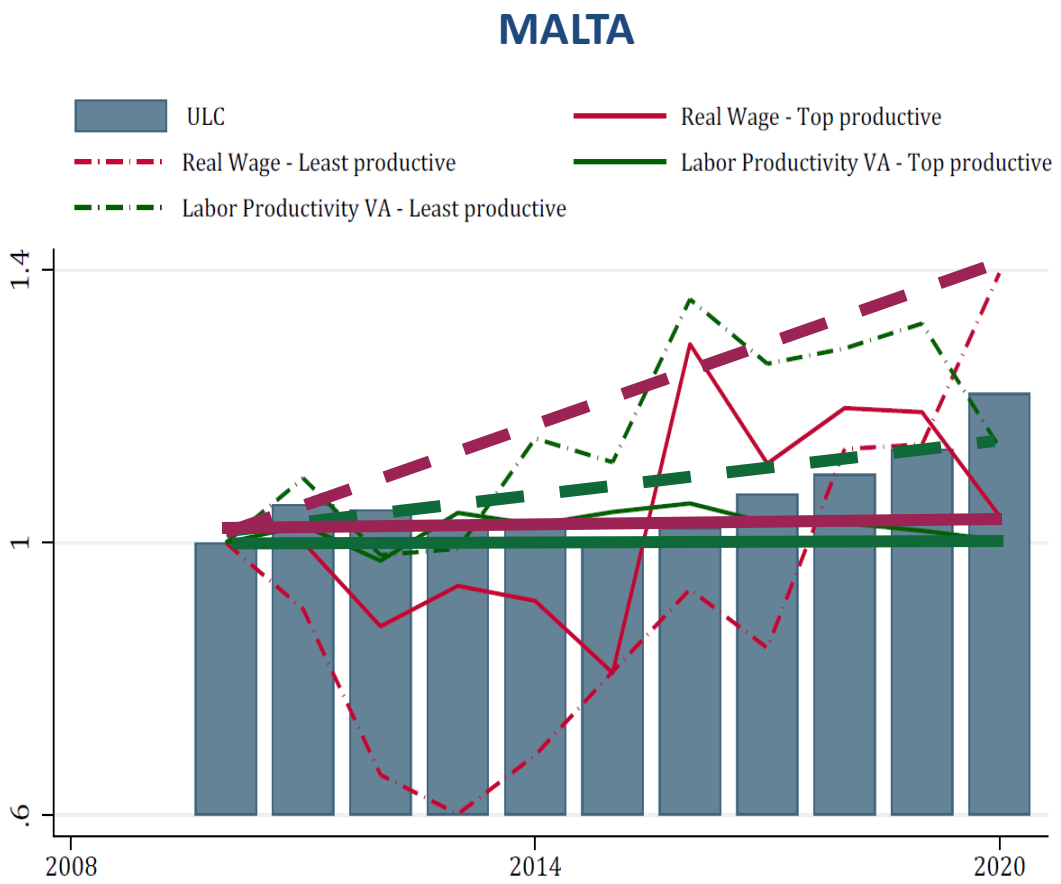
- **GERMANY**
  - Overall rising ULC….loss of competitiveness
  - Flat productivity of both least and most productive firms
  - Rising wages of top productive firms
  - Rising wages of bottom productive firms…even more marked …and totally out of whack with their productivity

- **POLAND**
  - Broadly constant ULC
  - Rising productivity of top firms as well as…
  - …..of least productive ones
  - Stagnant wages of top productive firms
  - Rising wages of least productive firms

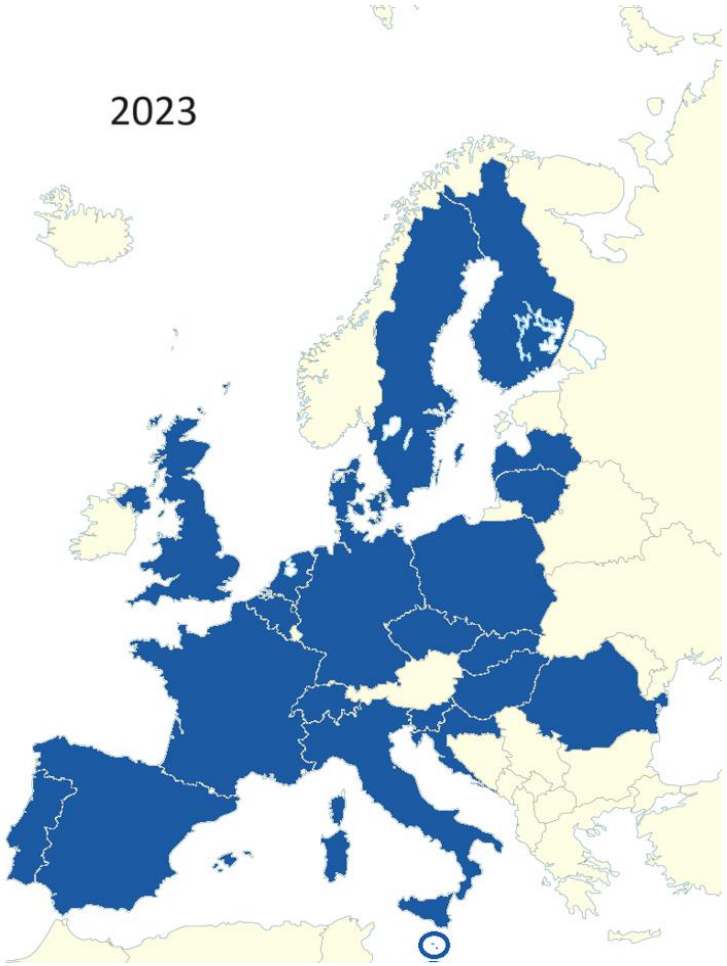


# Micro-based data analysis: Motivation

- **MALTA**
  - Overall rising ULC = competitiveness loss
  - Stagnant productivity of top productive firms
  - Stagnant wages of top productive firms
  - Somewhat rising productivity of least productive firms
  - ….but with their wages rising much faster



# The CompNet Dataset




- Unbalanced panel of **productivity and competitiveness indicators**
- **Started in 2012** from research departments of the ECB/Eurosystem, hosted at IWH since 2017
- Our data providers are **national statistical institutes, national central banks** and **governmental research institutions**
- **They** run our codes on the best existing national datasets (**business registers and tax returns**, with 2-3 years lag)
- **We** provide **cross-country harmonization**
- **No need** to undertake **new** and costly data collection **efforts**
- **9th Vintage**: out in July 2023 for **22 European countries, 1999-2020/21**

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

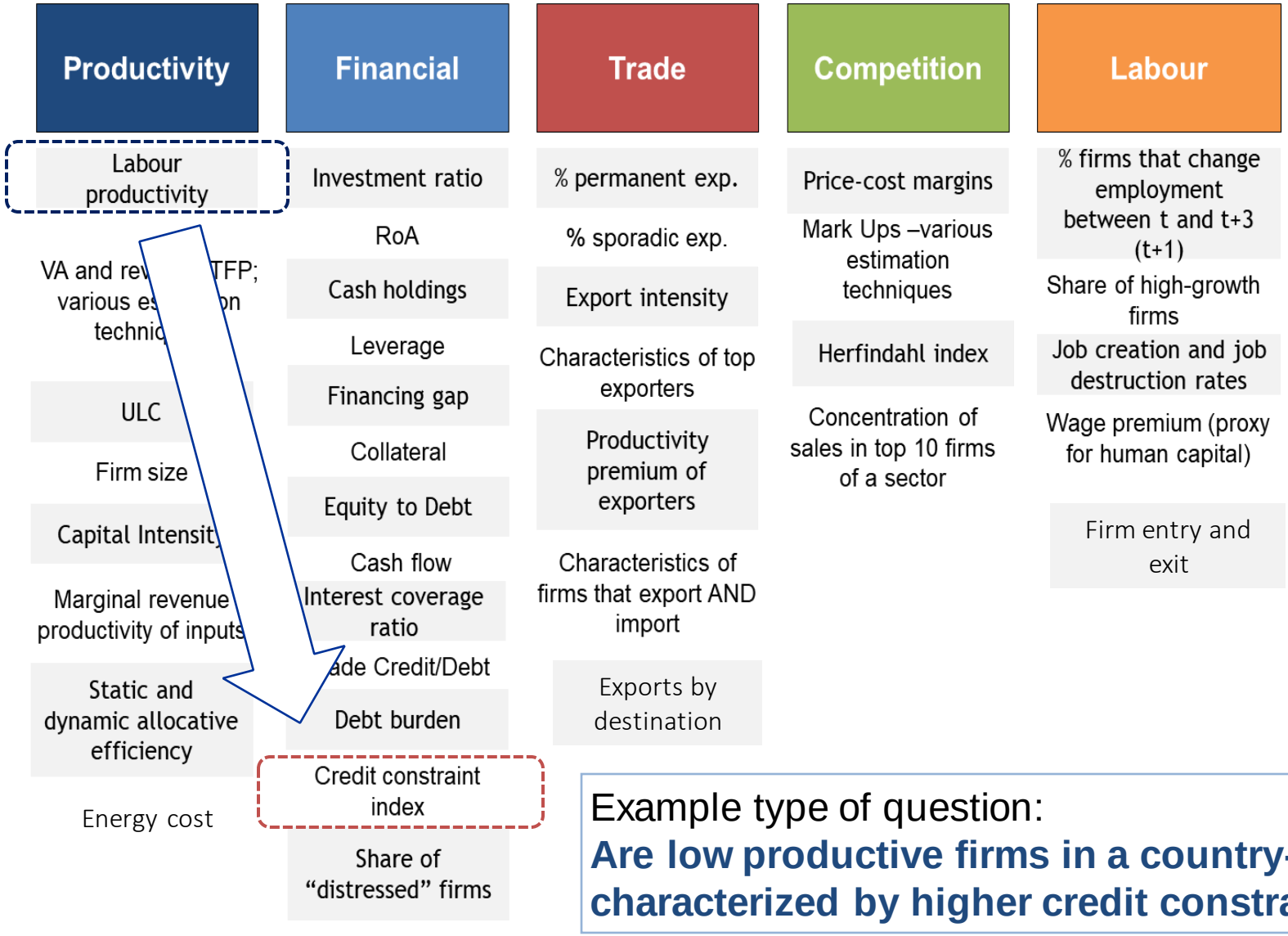
# The CompNet Dataset – 9th Vintage

| 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 within countries
- Intangibles proxies

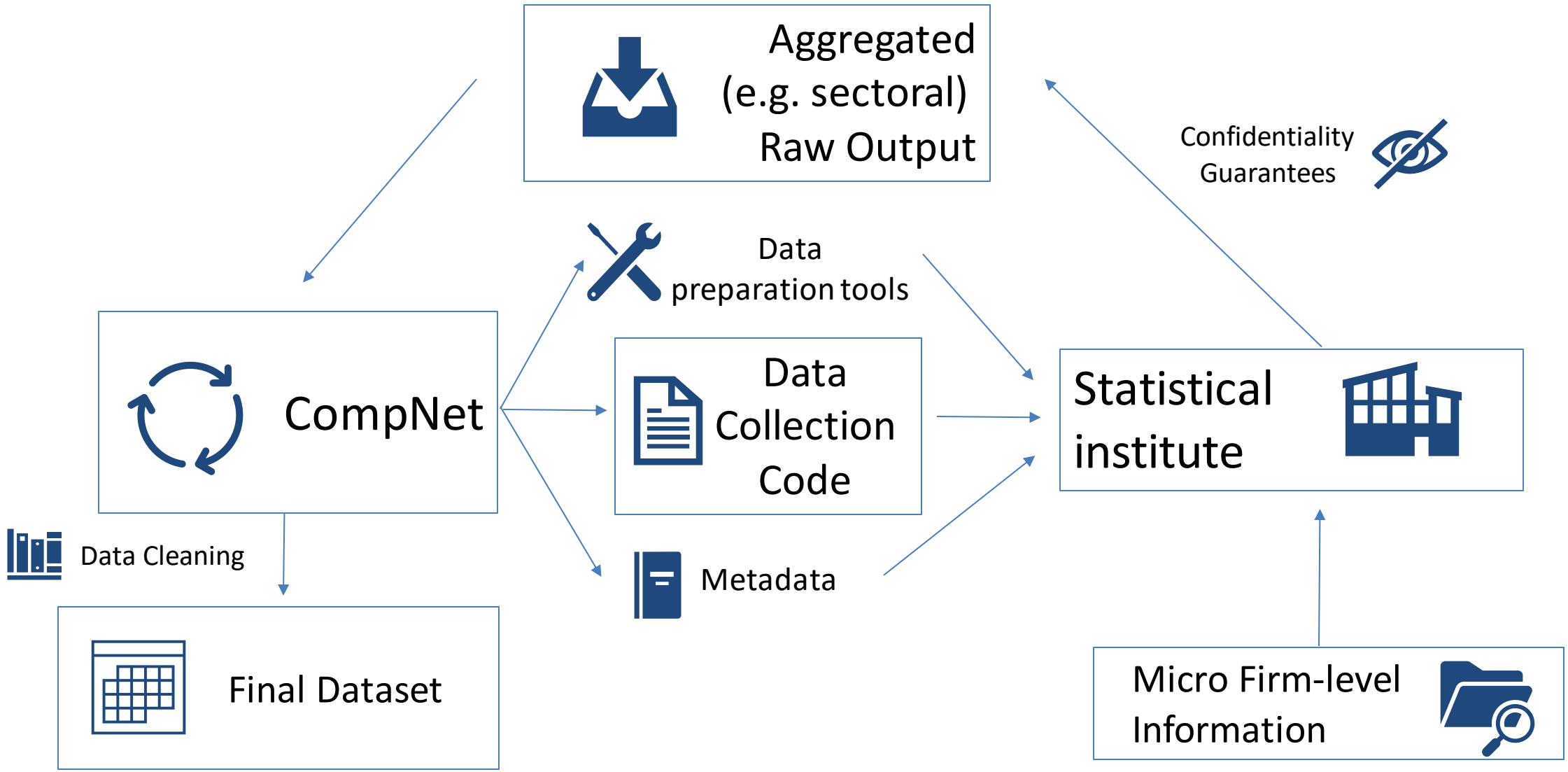
# The CompNet Dataset – Joint Distributions




Example type of question:

**Are low productive firms in a country-sector characterized by higher credit constraints?**

# CompNet – The Mechanics



# CompNet – Confidentiality Guarantee

- The CompNet code includes a **specific routine** that checks the eventual output cells to guarantee that **no individual firm can be identified**
- The specific routine bases on **two different thresholds**:

➢ **Minimum Number of Observations**: If a cell is based on a limited amount of underlying micro-observations, the cell will be dropped;

➢ **Statistical Dominance**: The largest permissible size share a single observation can attain for a given cell. If it is overcome, the cell will be dropped.

- **The data providers freely set both thresholds *a priori*** to satisfy their country or institution-specific requirements. The thresholds apply to each single cell.
- The **comparability** of all cells (e.g., sectors) eventually published is **not affected**
- For **Malta**, 8.23% of the cells are missing at the country level* and 33.75% at the macro-sector level* mainly due to confidentiality (but other variables, like investments, are simply not available)

* Unconditional 20e weighted dataset

- Q&A

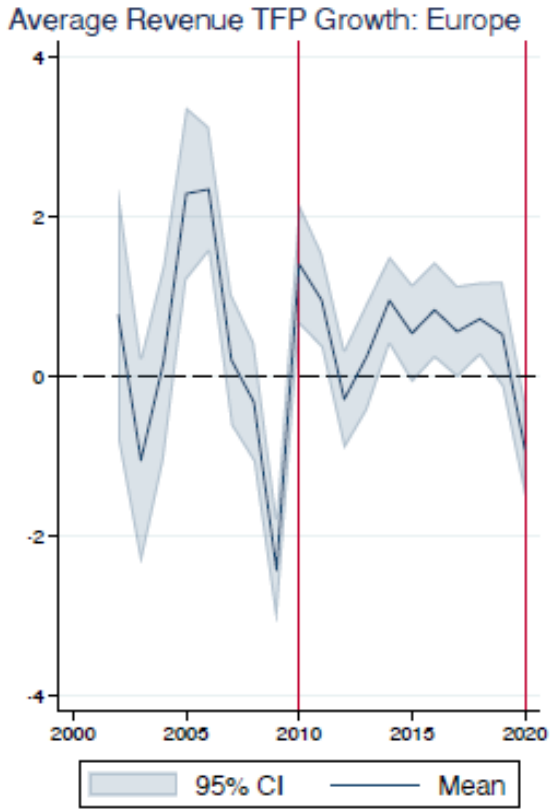
# The 2023 CompNet Firm Productivity Report

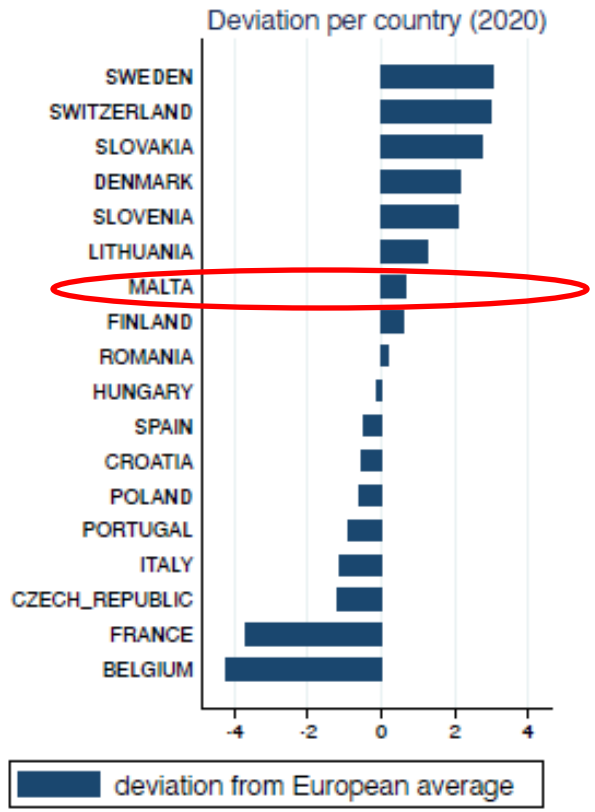

EU-TSI Weblink

- **Coordinators**: Marco Matani and Marcelo Piemonte Ribeiro (both CompNet)
- **Contributors**: Daniele Aglio, Sara Azzarito, Eric Bartelsman (Tinbergen Institute), Urska Cede (IMAD, Slovenia), Ralph De Haas (EBRD), Leonardo Indraccolo, Neeharika Kakunuri, Anmol Kaur Grewal, Laura Lehtonen, Laura Lufray, Eva Pereira (GEE, Portugal), Jan Sebo (UVSR, Slovakia), Vincent Sterk (UCL), Neeltje van Horen (BOE), Alessandro Zona Mattioli (all CompNet if not otherwise specified)

# Ch.1 - The productivity puzzle revisited: Firm performance after COVID-19

❖ How did COVID-19 impact post-COVID **firm-level productivity**?

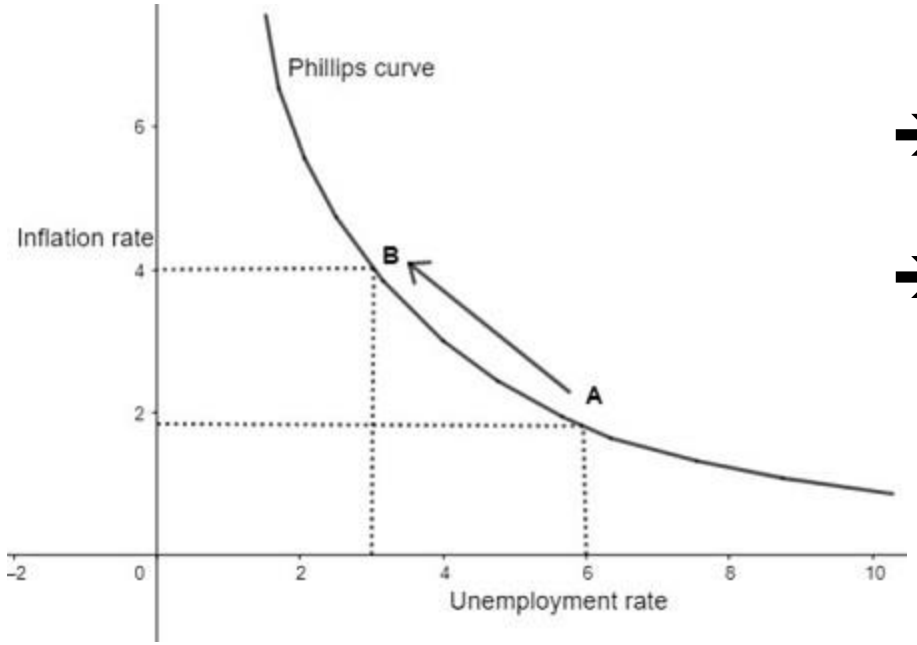



- COVID-19 crisis was followed by a **decline** in within-industry **total factor productivity (TFP) growth** in the short term in Europe
- Amidst **unprecedented cross-country variation**
- The performance of Malta was close to the European average

# Ch.1 - Phillips curve for heterogeneous firms

- The **Phillips curve** is used in macroeconomics to summarize the empirical relationship between "slack" in the economy and changes in the prices or wages, conditional on expected inflation

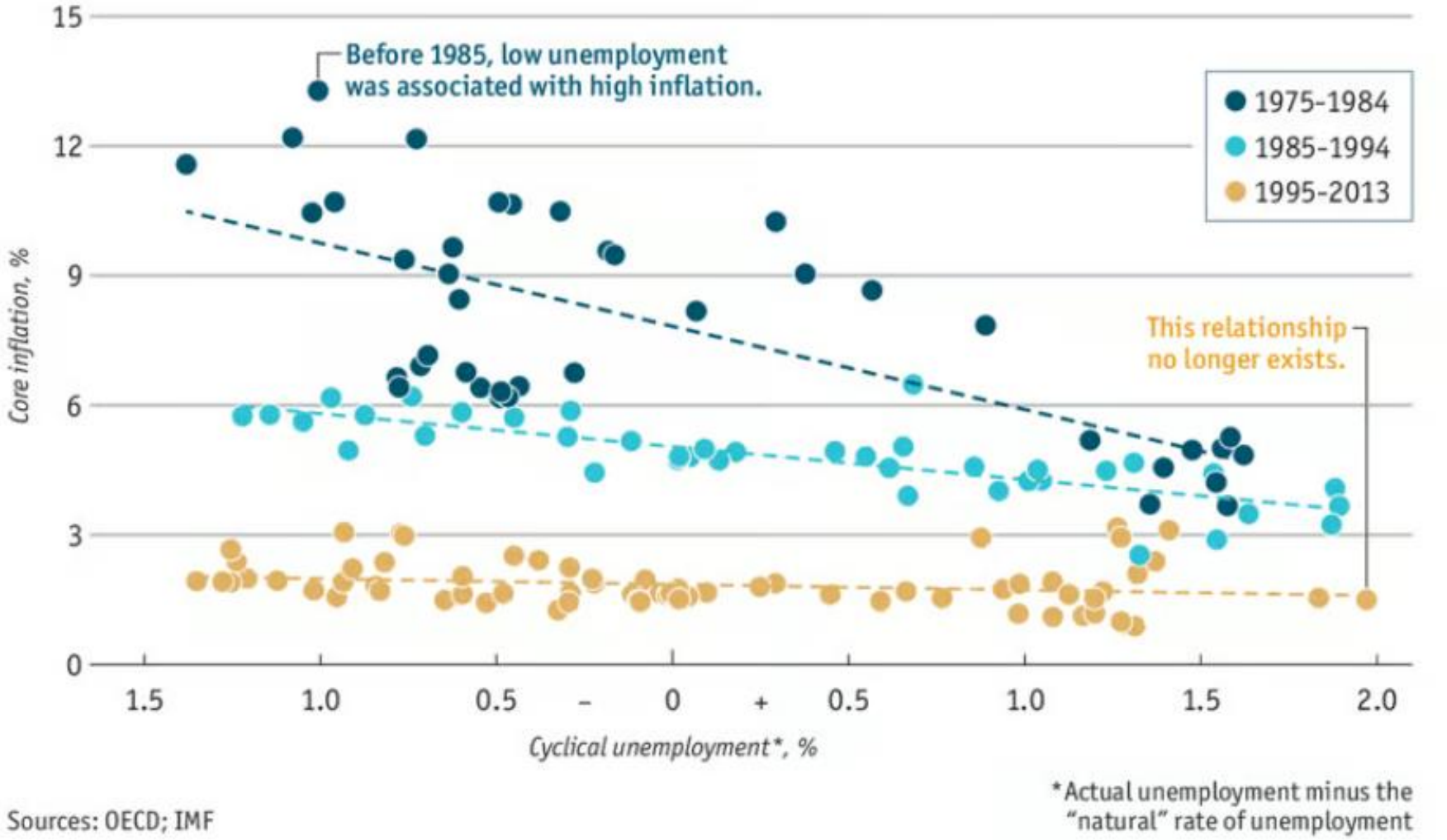



➔ When the capacity un-utilized (e.g., un-employment) drops inflation tends to rise

➔ Viceversa, higher inflation is associated with lower unemployment

- Over the years this relations tended to weaken, possibly because Governments were trying **to 'use' it** to promote growth via less attention to inflation

# Ch.1 - Phillips curve for heterogeneous firms




- Since the time the PC was conceived (mid-70) the curve tended to 'flatten'

- Still the debate reopens periodically:

❖ Can the **Phillips curve** still be used and how amid its apparent irreversible secular flattening?

# Ch.1 - Phillips curve for heterogeneous firms

- We take a **firm-level perspective** to the topic using **CompNet data**

- We link the macroeconomic concepts behind the Phillips curve with the outcomes of production and pricing decisions made by **heterogeneous firms** (industry aggregated by their productivity quintile)

- The main idea is that the **distribution of firms in productivity quintile MATTERS for the inflationary impact of the same demand shock**

❖ If demand for the output of an industry rises, and this **demand is disproportionately supplied by the most productivity (lowest costs) firms**, industry **prices may rise less** than if the demand is met by least productive firms, *ceteris paribus*

# Ch.1 - Phillips curve for heterogeneous firms

**The Phillips curve for Δ% real wages, 2001-2021**

| Models | (1) | (2) |
|---|---|---|
| Output Gap | 0.136*** | 0.123*** |
| | (0.007) | (0.008) |
| $\Delta$% Real Wages$_{t-1}$ | -0.311*** | -0.313*** |
| | (0.009) | (0.010) |
| Country Inflation$_{t-1}$ | | 0.119*** |
| | | (0.042) |
| Constant | 0.0548*** | 0.0481*** |
| | (0.006) | (0.0108) |
| Country-Industry-Quintile FE | Yes | Yes |
| Year FE | Yes | Yes |
| Observations | 35,600 | 27,611 |
| R-squared | 0.167 | 0.163 |

- We test this hypothesis by estimating:
- Real wages growth (as a proxy for marginal costs and, hence, inflationary pressure) =

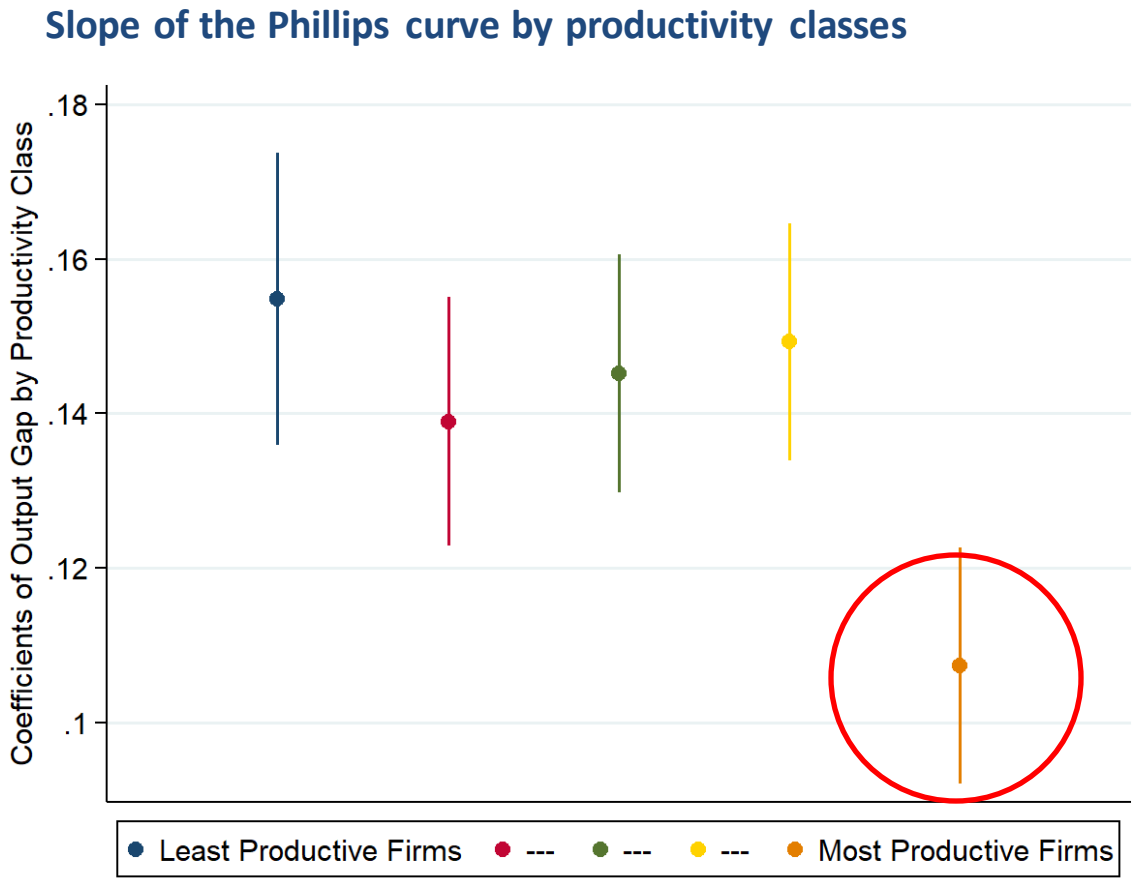
$$\alpha + \beta OutGap_{cidt} + \beta_1 RealWagesGrowth_{cidt-1} + \beta_2 Inflation_{ct-1} + \delta_{cid} + \delta_t + \varepsilon_{cidt}$$

- **TWO main results**:

**1) The (traditional) Phillips curve (i.e., the output gap parameter) is different to zero and therefore still holds** (The higher the output of firms with respect to their potential output, the higher the inflationary pressure through an increase in real wages)…

➔ **PC is NOT FLAT**

# Ch.1 - Phillips curve for heterogeneous firms




**2)** There is strong difference in the Phillips curve parameters, as measured at the different productivity classes

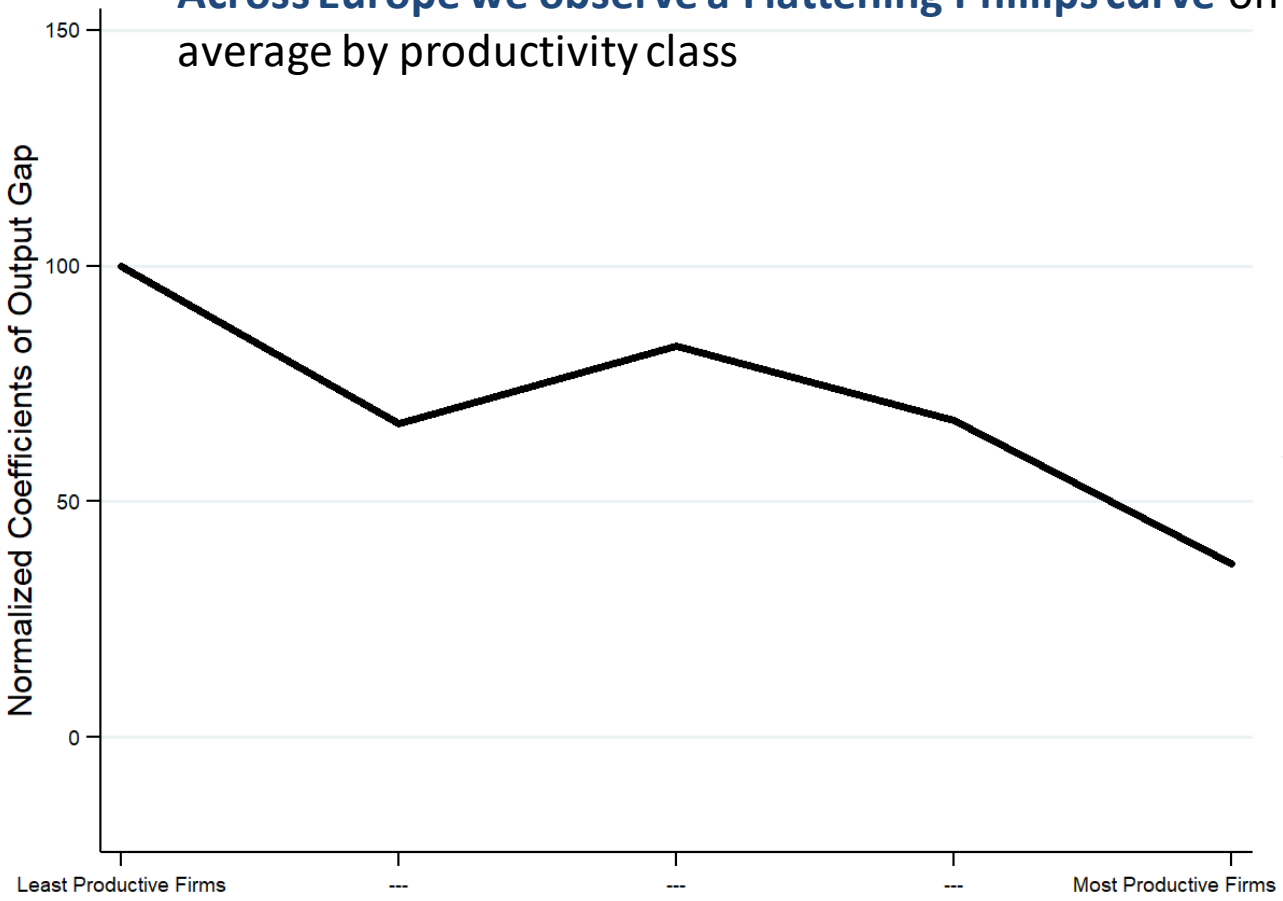
**➔The Phillips curve is <u>flatter</u> for the most productive firms.**

**➔ This is <u>flattening across the productivity distribution</u>**

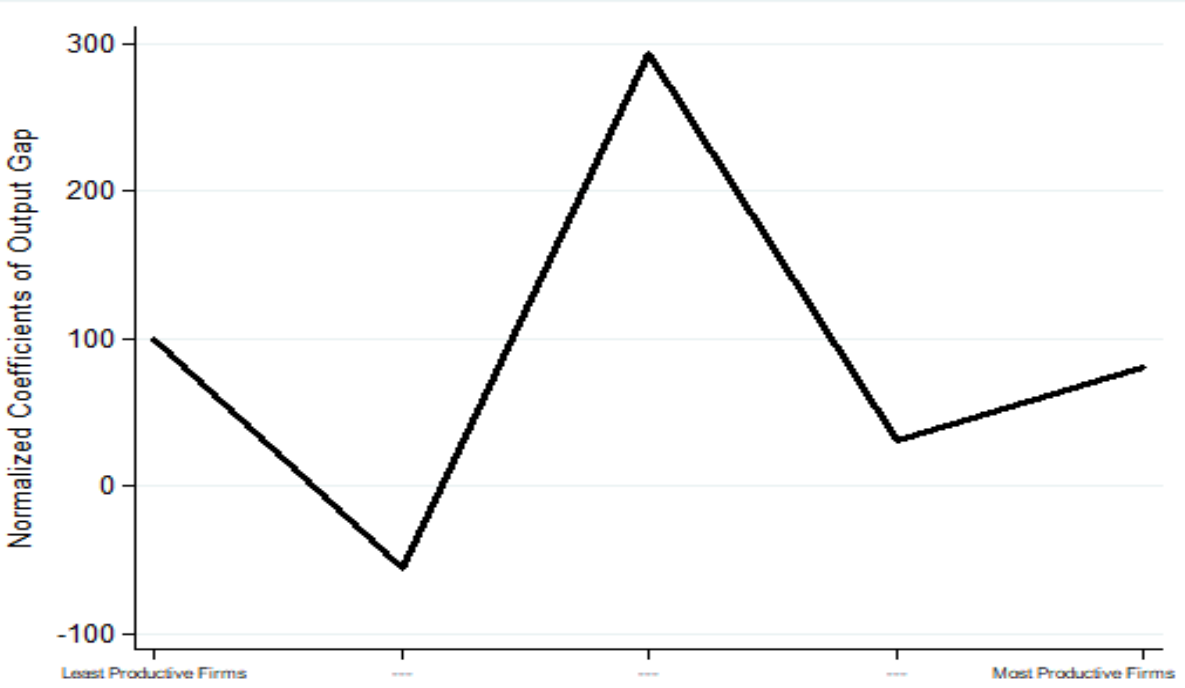
- Therefore, in a country-sector it matters **which composition of firms prevails** to understand the relationship between the economic slack and inflation.
- The more demand shock is met by increase in production by the most productive firms, the **least inflationary pressure will be observed**

# Ch.1 - Phillips curve for heterogeneous firms

**Across Europe we observe a Flattening Phillips curve** on average by productivity class




- This is driven by Den, Fin, Ger, Hun, Net, Por, Rom, Swe, and Swi...
- ...while for other countries (Be, Cro, Cze, Fra, Ita, Lit, Pol, Slk, Slo, and Spa) this is not the case
- For **Malta**, no evidence of significant flattening (though few sectors are covered):



# Ch.2 - EU firms in the global economy: A competitiveness assessment

- **Competitiveness is key;** we look at 3 aspects:

**1) Export drop during COVID-19**

**2) Role of EU Global Value Chains (GVCs) for productivity transmission**

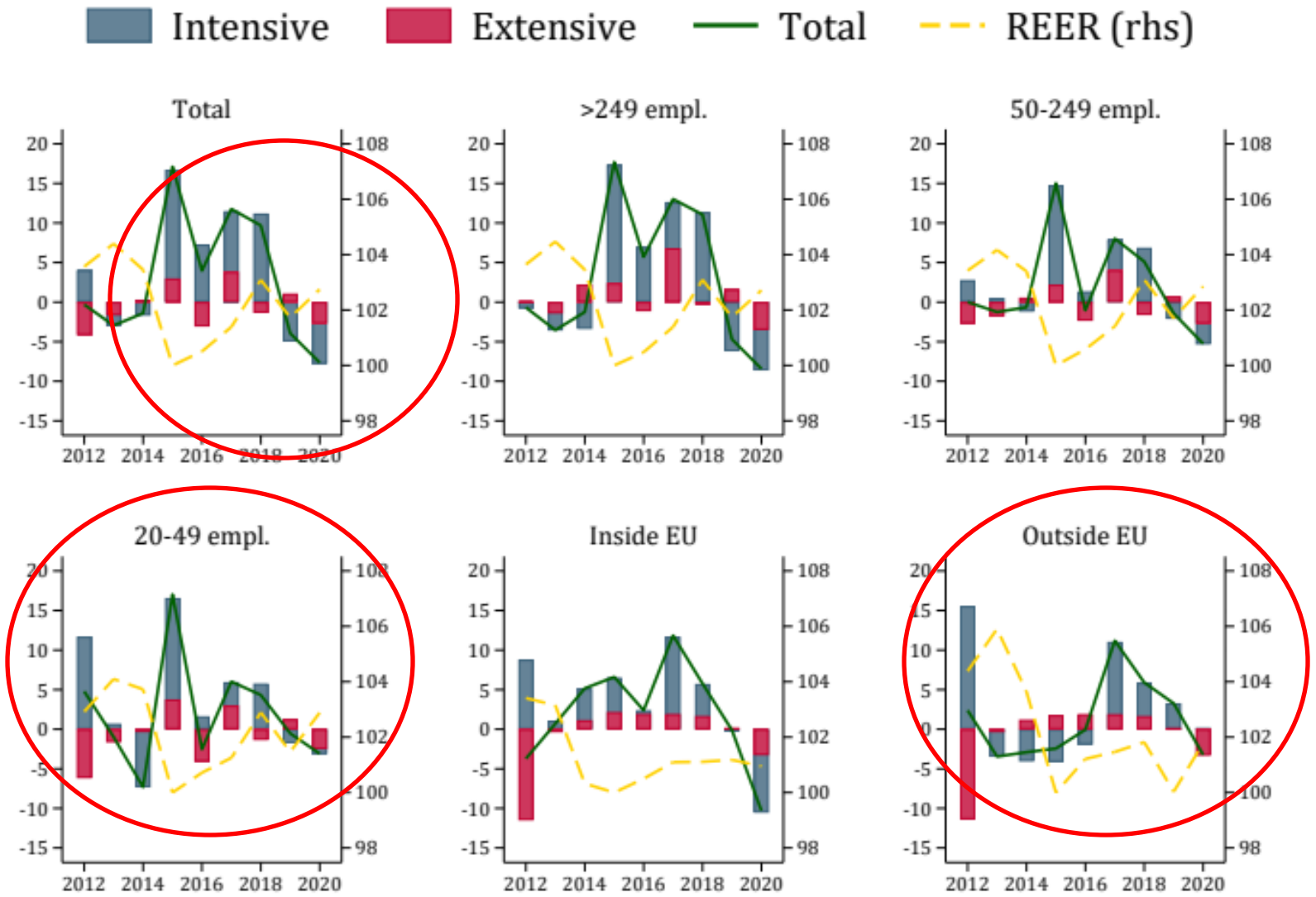
**3) CompNet-based Index**

## 1) Were export drops driven by firm characteristics?

- We disentangle **heterogeneity in export performance** by size classes, destination, and margin
  - **intensive**, i.e., same firms exporting more or less
  - **extensive**, i.e., change in the number of firms

# Ch.2 - EU firms in the global economy: A competitiveness assessment

**Export y-o-y rates of change by margin. European countries, 2012-2020 (y-o-y growth rate)**

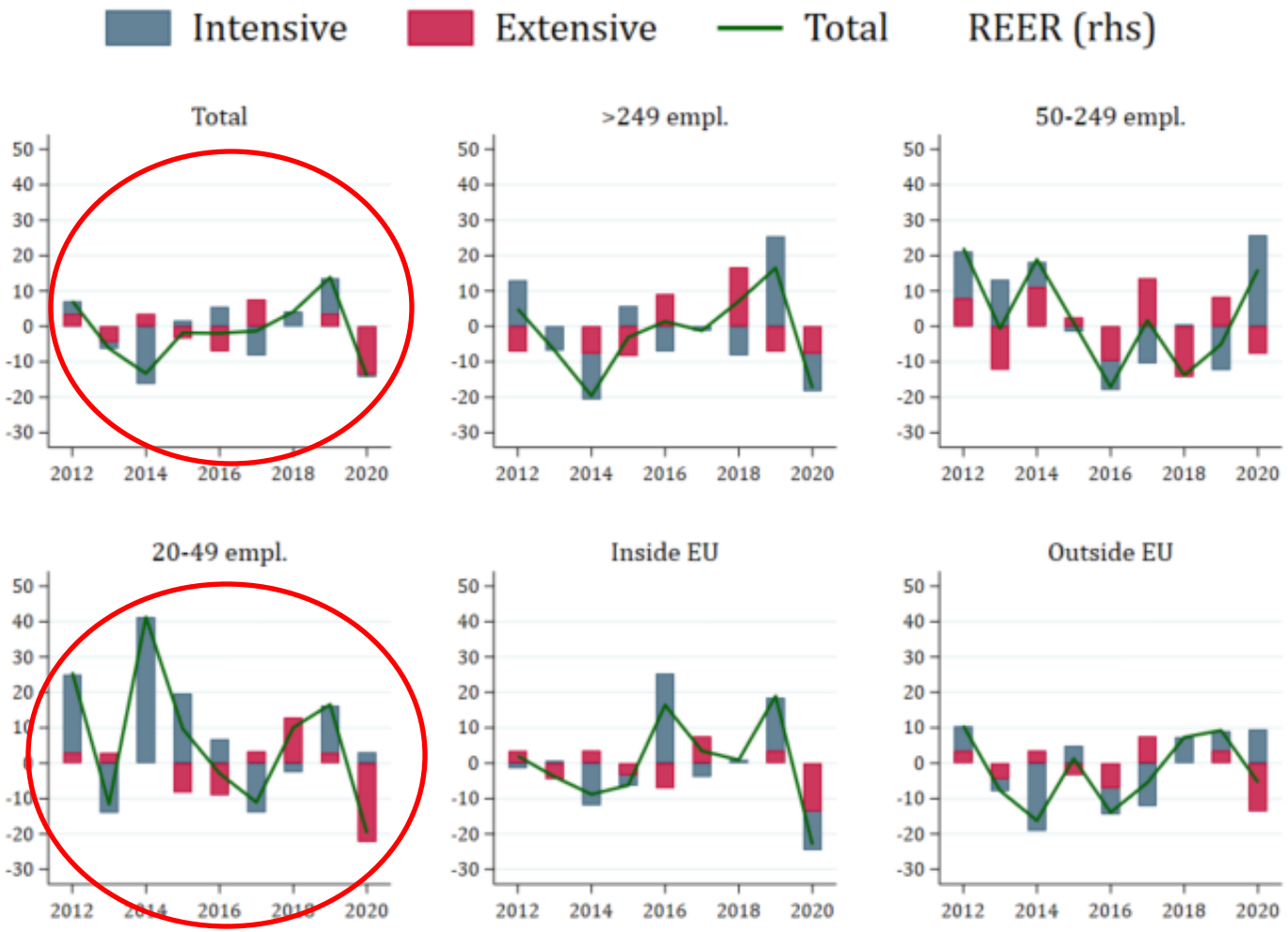



- **Starting with the overall result, the drop in total export in 2019 and 2020 resulted from the extensive and intensive margin alike**
- **However, for small exporters (20-49 employees) and for those exporting outside the EU the drop was due to the EXTENSIVE margin only, i.e., there has been a cut in number of firms exporting (only red histogram)**

## ❖ Focus on Malta

- Overall stronger dip in 2020, **almost completely at the extensive margin**
- Like in the EU, small exporters in Malta were **more prone to exit export markets** in 2020 but with a **much stronger drop (20% vs 3%)**

**Export y-o-y rates of change by margin. Malta, 2012-2020 (y-o-y growth rate)**

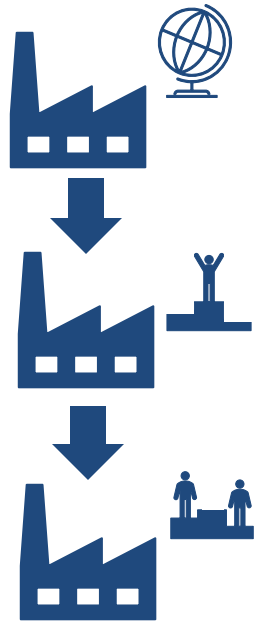


# Ch.2 - EU firms in the global economy: A competitiveness assessment

**TFP growth transmission with time interactions. European countries, 2005-2020**

| | (1) Frontier | (2) Middle | (3) Laggards |
|---|---|---|---|
| TFP growth GVC (import) frontier | 0.4636*** | 0.2243** | 0.2342 |
| | (0.1352) | (0.0905) | (0.1466) |
| TFP growth GVC (import) frontier × 2008-2010 dummy | 0.1790 | 0.1652 | 0.7637** |
| | (0.2684) | (0.1614) | (0.3617) |
| TFP growth GVC (import) frontier × 2020 dummy | 1.5797** | 0.1781 | 0.9058 |
| | (0.7425) | (0.7159) | (1.2805) |
| Lagged labor productivity gap with GVC (import) | 0.1138*** | 0.0345* | 0.0575** |
| | (0.0191) | (0.0207) | (0.0260) |
| GVC (import) participation growth | -1.5198 | 0.3132 | 0.7987 |
| | (1.9663) | (1.4075) | (2.0909) |
| TFP growth national frontier | | 0.5267*** | 0.5121*** |
| | | (0.0457) | (0.0682) |
| TFP growth national frontier × 2008-2010 dummy | | 0.5842*** | 0.8458*** |
| | | (0.1285) | (0.1966) |
| TFP growth national frontier × 2020 dummy | | 0.5762*** | 0.8796*** |
| | | (0.1311) | (0.2848) |
| Lagged labor productivity gap with national frontier | | 0.0277 | -0.0227 |
| | | (0.0227) | (0.0390) |
| 2008-2010 dummy | -0.5013** | -0.3058* | -0.6612*** |
| | (0.2156) | (0.1681) | (0.2421) |
| 2020 dummy | -0.3018 | -0.6983*** | -2.1518*** |
| | (0.3260) | (0.2302) | (0.4884) |
| Constant | 1.0791*** | -1.2086** | -1.9191** |
| | (0.2399) | (0.5449) | (0.9170) |
| Country-MacroSector FE | YES | YES | YES |
| Observations | 1,872 | 1,867 | 1,835 |
| Adjusted R-squared | 0.0468 | 0.6793 | 0.4658 |

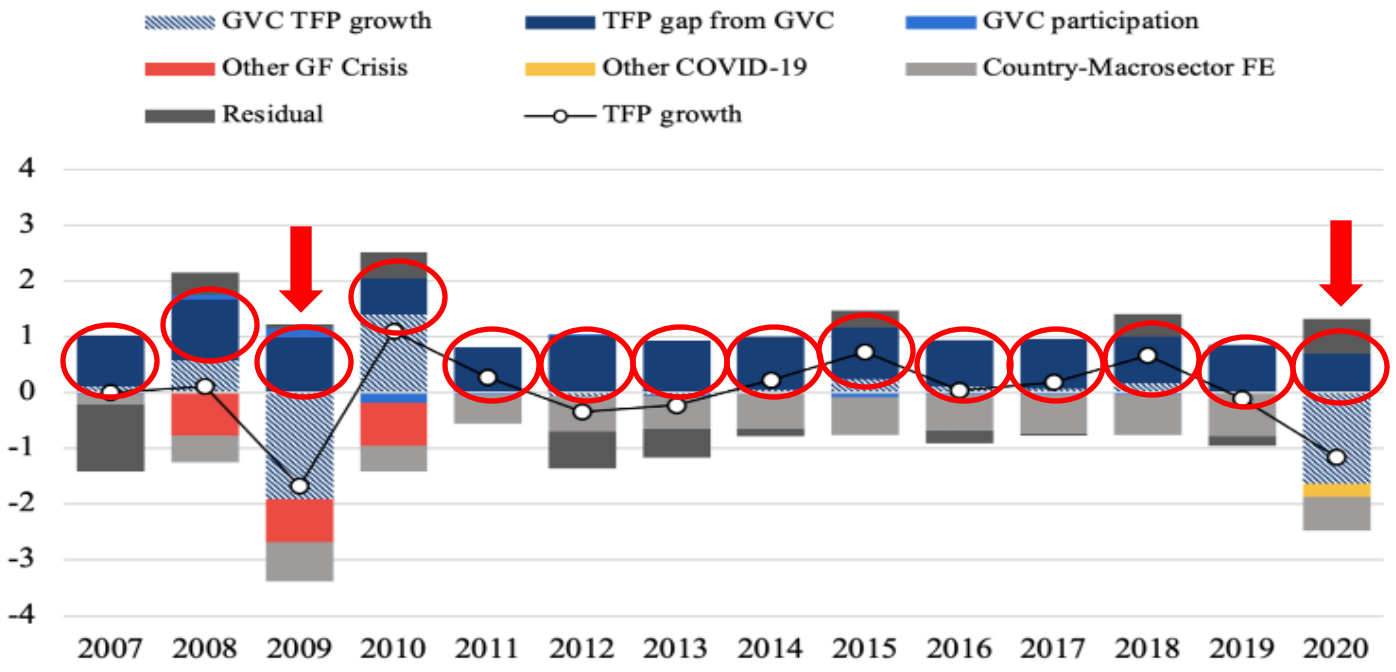
**2)** We find evidence that the GVCs set in motion a **two-stages productivity diffusion** within and between European countries



- **1st Stage**: From GVC to national frontier (most productive) firms
- **2nd Stage**: From national frontier to national mid-productive and laggard (least productive) firms
- **We see strong TFP transmission at both stages**

## ❖ How do European GVCs affect TFP growth in Europe?

**Contributions to EU TFP y-o-y growth rates within EU global value chains**




- Strong contribution of **productivity gap** ➡ Balassa-Samuelson "**catching-up effect**"
- The **TFP contribution of EU GVC** counterparts (dashed blue) becomes **strongly negative during crises**

# Ch.2 - EU firms in the global economy: A competitiveness assessment

**3) Firm-level characteristics** play a crucial role in shaping **competitive dynamics**

❖ **Policymakers** need to identify those **critical aspects of firm activity** and **tackle problems**

- We constructed a micro-aggregated **Enterprise Competitiveness Indicator (ECI)**
- 5 Dimensions, standardization to a 0-1 scale ("*min-max*" procedure)

| Dimension | Measured Firm characteristics | Variables in the Dimension |
|---|---|---|
| **1. Return** | Profit orientation | Return on assets (ROA); Estimated markup; Value added on Revenues; Operating profits on revenue |
| **2. Production Costs** | Coverage of production costs | Price cost margin; Revenue coverage of capital costs; Revenue coverage of labor costs; Revenue coverage of intermediate costs |
| **3. Productivity** | Efficiency of production factors | Labor productivity; Capital productivity; Capital Intensity |
| **4. Risk** | Financial risks | Collateral on total assets; Debt/Total assets; Cash flow/Total assets |
| **5. Quality Orientation** | Ability to develop future competitive advantages | Intangible fixed assets on Revenues; Wage premium; Estimated returns to scale |

# Ch.2 - EU firms in the global economy: A competitiveness assessment

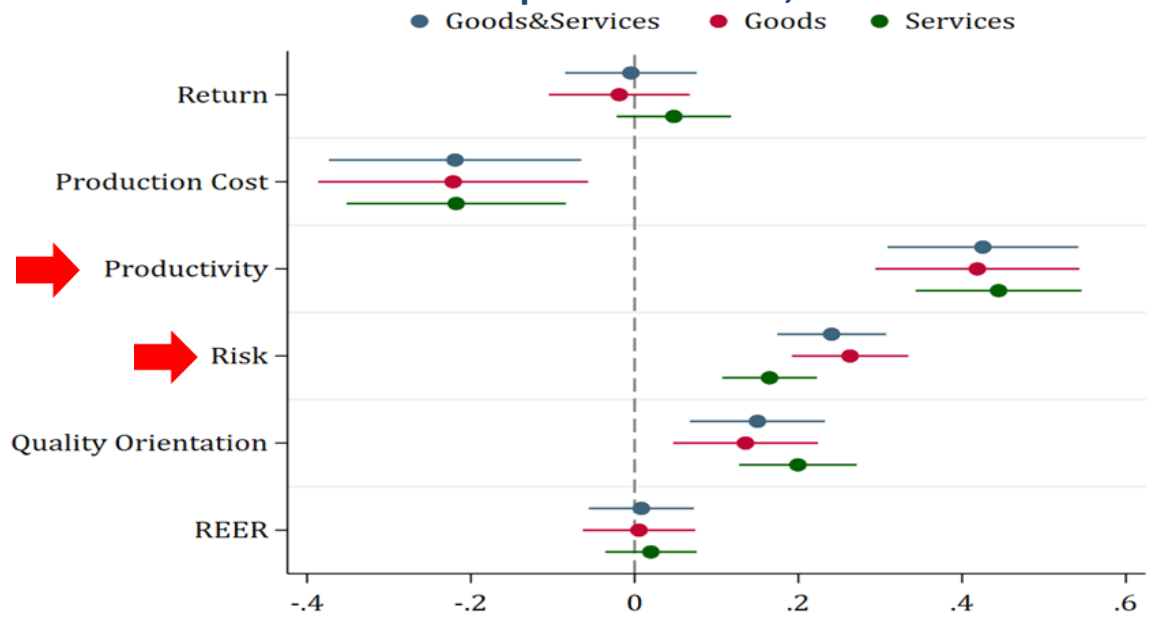
- What are the firm-level characteristics driving **external competitiveness?**
  - Our ECI explains countries' export market shares **better than Real Effective Exchage Rates (REERs)**
  - The most significant dimensions are **Productivity, Risk (financial soundness), and Quality Orientation**

➢ **Enhancing these aspects, rather than import controls, will elevate the EU's competitive advantages**

**ECI, REERs and Export Market Shares, European Countries, 2012-2020**

| | (1) Goods and Services | (2) Goods | (3) Services |
|---|---|---|---|
| ECI | 0.3263*** | 0.3216*** | 0.3429*** |
| | (0.0428) | (0.0448) | (0.0400) |
| REER | 0.0699* | 0.0686 | 0.0761** |
| | (0.0397) | (0.0416) | (0.0371) |
| Constant | -14.5172*** | -14.2904*** | -15.4898*** |
| | (4.1744) | (4.3745) | (3.8990) |
| Year FE | YES | YES | YES |
| Observations | 176 | 176 | 176 |
| Adjusted R-squared | 0.2355 | 0.2107 | 0.2874 |

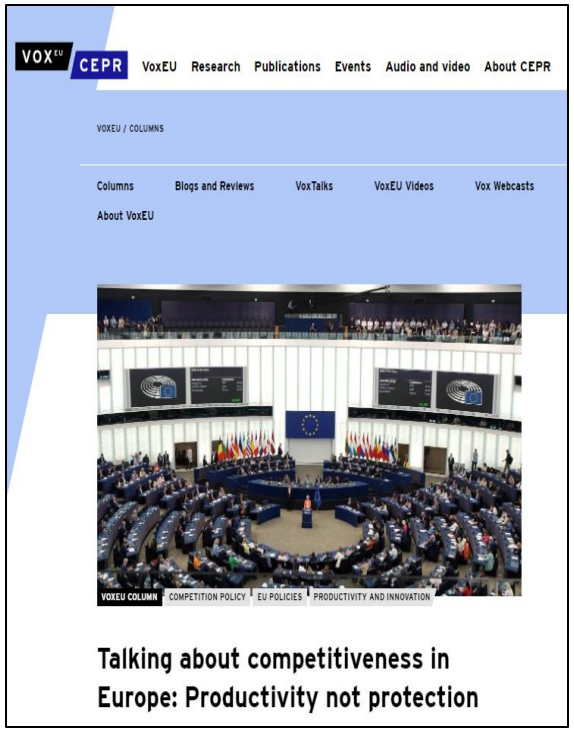
**ECI Dimensions, REERs and Export Market Shares, European Countries, 2012-2020**



# Competitiveness at the core of the EU Agenda

- In the **2023 State of the Union Address**, President von der Leyen put **competitiveness at the top of the EU agenda**
- Mario Draghi was tasked with preparing a **report on the future of European competitiveness**
- **CompNet is all set to provide support...**
- **...and is already contributing to the debate**

**VoxEU Column**
**"*Talking about competitiveness in Europe: Productivity not protection*"**



# Ch.3 - Resource reallocation over the business cycle

***We study firms' ability to adjust employment*:**

1) Over the business cycle

2) Across countries

***Why?***

a) How firms react matters for aggregate productivty

b) Different countries have different labor adjustment costs (buroucratic, legal, administrative and institutional costs)

***What do we find*?**

1) Aggregate productivity improves during recessionary periods because less productive firms exit the markets

2) Firms fire and hire less in countries with more rigid labor market institutions

## The Indicators

1. Job Reallocation Rate: $JRR_{at} = \sum_{i \in a} \left(\frac{X_{iat}}{X_{at}}\right) |g_{iat}| = JCR_{at} + JDR_{at}$

a) Job Creation Rate: $JCR_{at} = \sum_{i \in a} \left(\frac{X_{iat}}{X_{at}}\right) g_{iat}$ iff $g_i >= 0$

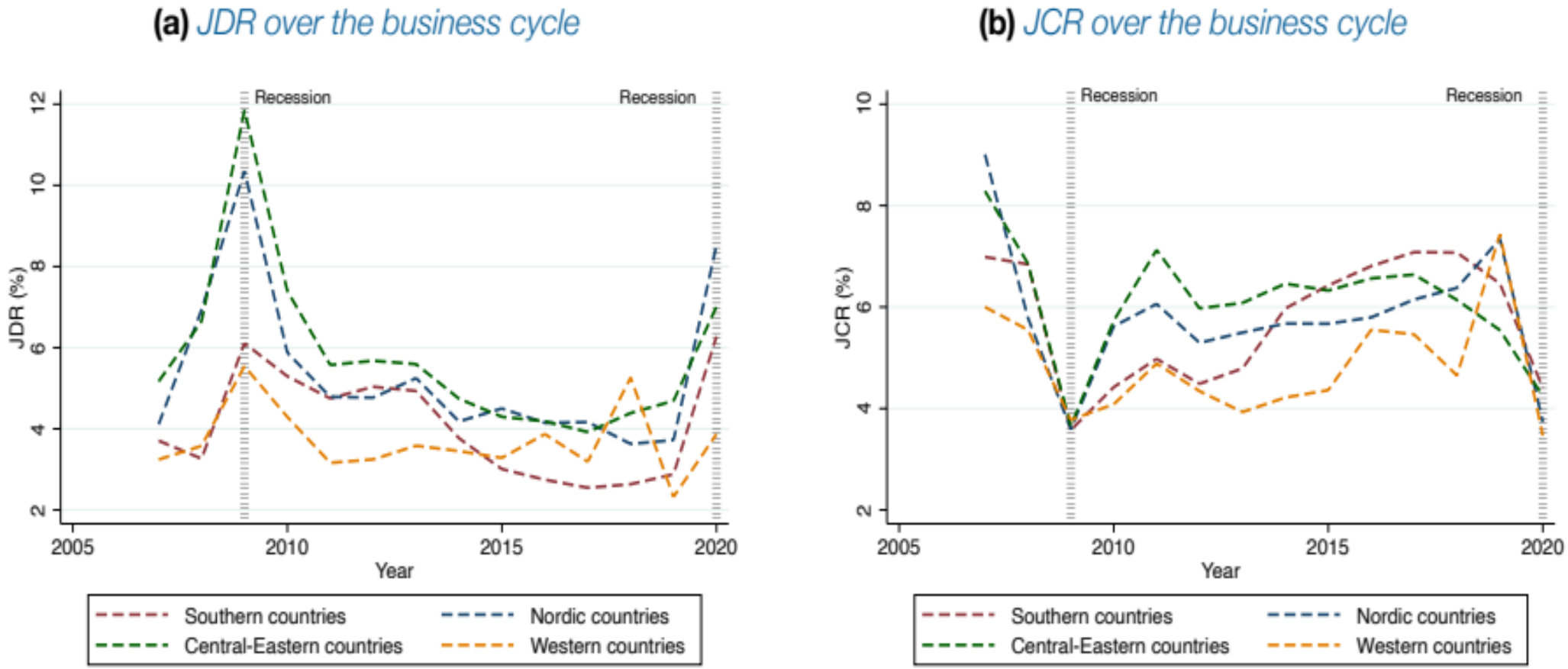
b) Job Destruction Rate: $JDR_{at} = \sum_{i \in a} \left(\frac{X_{iat}}{X_{at}}\right) |g_{iat}|$ iff $g_i$ if $g_i < 0$

$$g_i = (E_i - E_{i-1})/X_i \ , \ X_i = 0.5 \cdot (E_i + E_{i-1})$$

# Ch.3 - Resource reallocation over the business cycle: A cross-country comparison

❖ **How are resources (capital and labor) reallocated during expansionary and recessionary periods?**

JDR and JCR over the business cycle by European countries across sectors, 2008-2020

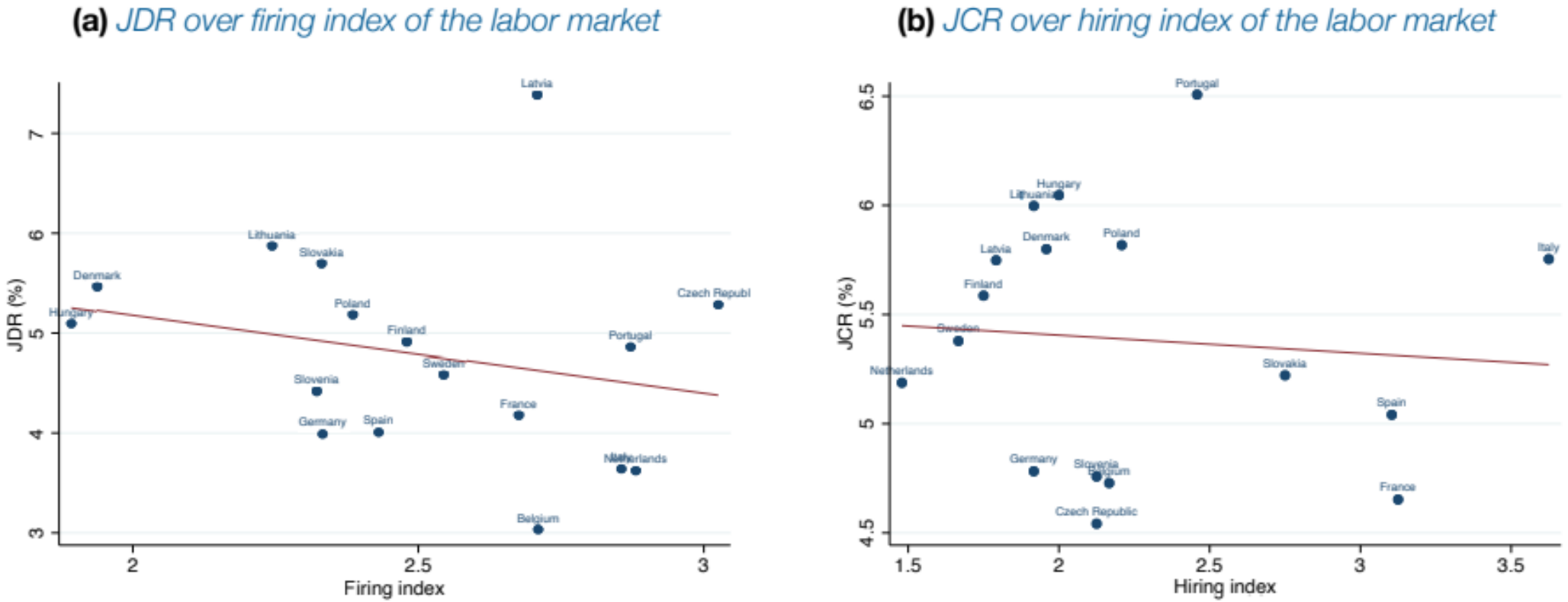



➢ **Job destruction and creation rates (strongly related to reallocation) are resp. higher in recessions and expansionary periods**

# Ch.3 - Resource reallocation over the business cycle: A cross-country comparison

❖ **How does firm responsiveness (job creation and destruction rates) relate to country-specific institutional features?**

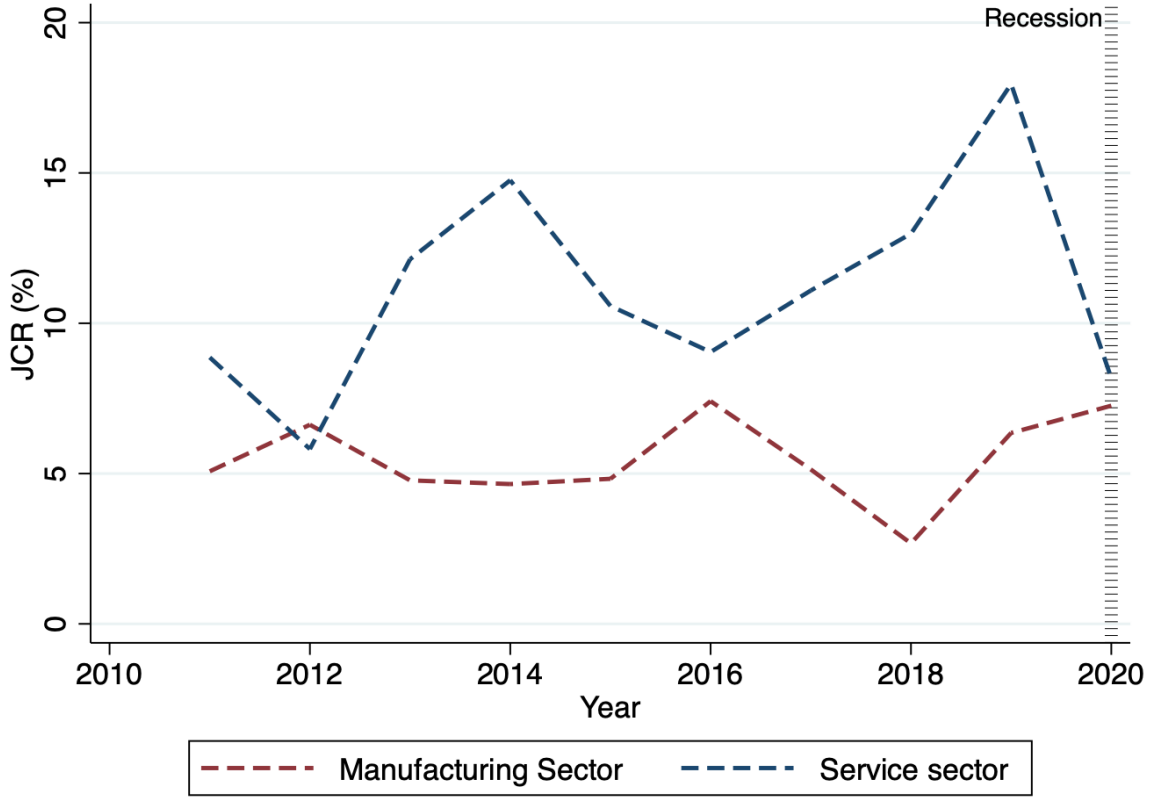
JDR & JCR and indexes of labor market rigidity, European countries, 2008-2020

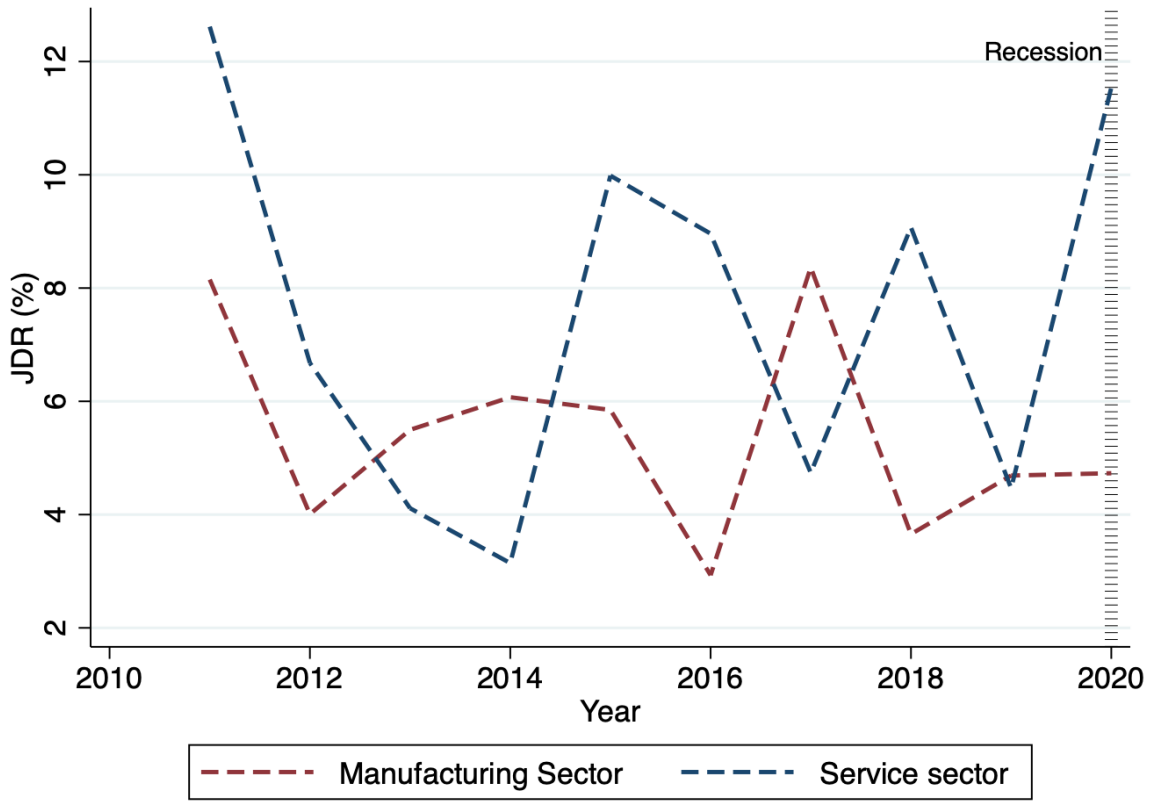



- **Countries where it is more difficult to fire workers also have lower JDRs;**
- **Similar but weaker association between JCRs and the index of ease of hiring (labor market rigidity from the OECD)**

# Ch.3 - Resource reallocation over the business cycle: A cross-country comparison

## ❖ Focus on Malta




- Service sector was driving the job creation, until the drop in 2020
- service sector was highly volatile in job destruction with a peak in 2020

- Q&A

CompNet The Competitiveness Research Network

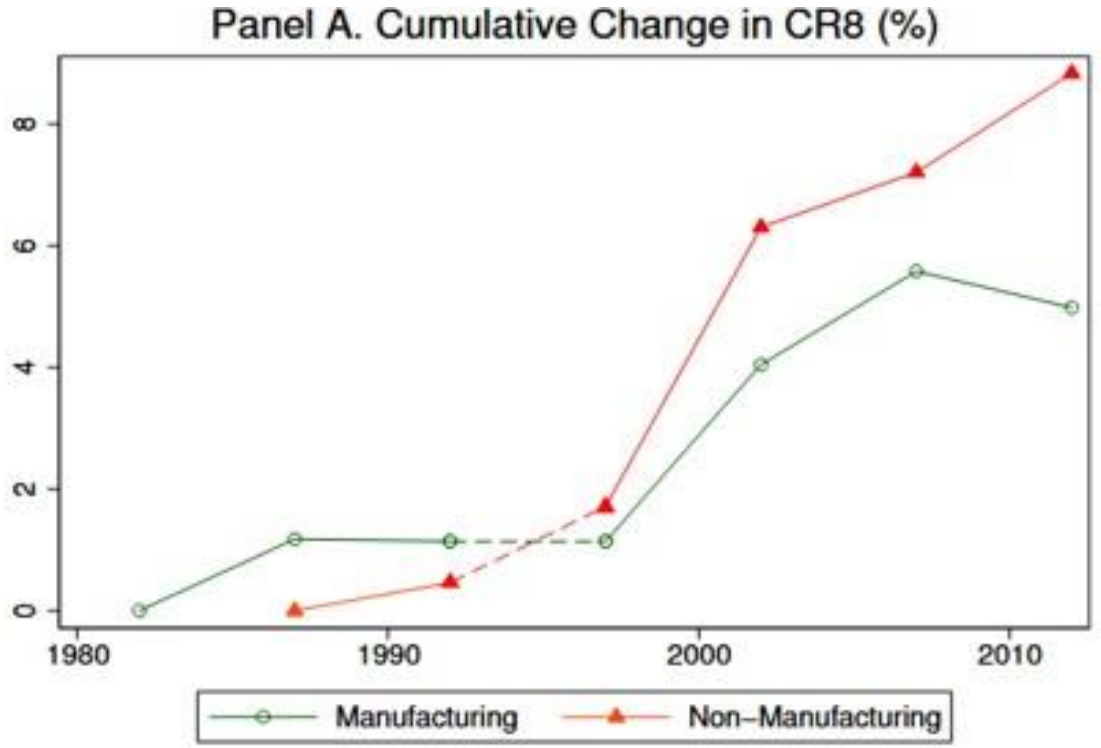
# European firm concentration and aggregate productivity

(joint with Tommaso Bighelli, **Marc Melitz** and Matthias Mertens)

**In Journal of European Economic Association (January 2023)**

# Motivation and results

# Motivation: Concentration and market power are increasing in the US




*Covarriubas et al. (2020)*

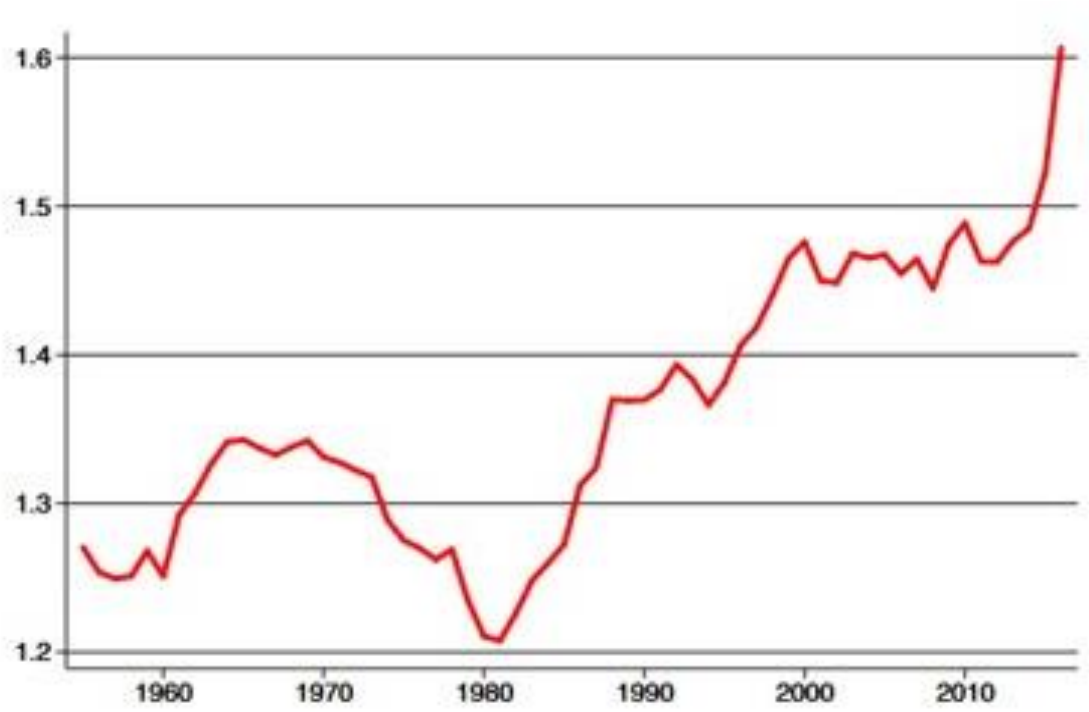



FIGURE I

Average Markups

*De Loecker et al. (2020)*

# Research questions

How has firm concentration changed in Europe?

Is firm concentration in Europe an outcome of a more efficient market environment (winner-takes-all), or a reflection of higher firm market power and less competition?

# Summary results

- European Concentration is increasing after 2009;
- Changes in productivity and changes in concentration are positively associated, but not with Market Power;
- Rise in concentration is driven by reallocation of market share towards concentrated sectors and countries
- Germany explains the largest share of European Concentration

# This Research

1. Derives a European concentration index from 15 independently derived micro-aggregated country datasets;
2. Tests the association between concentration, productivity and market-power using European data at 2-digits industry level

# Concentration in Europe

# Aggregating European Concentration starting from country HHI

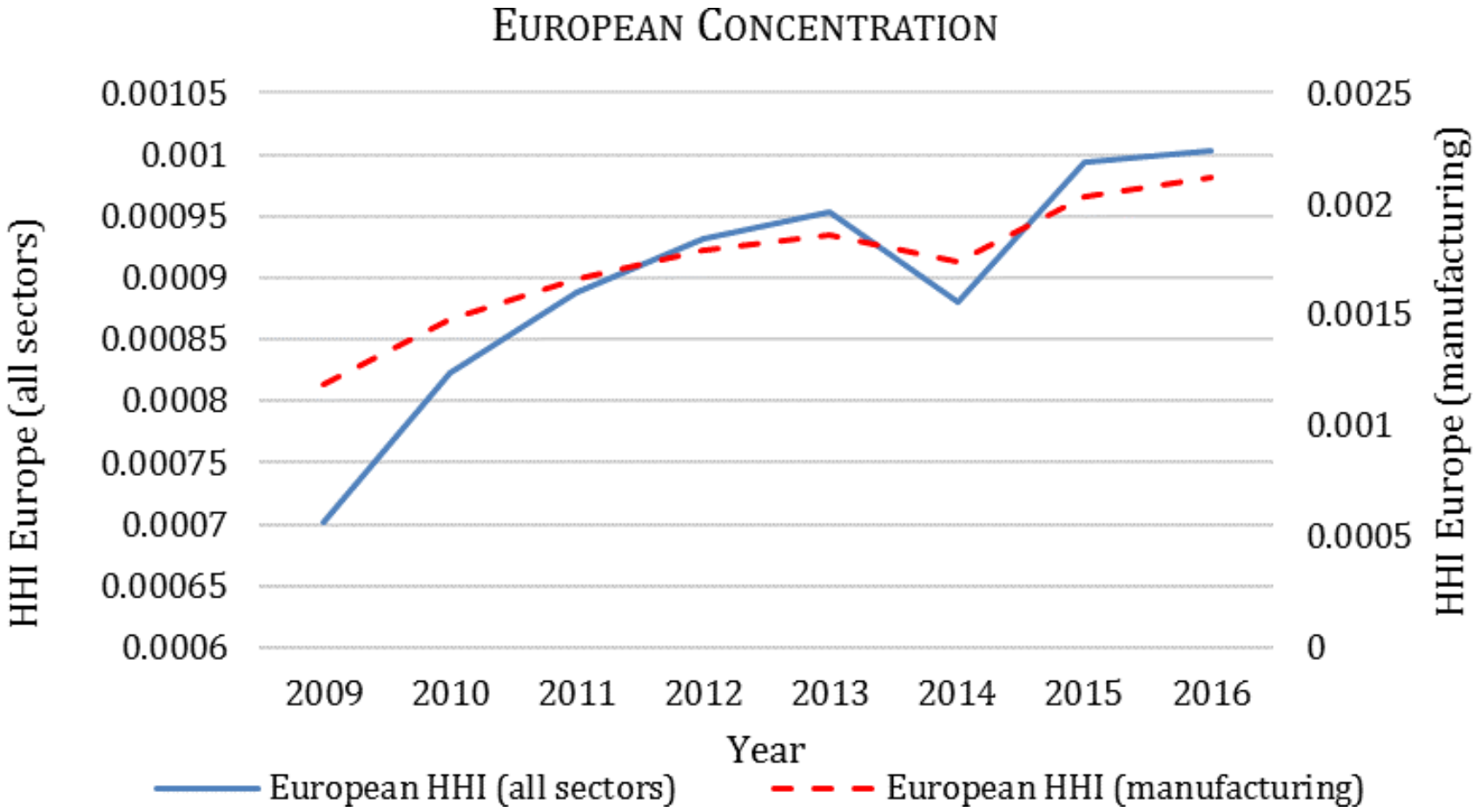
Define two countries, A and B, which compose the world population of firms. Define $r^A$ the total revenue of country A and $r^B$ the total revenue of country B.

$$\sum_{i=1}^{T} r_i = r^A + r^B = \sum_{i=1}^{T-k} r_i + \sum_{T-k+1}^{T} r_i$$

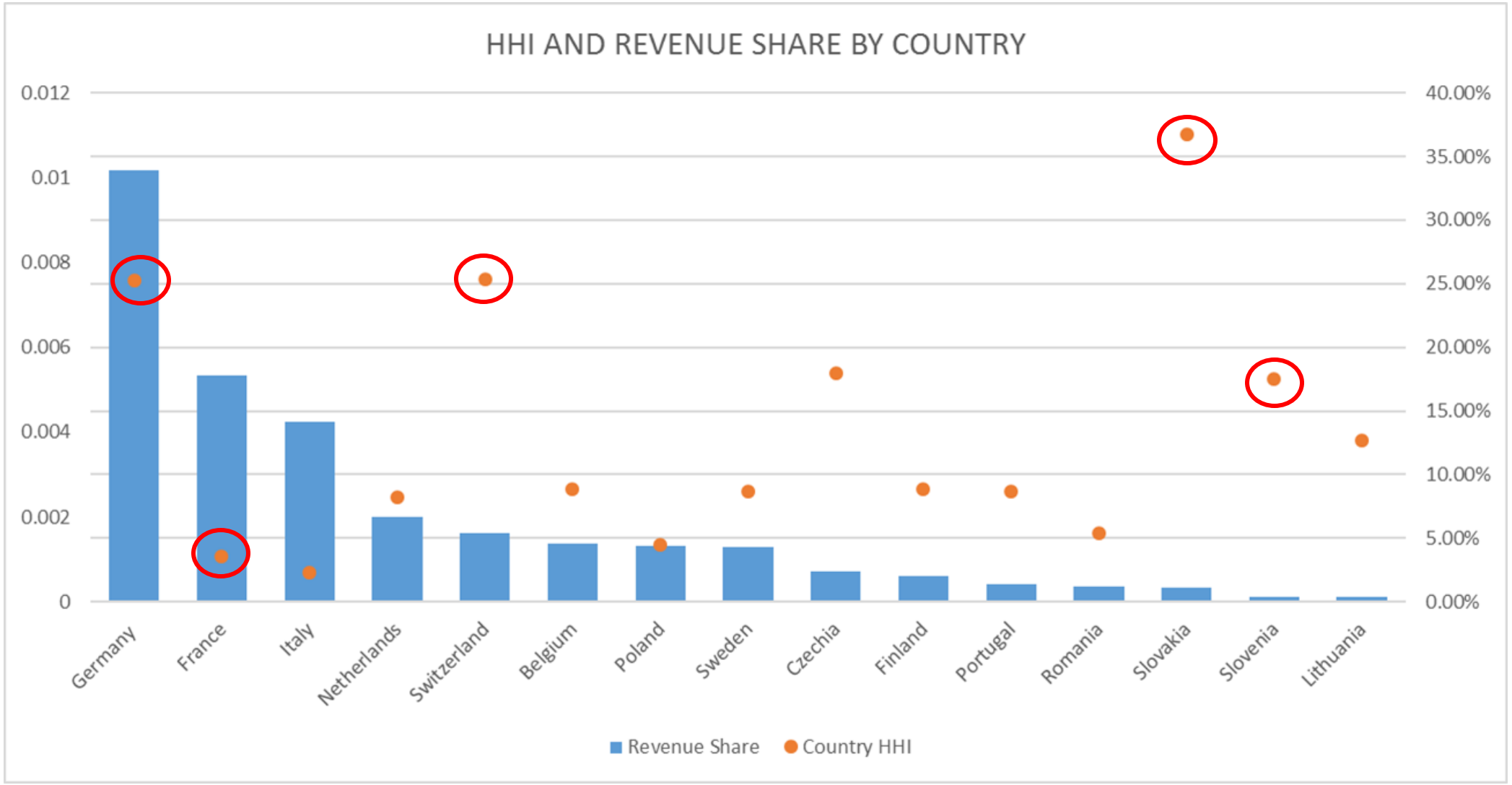
$$HHI^A = \sum_{i=1}^{T-k} \left(\frac{r_i}{r^A}\right)^2 \qquad HHI^B = \sum_{T-k+1}^{T} \left(\frac{r_i}{r^B}\right)^2$$

$$HHI = \sum_{i=1}^{N} s_i^2 \qquad \left[\frac{1}{N}, N\right]$$

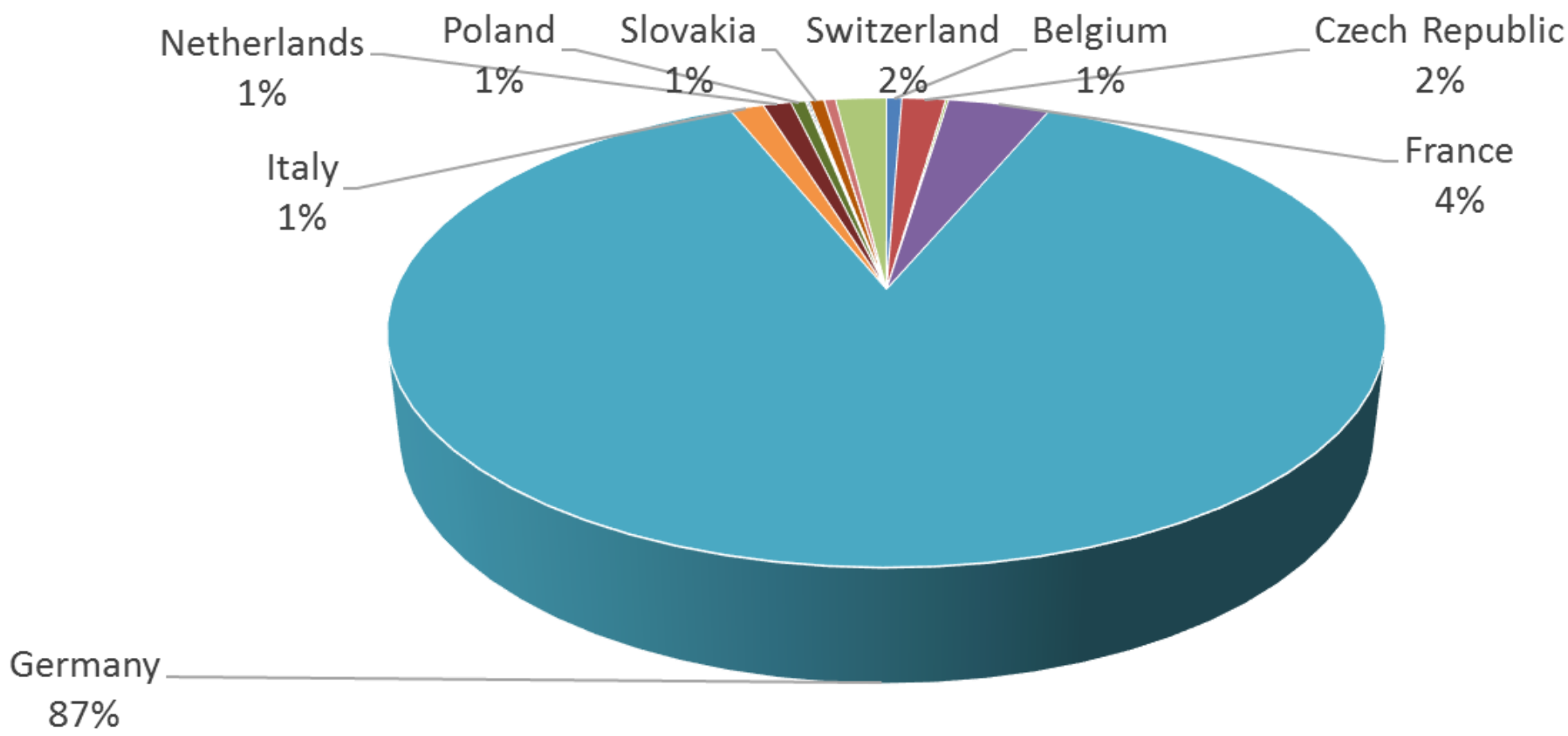
# European Concentration Aggregated



# Concentration derives from national concentration and size of the country



# Market concentration in Europe is mostly related to Germany



# Empirical analysis

- Industry 2-digits data, panel of 15 countries, 2000-2017, 20e firms
  - $HHI_{n,s,t} = \alpha + \beta_1 LProductivity_{n,s,t} + \beta_2 log\ PMP_{n,s,t} + log\ X_{n,s,t} + r_{n,s,t}$
- X is a vector of controls: Median Firm size, Capital/labor ratio, year FE, country-industry FE
- SE clustered at industry level

# Results

| | HHI (1) | HHI (2) | HHI (3) |
|---|---|---|---|
| Aggregate Productivity | 0.026*** (0.006) | | |
| Within-firm productivity | | -0.008 (0.007) | |
| Between-firm productivity | | | 0.069*** (0.020) |
| K/L | -0.003 (0.002) | -0.001 (0.001) | -0.002 (0.002) |
| log Avg. Firm size | 4.493** (1.718) | 4.183 (1.697) | 4.332*** (1.567) |
| log PMP | 0.768 (1.496) | 3.394 (2.097) | -0.123 (1.327) |
| Observations | 6,364 | 6,364 | 6,364 |
| R-squared | 0.799 | 0.793 | 0.812 |
| # of Clusters | 47 | 47 | 47 |

SE clustered at industry level in parentheses

*** p<0.01, ** p<0.05, * p<0.1

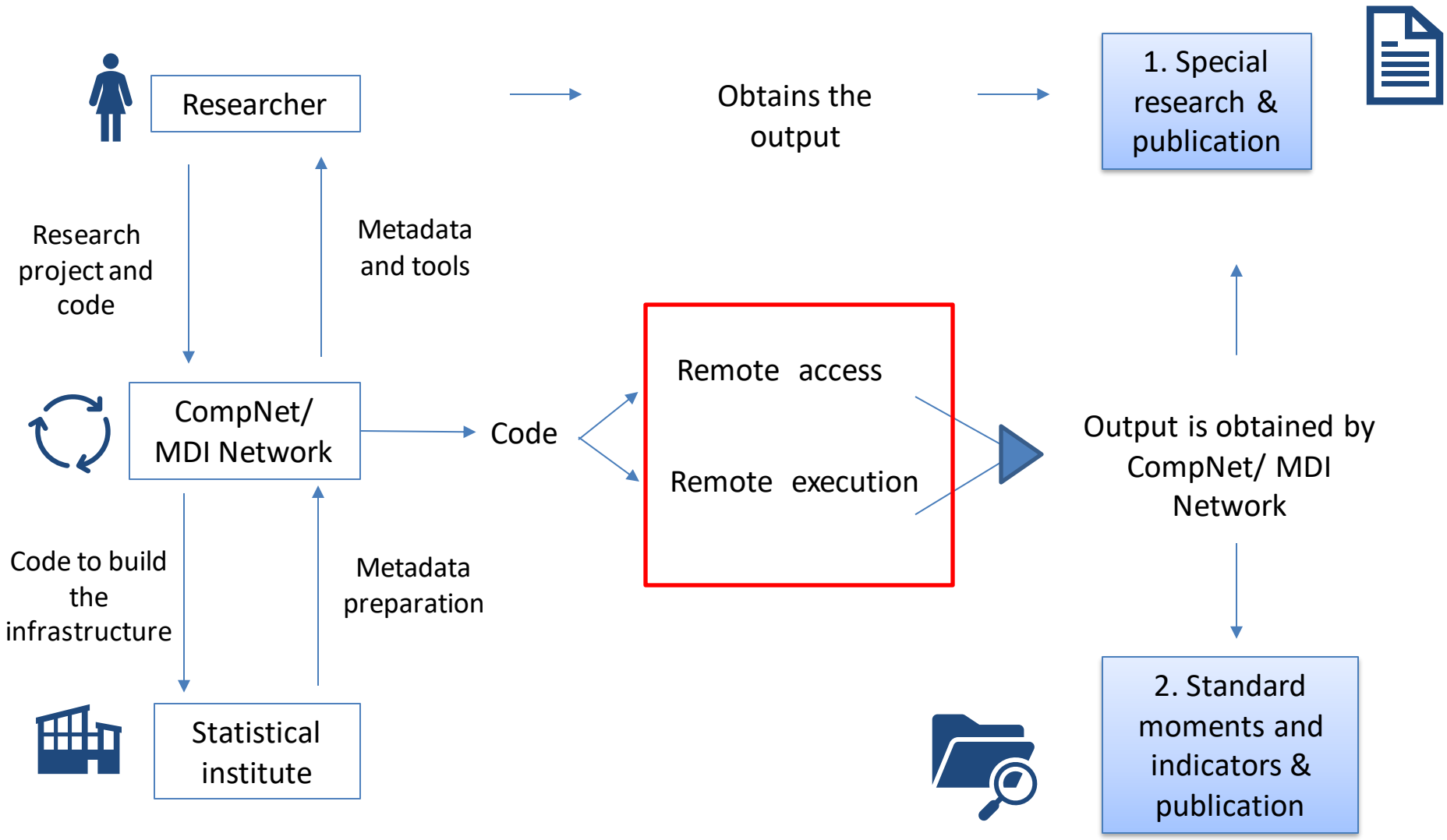
# Conclusion

- European Concentration is increasing over the last 10 years;
- This increasing trend is related to productivity and allocative efficiency, NOT to market power
- It is the results of *reallocation* of market shares towards more concentrated sectors and countries;

- Q&A

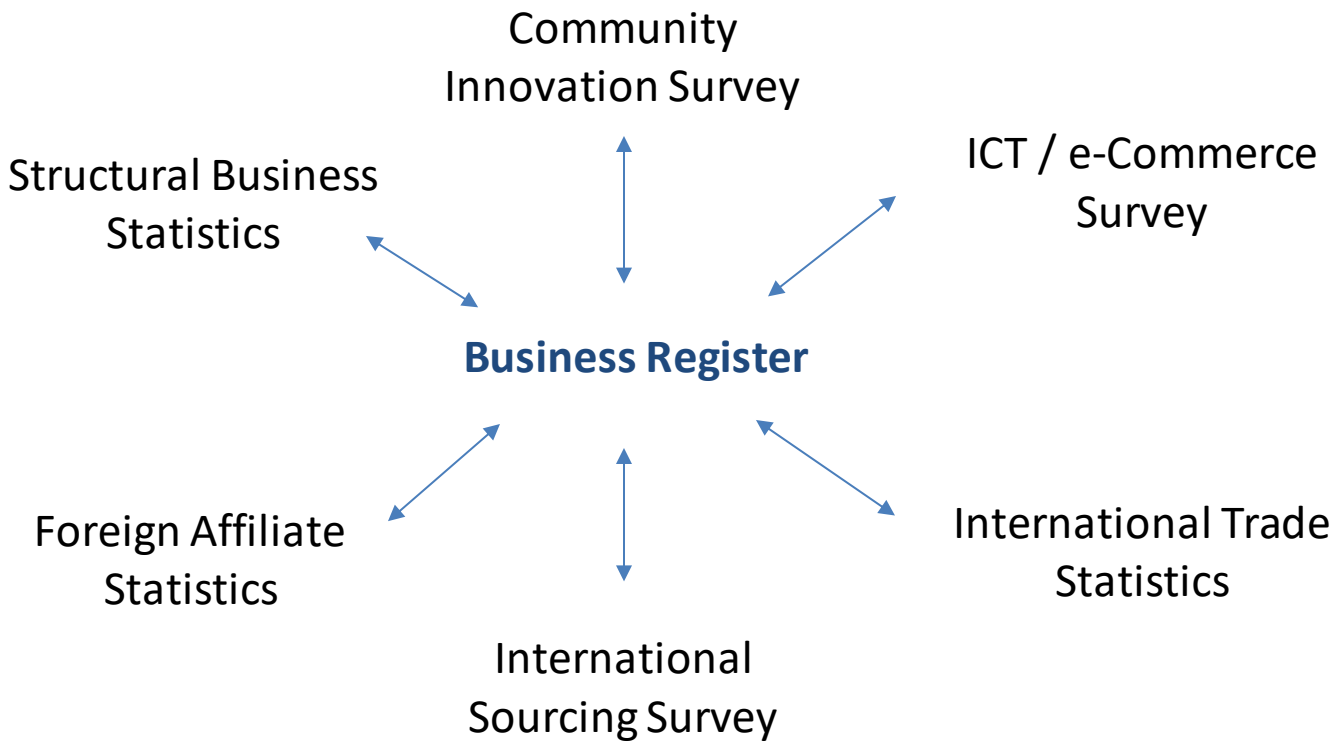
# CompNet going forward

# The MDI – Setup



# The MDI – Setup

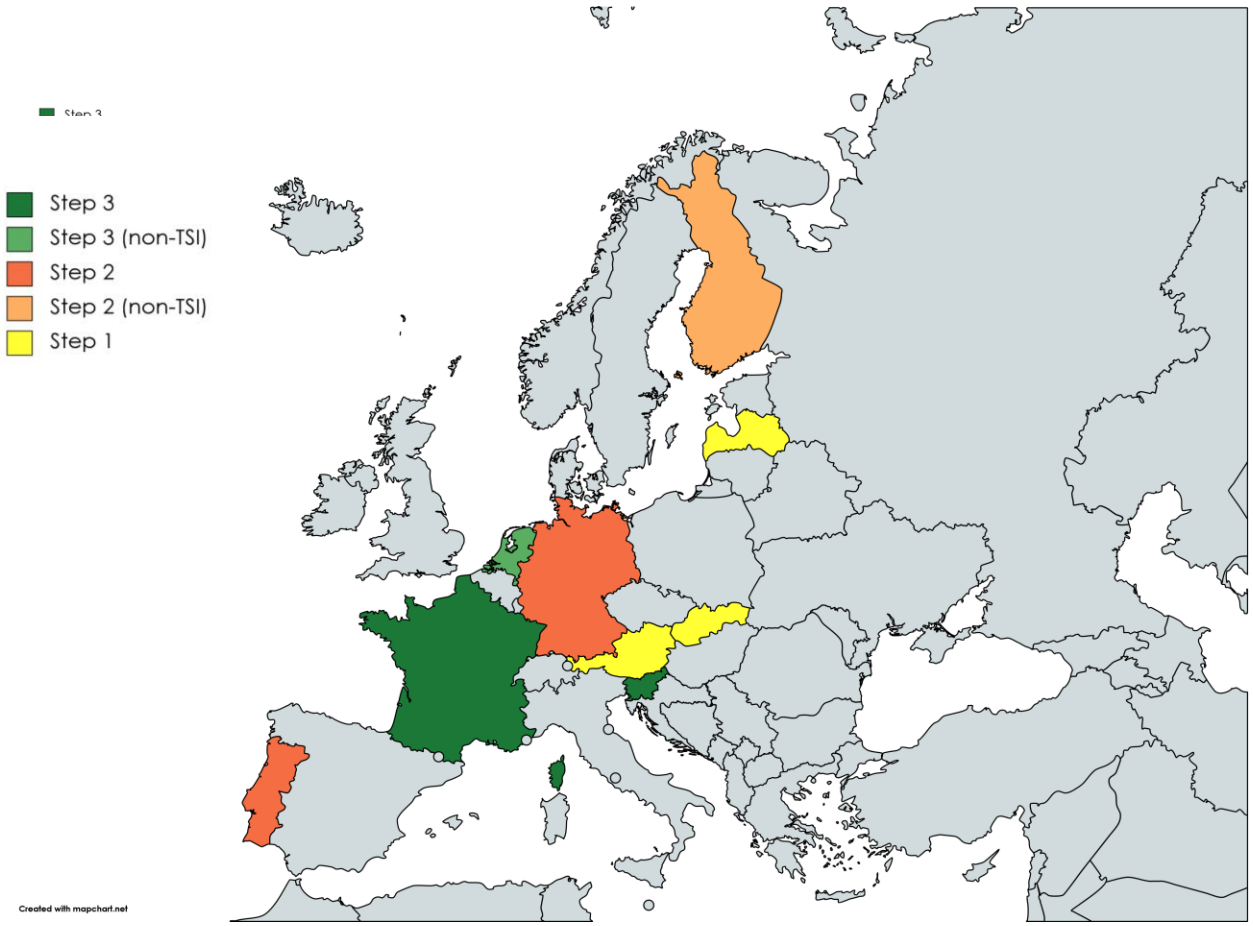
Homogeneized set of **datasets** (sourced from National Statistical Institutes):




- For each dataset, **same list of indicators** with **Firm-level** data
- **Time coverage**: 2007-2017, 2000-2020 for some countries
- **Additional Datasets** are about to be added (Prodcom, Energy Consumption Survey, ...)
- Much more granular than the traditional CompNet dataset

# The MDI – Current status

- **Step 1**:
  - **LV,SK**: negotiations with statistical office
  - **AT:** contract negotiations
- **Step 2**:
  - **DE:** construction of dataset, contract to be signed
  - **PT:** construction of dataset & testing of the codes
- **Step 3**:
  - **SI:** harmonization of data and indicators
  - **FR,NL**: MDI is established




➔**MDI soon operational for 7 Countries**

➔**Start preparing your codes….**

# The Research agenda

- Emphasis on **operationalising the MDI**
- **Convert CompNet projects into the MDI** whenever possible to enhance granularity
- **4 meta directions:**

❖ **Trade and Competitiveness:** Productivity transmission within GVCs and drivers of EU firms' comparative advantages

❖ **Phillips Curve and Monetary Policy:** Micro-founded Phillips Curve and the effects of firm heterogeneity on inflation

❖ **Energy:** Firms' heterogeneity in reacting to energy shocks and the relevance of firm characteristics for optimal policy desing

❖ **Firm Dynamics:** Firms' heterogeneity in responsiveness to the business cycle and the relation between firm dynamism and reallocation-driven productivity growth

- Looking forward to having Malta ALSO in the MDI

- ….and to collaborate to Maltese institutions and researchers on concrete project applications for policy and academic output

# Conclusions

- **CompNet is thriving on**
  - **Data generation (CompNet and MDI)**
- **... Research output**
  - **CompNet flagship Report**
  - **Diverse publications**
- **Going forward**
  - **Keeping up with the research and policy debate**
    - **Focus on Competitiveness**
    - **Concentration, mark up, firm dynamism ….**

Thanks very much for your attention and hospitality

# Important Links

- TSI Website
- The 2023 CompNet Firm Productivity Report
- VoxEU Column on Competitiveness