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# MAPPING COMPETITIVENESS in EUROPE: A quest for new measures

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*„Compétitivité française : nouveaux enjeux, nouvelles mesures”*



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CENTRO STUDI LUCA D'AGLIANO

# This presentation

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- Discuss research into new measures of European competitiveness
- Organised around the definition of a competitive economy as one *“in which institutional and macroeconomic conditions allow productive firms to thrive and in turn, the development of these firms supports the expansion of employment, investment and trade”* (Mario Draghi)
- Topics
  - Brief presentation of the *MAPCOMPETE* project
  - Introducing the new *Altomonte – Békés Blueprint*
  - Some emerging views on measurement

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# I. THE PROJECT

# MAPCOMPETE

# Motivation for Mapcompete

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- **Competitiveness** is a key objective of national and European economic policies
- It is firms, rather than countries that **compete globally**
- Large number of competitiveness reports with many different concepts and indicators
  - No general consensus about how to measure competitiveness
- Toolbox for policy-makers outdated
  - Especially at EU level
- No global or even European harmonized data for an assessment of different aspects of competitiveness
  - Particularly for micro-data

# The Mapcompete project

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- The aim of the MAPCOMPETE project was to help fill this gap by **providing inputs for a thorough assessment** of competitiveness indicators and the potential development of new ones.
  - Comprehensively map data availability and accessibility in the European Union
  - Provide a critical overview of new analytical methods and new data sources as they became available to researchers

# DataMap & Webtool

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## Data Map

- Produced on the basis of a database that will allow researchers and stakeholders to assess the availability and computability of indicators of competitiveness within and across countries

## Web tool

- Access meta data information online
- Open to public
- <http://mapcompete.eu/meta-webtool/>

# DataMap & Webtool



It is possible to select more than one option just by keeping CTRL pressed.

HOW TO USE WEBTOOL

## Country

- Austria
- Belgium
- Bulgaria
- Croatia
- Cyprus
- Czech Republic
- Denmark
- Estonia

select all select none

## Concept

- EU regional indexes and infrastructure
- Firm dynamics
- Global Value Chains (GVC)
- Innovation activity, all firms
- Innovation activity, SMEs
- Intangible assets and financial activity
- International activities
- Labour force

select all select none

## Data aggregation

- Country
- Sector
- Regional
- Bottom-up
- Bottom-up regional

select all select none

## Indicator

- Current account balance
- Dispersion of firms
- Domestic credit provided by banking sector
- Domestic credit to private sector
- Effective corporate tax rate
- Employment protection
- Employment rate
- Employment shifts between sectors

select all select none

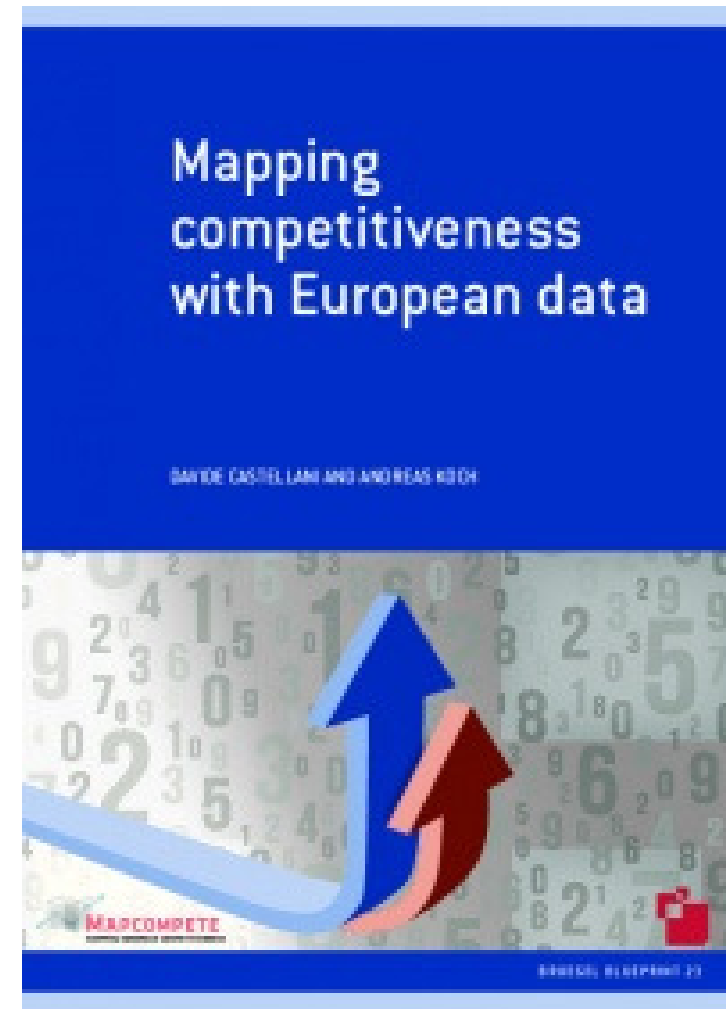
clear filter

FILTER

# Blueprint on Data

*Davide Castellani and Andreas Koch*  
Bruegel, 2015 March

- Availability of official statistics for measuring competitiveness
- Macro and micro (bottom-up) indicators
- Computability and accessibility of (micro) data
- Cross-country (micro) data matching
- Discussion of methods and problems





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## II. ALTOMONTE-BÉKÉS BLUEPRINT

# A book about new thinking about competitiveness

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## Bruegel Blueprint Series

- *In press - official release in January 2016*
- *PDF available on request*
- *Edited volume with six contributions*



# Blueprint themes

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Competitiveness measurement topics:

- **Granularity** -- analysis of firm-level characteristics, highlighting the role of a small number of highly-productive firms
- **Reallocation** -- interplay of firms' behaviour with structural economic factors
- **Globalized production** -- Value chains and groups – internationalization and fragmentation of production
- **Non-price competitiveness** -- such as quality

# 1. Granularity – the point

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- Economic activities
  - Driven by a few selected outstanding individuals or companies that play a dominant role in regional and national economic performance
- Thinking about "average" firm is not enough
  - Top 10% firms are about twice as productive as bottom 10% firms (ceteris paribus these firms make twice as much output)
  - These within-industry differences are way larger than the difference across industries
  - Persistent result across countries, industries, measures

# 1. Granularity - Blueprint

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***„The importance of micro data in assessing aggregate outcomes”*** by Barba Navaretti, Bugamelli, Forlani, Ottaviano

- Features of how firm size (employment, sales) or productivity is distributed in the economy
- Correlates with measures of success in global markets
- A competitiveness indicator

***„Micro-founded measurement of regional competitiveness in Europe”*** by Békés and Ottaviano

- The role of large firms in regions matter even more
- Regional indicators greatly affected by granularity

## 2. Resource allocation – the point

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- A significant part of the differences in productivity between countries can be accounted for the **differences in allocative efficiency**
- Lagging performance: some technology or policy-induced frictions in capital/labour markets **might prevent** productive inputs from flowing into the firms that would use them in the most productive way
- **Removing these frictions** thus provides a potential new channel for boosting aggregate productivity

## 2. Resource allocation – the Blueprint

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***„Resource misallocation and aggregate outcomes: towards better assessment of competitiveness”*** by Fontagné, Santoni, Tomasi

- Misallocation - departure from an efficient use of the labour input, increasing over the 2000s in France
- Negative correlation between resource misallocation and the trade performance of some manufacturing sectors

***„Centralisation of wage bargaining and firms’ adjustment to the Great Recession: a micro-based analysis”*** by di Mauro, Ronchi

- Show that wage-bargaining institutions affect how shocks are distributed by firms to their economy

# 3. Globalized production – the point

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- **Internationalization activities are key** to understand firm performance
- Emergence of global value chains (GVCs) -- **fragmentation** of production activities & **the international dispersion** of tasks -- influence deeply firms' competitive strategies
- **These features affect**
  - What measures to develop
  - What data to use



# 3. Globalized production – the Blueprint

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**„Global value chains and GDP growth in the post-crisis context” by Altomonte, Colantone, Zaurino**

- GVC induced trade in (mostly) intermediaries has become very important
  - It behaves differently - dropped sharply in 2009
  - Adjustment process differs as well
  - GVC reaction to shocks will affect trade cycles beyond consumer demand
- For firms, selling to multinationals at home or the ability to build up a chain of suppliers is an equally important and policy relevant channel

# 3. Globalized production +1

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- There is **broad, robust, and strong correlation** between firms' internationalisation and innovation activities
- Policy shall focus on **capacity building**
- Positioning internationalisation and innovation policies 'under one roof' at both the national and EU levels, would be welcome

*Altomonte, C., Aquilante, T., G. Békés and Ottaviano G.I.P. (2013). "Internationalization and Innovation of Firms: Evidence and Policy", Economic Policy, Volume 28*

# 4. Non-price competitiveness

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- New evidence on **the importance of non-price factors** in driving exports
  - The standard price (cost) competitiveness argument – low production cost = more competitive the firm/industry
  - About 1/3 of variation in performance (e.g. exports) rest being dependent on competitiveness-enhancing channels that are alternatives to cost reductions

## Blueprint

***„In search of lost market share: the French case”*** by Bas, Fontagné, Martin and Mayer

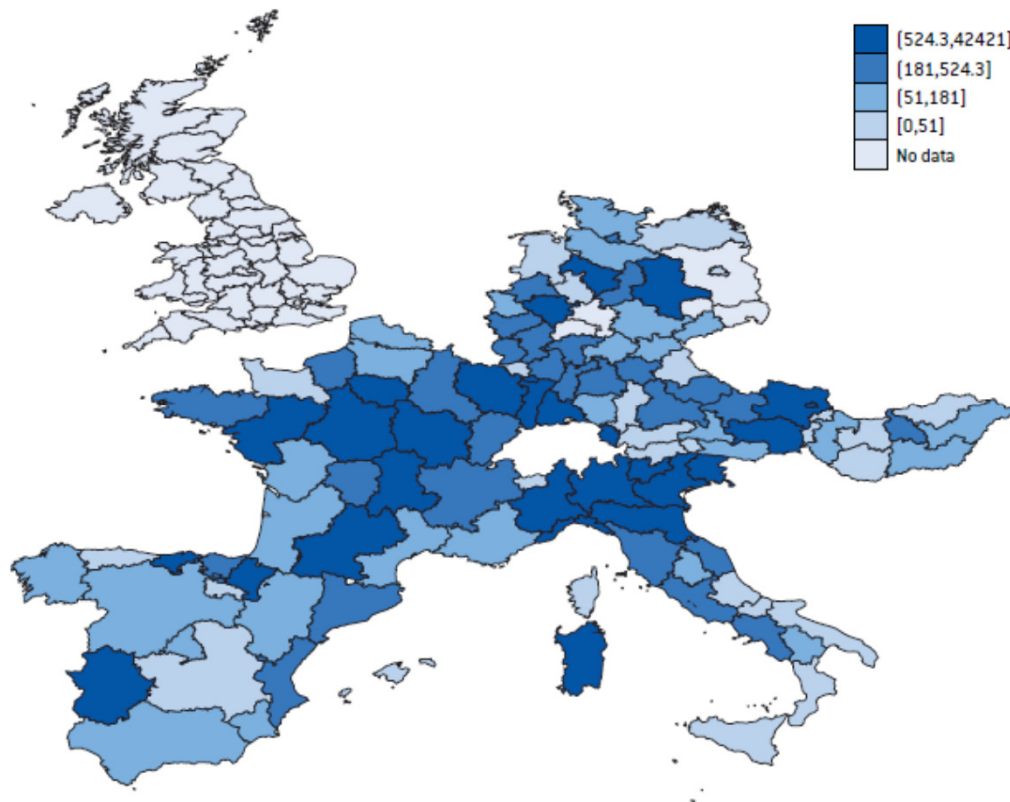
# What we learnt for better measurement

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- Getting **comparable data is crucial**
  - EU-wide effort needed, not-project based
  - Allow regular updates
  - Likely a mix of survey and official data + organization
- Measures should **be comparable at industry, country, regional**
- Some **new measures are emerging**
  - Non-price, quality
  - International market performance

# Example: Regional trade performance (xEU)

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- New measure:  
**Index of exports to outside of Europe**
  - Straightforward
  - Comparable
  - But hard to calculate
- Here: using EFIGE survey as an illustration

# What we learnt for better measurement

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- Macro/aggregate data → micro/firm level data
- Average → details of economy, distributions
- Policy to boost on *average* → reallocation key
- Unit labour cost → productivity, internationalization
- Firms → groups, GVC (what role a firm plays is crucial)
- Measures at country → EU wide comparable measures
- National data + EU collection → EU level micro data