

CompNet The Competitiveness Research Network

Introductory remarks

CompNet-EBRD-IWH

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Chairman of CompNet

FINPRO Conference
London 2nd -3rd December 2019

CompNet Mandate and History: A reminder

1. We were born in 2012 as an initiative of the European system of Central Banks to:
 - Provide a forum for research on productivity/competitiveness related matters
 - Create indicators on productivity drivers, which are firm-level based.
 2. Since early 2017, we are a self-managed Network financed by major European institutions, including EBRD, ECB, EU Commission (EC-Grow and EC-EcFin), EIB and academic/policy institutions (IWH-Halle, Tinbergen and France Strategy). Our management is handled by IWH-Halle and the ECB.
 3. Our members/data providers include National Central Banks and an increasing number of Statistical institutes (8).
- ➔ This allows us to constantly improve the quality and cross country comparability of our dataset, which is recognised as top standard in Europe.

Why do we need CompNet? A reminder

1. Firms are **heterogeneous**:
 - averages measures can be misleading and therefore
 - we need more granularity in the data to study the entire distribution of firms
 2. Firm-level data is **confidential**
 3. One possible solution is to rely on **ORBIS data**.
 - there is limited coverage and representativeness for a number of countries and
 - limited information on employment and exports
 4. Here **we fill the gap thanks to a micro-distributed methodology**
 - Our starting point are the firm-level data available at data providers
 - We distribute codes to country teams and collect distributions of competitiveness-related indicators to preserve confidentiality
 - We use the same protocol in all countries to ensure harmonization
- ➔ We have by now some 100 teams across the world using our dataset for research in addition to our members (ECB, EBRD, EU Commission) using it for country surveillance

A brief recap of what has been going on

Past Conferences & events

- Annual Conference CompNet at EIB-Luxembourg on “mark-ups”. **March**
→ Incredible turn-out of scholars
- First CompNet User Conference last **October** at France Strategy.
→ Great potential for the dataset

New data and a revised code

- Improved master code: better and more reliable weighting procedure
- New variables (e.g. job creation & destruction rates, age of firms, intra- or extra-EU imports & exports, etc.)
- New countries (Switzerland & Turkey)
- Larger time span in order to enrich our dataset.

Next steps for the 7th Vintage

- Release of a first subsample to members before the end of December
- Report on data (Productivity Report) and user Guide to be released officially next spring

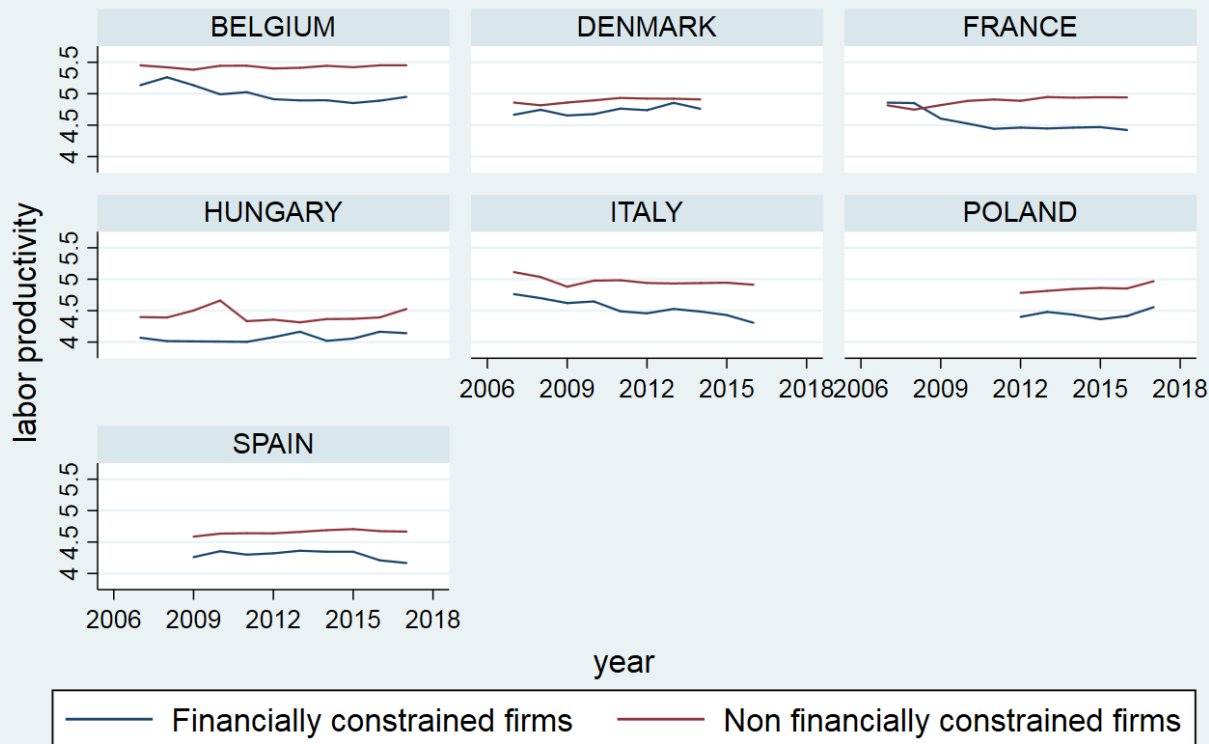
Next events

- **April 2020**: Conference in Bratislava on Sustainability and Competitiveness (joint with NBS), deadline for papers 15/01
- **June 2020**: Annual CompNet conference at the ECB (jointly organized with IMF), deadline for papers 6th of March.

Stylised facts from the 7th Vintage

- What is the link between financial condition of a firm and its productivity level?
- We compute two measures in our dataset
- As expected a firm NOT financially constrained has higher productivity than financially constrained ones (blue line).

Average labor productivity of firms per financial condition



Two indicators in CompNet dataset:

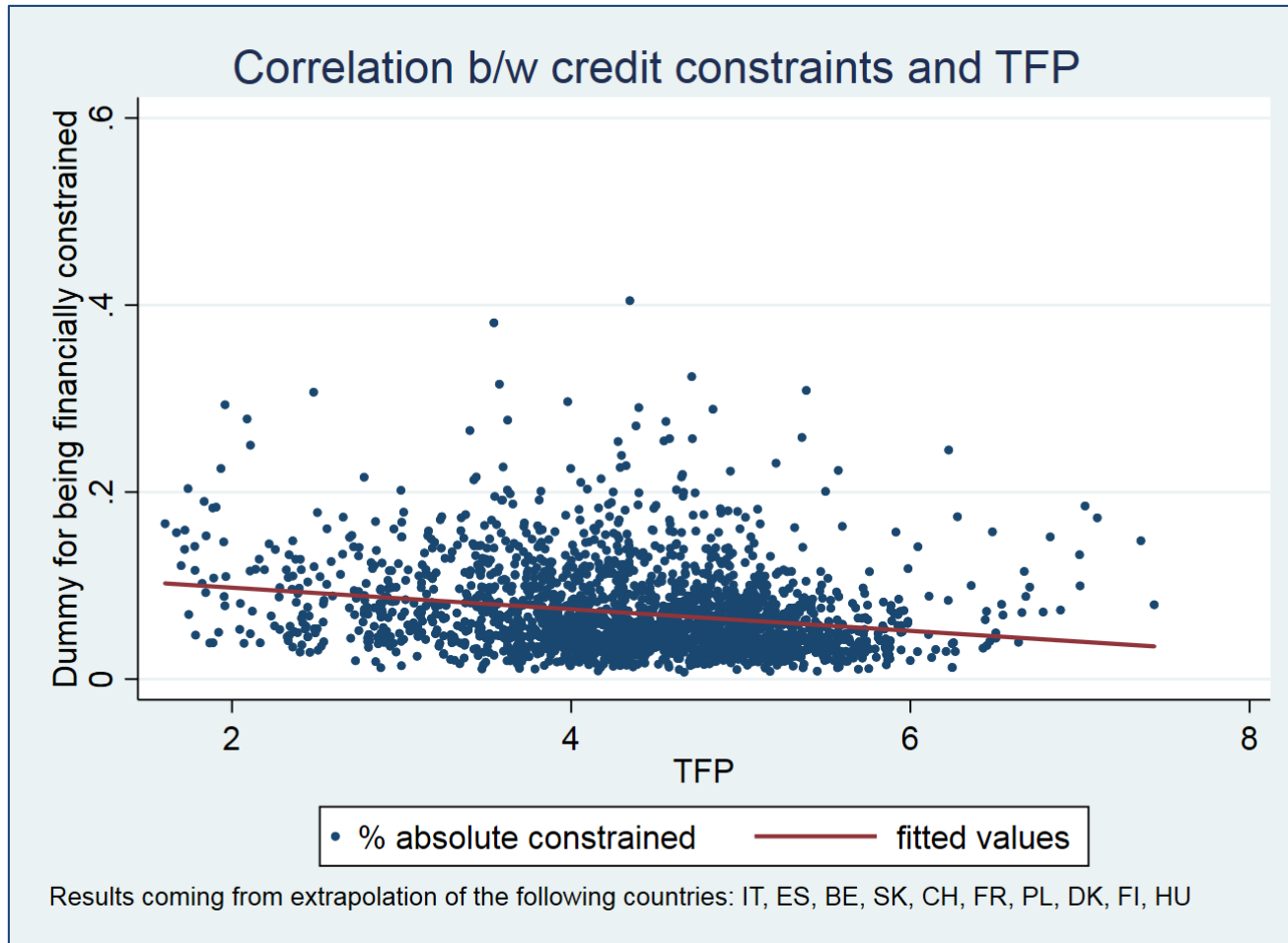
1. absolutely financially constrained firms (*Ferrando & Ruggieri (2015)*):

- firms with positive investment, which is higher than current cash flow (with concurrent reduction of debt and capital);
- firms that, although disinvesting, have a positive financing gap.

2. *ex-post* measure starting from the SAFE survey on credit availability.

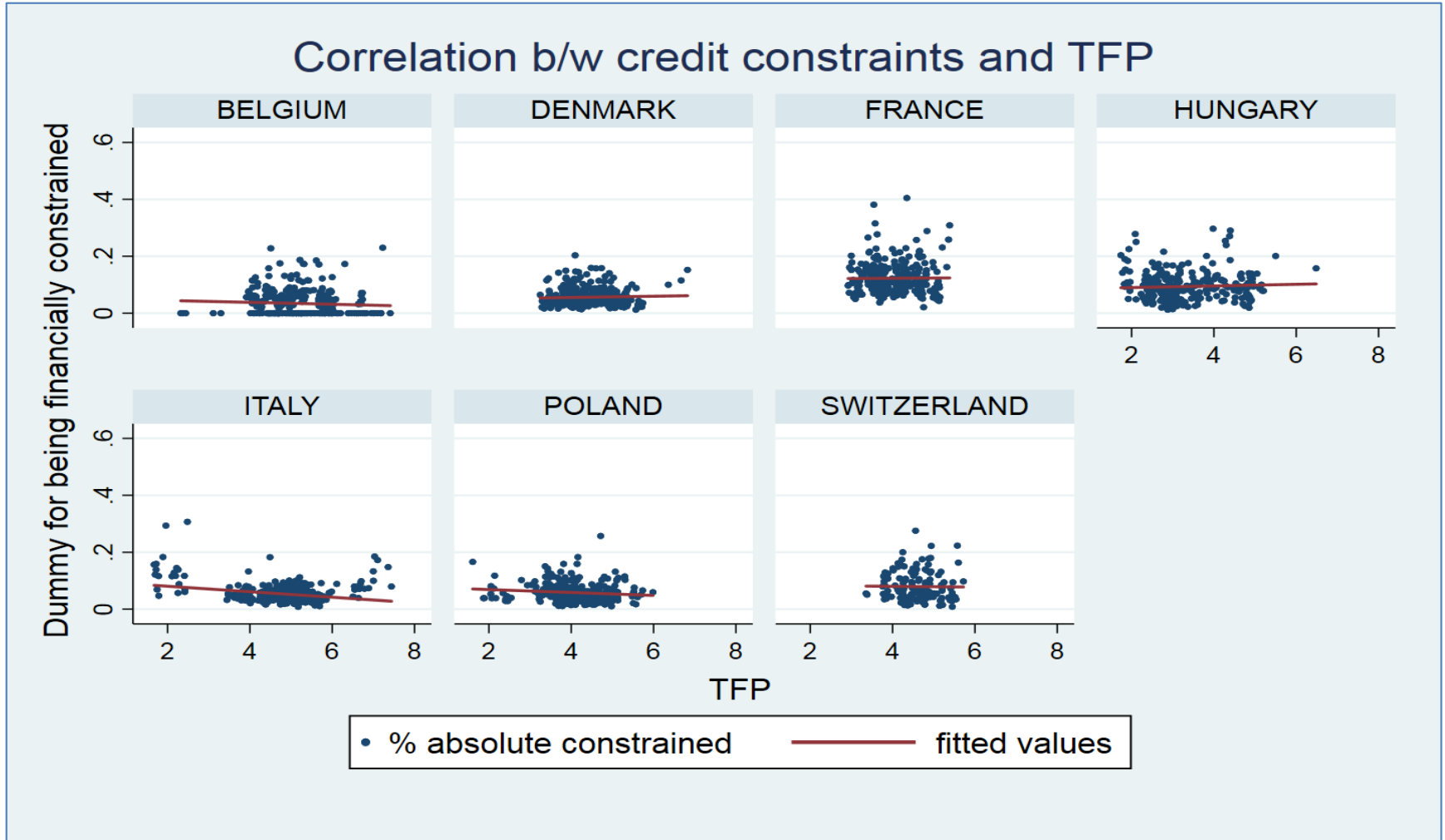
Stylised facts from the 7th Vintage

- For the whole sample, therefore, firms productivity is negatively correlated with the chance to be financially constrained



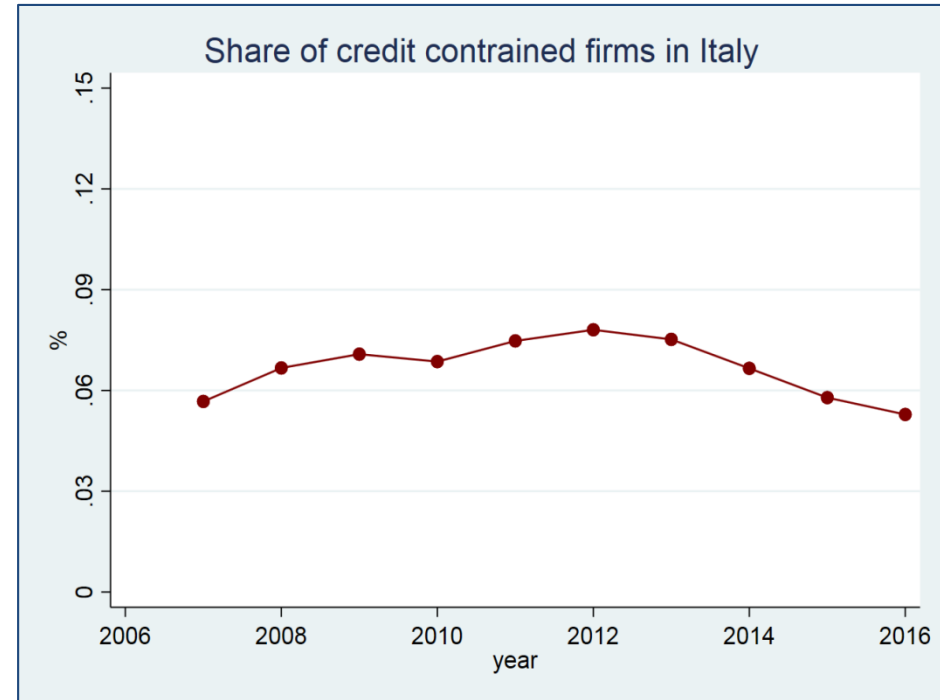
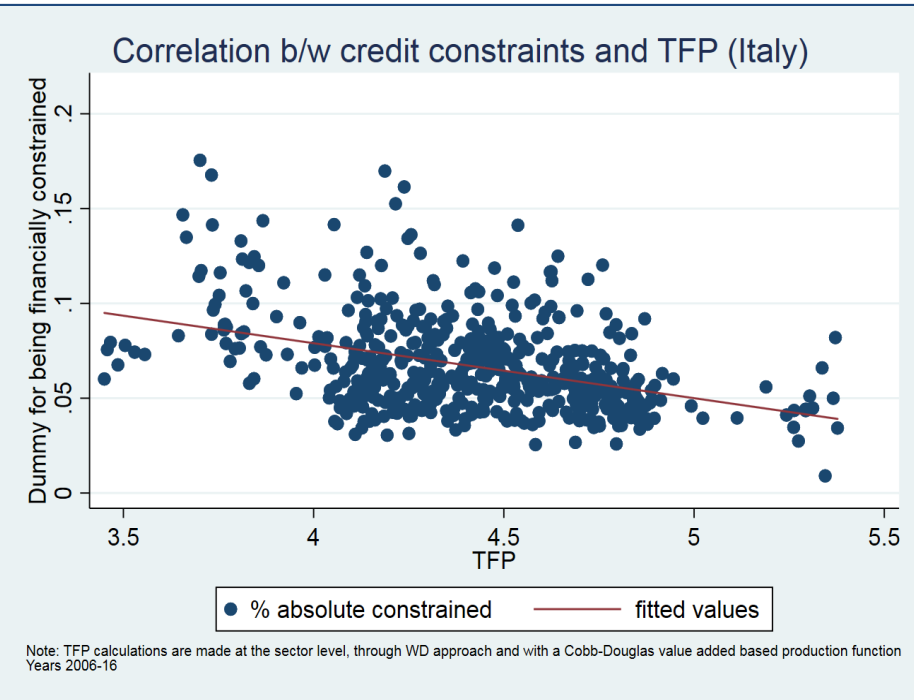
Stylised facts from the 7th Vintage

- Such correlation however, as expected, varies across countries



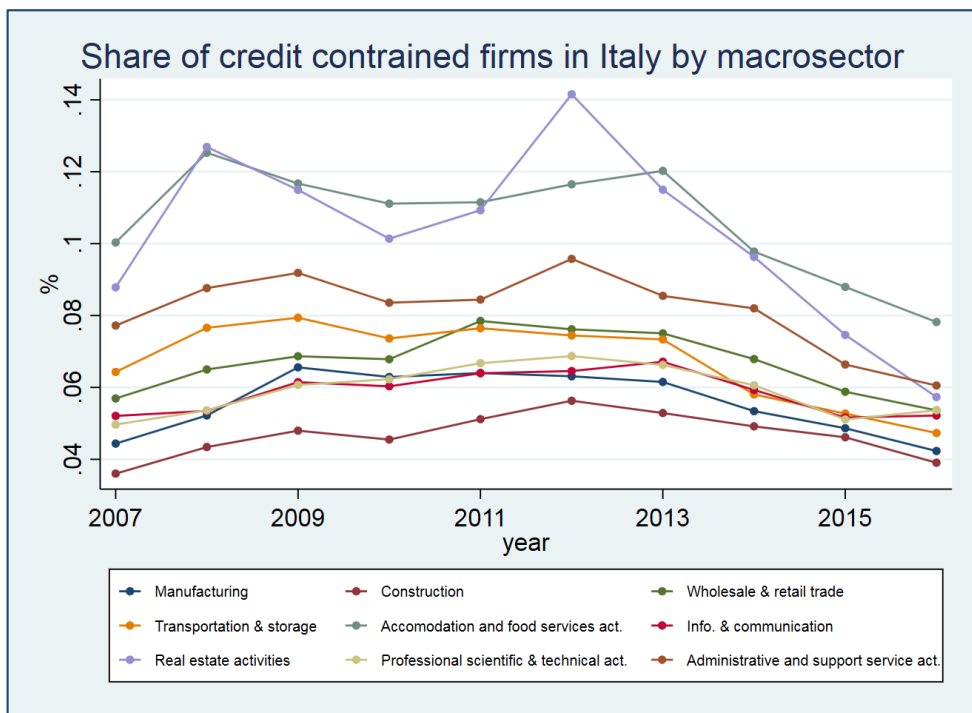
Stylised facts: the case of Italy

- In Italy, this relation is significantly more negative.
- It would seem however that the share of credit constrained firms has returned to pre-crises levels



Stylised facts: the case of Italy

- However, thanks to our dataset, we can uncover at least two additional sources of heterogeneity within Italy:
 - the macro-sector .
 - and the NUTS2 region in which a firm operates



**Thanks for your attention
and
enjoy the Conference**

CompNet e-learning course to research on competitiveness

Structure

- 3 Modules (beginners, intermediate, advanced)
- A set of slides Stata scripts
- A dataset of CompNet data
- A skype call for assistanship

Intermediate

- Professionals and graduate students who are familiar with CompNet and Stata
- Parametric estimates for cross-country/sectors comparisons
- Complex graphical representations
- Analysis of dispersion
- Regression Analysis

Beginners

- CompNet first users
- Data Preparation
- Data Mining
- Data Visualization

Advanced

- Academic Scholars, PhD students with solid knowledge of applied economics
- Kernel approximation of firm level distribution
- Simulation of small firm level dataset
- Beyond OLS: probit/logit, quantile regression, DiD, IV