

2015-04-28

PRESS RELEASE

Assessing European competitiveness: The new CompNet micro-based database

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NBB Working Paper No 279 - Research Series

The economic literature has long recognized that firm-level data delivers crucial information for understanding the drivers of competitiveness, as aggregate performance depends strongly on firm-level decisions and shocks have a different macroeconomic impact depending on the underlying distribution of firms. For these reasons, one of the pillars of the Competitiveness Research Network of the EU System of Central Banks (CompNet) since the start of its activity has been to exploit micro or firm-level based information to support and complement its analysis. However, cross-country firm-level analysis is hindered in practice by at least two major constraints. First, existing indicators based on firm-level data are often not comparable across-countries, given that they refer to non-homogenous periods, they are constructed using different methodologies or they use inconsistent variable definitions. Second, firm-level data are normally confidential. As a result, micro-based analysis of competitiveness remains mostly bounded at the national level, which thus hampers the scope for benchmarking analysis. This includes responding for instance to questions such as: what is the role of the regulatory environment and its impact on firm productivity?

One way to tackle the confidentiality and comparability issues associated to firm-level analysis is to have individual country teams handling the respective confidential firm-level data to produce homogenous indicators aggregated at the industry level. Those indicators are then collected by a central coordinating team, which recirculates the whole set of aggregated information for the whole set of participating teams. This approach is known as “distributed micro-data analysis” and it has been followed by CompNet to set a new research infrastructure able to deliver cross-country firm-based indicators. The first output of this joint exercise was an industry-level database with comparable information on the distribution of productivity, Unit Labour Costs and Total Factor Productivity across 11 EU countries. The ECB WP 1634 documented in detail the exercise. The scope of the first version of the database was quite limited in terms of countries as well as of indicators analysed. Despite this preliminary nature, several relevant facts already stood out from the analysis: (1) adding information from firm-level data greatly enhances the ability to draw policy conclusions from aggregate patterns; (2) the process of reallocation of resources from low to high productive firms, which is vital for restoring growth, can only be tracked by using firm-level information; and (3) the aggregate impact of a shock might vary depending on the underlying distribution of firms, thus firm-level information is needed to assess the relevant elasticities.

The analysis of the first wave of firm-level data opened up novel evidence on the drivers of competitiveness across countries, but raised as well some important questions that could not be addressed with the available indicators. Those questions related to the different drivers of productivity across countries, as well as to their impact, among others, on exports and labour market dynamics. Given the promising results obtained, three needs emerged: (1) to expand the dataset in terms of country and sector coverage, in order to build a truly European database useful for the analysis of competitiveness; (2) to continue improving the cross-country comparability of the indicators; and (3) to collect new information from firm-level data, including indicators of the financial position of firms, exporting status, employment creation or price-cost margins. Hence, in February 2014, CompNet started a second, much more ambitious, data collection exercise. The new database now includes information on 17 EU countries (13 EA countries) and covers 70 % of EU GDP (in 2013), and it is expected to be further expanded in the near future.

This paper documents the new CompNet firm-level database. It will be complemented by four forthcoming papers documenting and providing technical details on the construction and distribution of the new indicators included in this database (grouped around four broad topics: financial, trade, employment creation and markups). It is also complemented by a technical analysis of data quality and cross-country comparability performed by the DG-Statistics of the ECB.

Although it is intended to provide a complete reference related to the novel micro database, the paper includes also a number of applications. For instance, by using covariances between productivity and employment, the paper shows that the drop in employment which occurred during the recent crisis appears to have had “cleansing effects” on EU economies. This can be seen by the fact that the employment share of the most productive firms has increased at the expense of that of the least productive ones, particularly in economies under stress.