CompNet The Competitiveness Research Network

## The guarantee of confidentiality in the CompNet firm-level based indicators dataset

Although the literature has long recognized that firm-level data delivers crucial information about a wide range of phenomena, economic research based on these data has been so far hampered by issues of confidentiality and comparability. As a result, CompNet data collection and indicator construction process has been designed in such a way that both issues are resolved.

CompNet raw data are collected from a number of sources and institutions that collaborate extensively with the network by performing the initial steps needed to ensure full confidentiality of the data.

To begin with, it has to be pointed out that no individual firm level data is made available in the Secretariat of CompNet. The latter is in charge to send common codes that are run by the individual country teams.

A number of precautions are taken at the individual country team level.

- First, the country teams apply within the NCB or NSI a common procedure aiming at protecting confidential information. This procedure is structured in such a way that the user of the final data would not be able to uniquely identify individual firms based on the aggregated data. For example, in order to compute the mean value of a variable, the CompNet protocol requires a sample size of at least 3 observations (for computing complex indicators, such as TFP or TFPR, the required amount of observation will be higher).
- The required number of observations to compute the full distribution is 11, while for a joint distribution is 101.
- Further country specific requirements might apply according to their own confidentiality protocol.
- Ultimately, the country team will ensure that no private information is released within the network, by grouping together an amount of data sufficient to ensure complete confidentiality.

The aggregation at sectoral level, together with the sample size requirement, allows protecting all the firm-level information. Therefore, the resulting indicators, owned by CompNet and its members, are not confidential. They can be used via a quick procedure handled by the Executive Committee, with the only requirement to quoting all the necessary background literature on the CompNet database, expressly mentioned in the request form signed by the authorised utilisers. This is needed, in order to ensure that the limitations in the interpretation of the results are transparently highlighted.