

Regression trees for industry market structure

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This paper tries to investigate the firms size distribution in all the manufacturing sectors, by using the Extended Statistical Business Performance Register (Frame-SBS), elaborated by Istat.

In order to identify the firms size distribution we use two simple indicators: the number of companies and the level of concentration. The joint use of these two indicators captures different market structure. The contribution of this paper is the possibility to classify all the manufacturing sectors according to a data-driven approach, never employed in the literature for the italian manufacturing sectors: the atheoretical regression trees (ATR). The aim of this exercise is to identify relationships between companies of different size in each sector, in order to be able to reduce the effects of potential crises or develop expansive industrial policies for different sectors or even new production chains.