

Modelling some Entrepreneurship factors

ANNAMARIA BIANCHI (*University of Bergamo, Italy, annamaria.bianchi@unibg.it*)

SILVIA BIFFIGNANDI (*University of Bergamo, Italy, silvia.biffignandi@unibg.it*)

Entrepreneurship is increasingly recognized as a major factor of economic growth, productivity and competitive economy. Many countries are making efforts to support entrepreneurship and are interested in knowing how government policies and other factors can influence the amount and type of entrepreneurship. For this purpose they need to understand the determinants of and obstacles to entrepreneurship.

In spite of the large interest on entrepreneurship, due to the lack of internationally comparable data, the understanding of this phenomenon and its determinants remains still an open problem.

In 2006 OECD launched the Entrepreneurship Indicators Programme (EIP), which was joined by Eurostat in 2007. In *Measuring Entrepreneurship: A Digest of Indicators* (2008) - a report published within this project – a common set of concepts and definitions is presented. Furthermore, consistent data across different countries on firm start-ups, survival and growth firms, including gazelles (young high-growth companies) are provided in a OECD database. These data, even if they do not represent the whole set of indicators which is needed for studying the entrepreneurship process, represent a preliminary database of internationally comparable statistics.

Using this database (Structural and Demographic Business Statistics (SDBS)) and others (R&D database, Market Regulation database and Education at a Glance) we perform initial analysis of entrepreneurship across countries. Our interest is in understanding its determinants and in particular those related to education. Considering different measures of entrepreneurship, we perform regression analysis to identify the main determinants of entrepreneurial performance. The analyses are carried out for the manufacturing sector and for the total industry and market services sectors separately. In our models, we consider the following variables: employer enterprise birth rate, rate of high-growth enterprises, barriers to entrepreneurship, SME share of business R&D, tertiary educational attainment, upper secondary educational attainment and at least upper secondary educational attainment.

To shed further light on the relationship among countries and variables we apply multidimensional scaling techniques to produce a spatial representation of the data. The obtained mapping shows the 'hidden structure' of the data and allows to understand the degree of relation between variables and countries.

Preliminary conclusions about the role of different educational level on entrepreneurship are obtained as a reference theoretical frame for more detailed analyses based on single country data.

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