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Can entrepreneurship channel overqualification in young university graduates in the European Union?

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ABSTRACT

Human Capital Theory states that the higher a person's educational level, the higher their productivity and earnings. However, young university graduates sometimes find it difficult to enter the labor market due to their overqualification. The increase of qualified workers entails a decrease in their salaries when employed by others. One solution to the personal and economic costs of overqualification may be the creation of self-employment through entrepreneurship. For this reason, the EU 2020 strategy includes entrepreneurship principles in all educational levels to improve employability. This research focuses on the European population of under-25-year-olds with tertiary studies between 2009 and 2014. FsQCA is used to analyze the relationships among early entrepreneurship rates (GEM), expenditure on tertiary education (Eurostat), and overqualification levels (OECD) by country. Our findings show that there is a relationship between qualified entrepreneurial activity and young people, but none between educational investment and the entrepreneurial activity of young people.

1. Introduction

Most countries are concerned about their economic situation and wish to create solid economies with low unemployment rates. Entrepreneurship is the key factor to achieve that goal (Devece, Peris-Ortiz, & Rueda-Armengot, 2016). As part of its efforts to foster entrepreneurial values in education, the European Union's Horizon 2020 program is committed to entrepreneurship training at all levels (European Commission, 2013). The program rests on three main pillars: increasing education in entrepreneurship at all educational levels as a path toward business growth; ensuring flexible environments to favor business creation; and creating role typologies to extend entrepreneurship to specific population groups (the unemployed, immigrants…). In a nutshell, the overall goal is to provide people with basic competencies that permit their personal and professional development as entrepreneurs.

Traditionally, most entrepreneurs have had low qualification levels; some may even have abandoned their formal education at an early age. By the start of the 21st century, mandatory education meant an improvement in the average educational level of entrepreneurs. Empirical evidence shows that most entrepreneurs have received primary and secondary education, while in recent years, there has been an increase in the number of entrepreneurs with tertiary studies (GEM, 2010, 2015). However, there is great disparity between the northern and southern countries of the European Union. In Mediterranean countries like Italy (25.7%) or Portugal (25.2%), for example, the percentage of entrepreneurs with tertiary studies is below the European Union average (40.1%), while in France (54.1%) or Germany (49.5%) it is above it. In other cases, like Spain, a lot of entrepreneurs have only completed their mandatory education (36.9%) (Eurostat, 2014).

Due to regional characteristics, any analysis must be multidimensional. At a European level, the REDI index (Regional Entrepreneurship and Development Index) considers the individual dimension of business creation as well as a set of regional and institutional variables. REDI uses variables such as educational quality, entrepreneurial risk, transference of technology, and competitiveness and takes into account business heterogeneity and labor markets diversity from country to country to propose measures that foster entrepreneurship and eliminate bottlenecks deriving from the educational system (Greckhamer, 2011). In addition, a country's cultural values may affect its perception and attitudes to entrepreneurship (Benyon, Jones, & Pickernell, 2016; Castaño, Méndez, & Galindo, 2015; Crecente, Giménez, & Rivera-Galicia, 2016).

The entrepreneur's training level has a direct influence on managerial improvement, knowledge generation and a region's competitiveness. GEM research has detected positive relations between tertiary education and business survival (Coduras, Urbano, Rojas, & Martínez, 2008) due to greater management knowledge. Today, knowledge

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generated by entrepreneurs is more significant than knowledge acquired through the traditional educational system and enables the creation of spillovers and spin-offs and the identification and development of new market opportunities (Acs, Braunerhjelm, Audretsch, & Carlsson, 2009).

There is, too, a positive relationship between specialized education in entrepreneurship and an individual predisposition to launch a business in the future (Dutta, Li, & Merenda, 2011; Sánchez-Escobedo, Díaz-Casero, Hernández-Mogollón, & Postigo-Jiménez, 2011). Even if students do not contemplate setting up their own business, they nonetheless acquire competencies and skills that are at a premium in the labor market (Kassean, Vanevenhoven, Liguori, & Winkel, 2015).

By adopting the fsQCA methodology, our research will help to determine whether, on the one hand, investment in education on the part of EU countries between 2005 and 2010 is related to an increase in the number of young entrepreneurs (as defined by GEM) and, on the other, whether the acquisition of better skills and knowledge encourages them to set up businesses.

The structure of the paper is as follows: Section 2 sets out the theoretical framework, Section 3 explains the methodology and presents the data used to obtain, Section 4 shows the main results, and Section 5 provides some conclusions and makes some general recommendations.

2. Theoretical framework

Given the low levels of entrepreneurial activity detected among young people, EU countries are bent on implementing different measures to improve those levels as one strategy toward accomplishing Horizon 2020 goals, as entrepreneurship is the principal driving force of economic growth.

The existing relationship between entrepreneurship and educational level considers exogenous factors such as the economic environment, labor market flexibility and salary trends. In times of economic crisis, unemployment and wage restraint act as stimuli to unemployed people, encouraging them to set up their own businesses in order to obtain better remuneration than when working for others. Times of crisis also see a fall in the average educational levels of entrepreneurs, whose ranks are joined by unemployed workers forced by need to set up on their own.

There has been a gradual trend in educational systems toward fostering positive attitudes to the figure of the entrepreneur and to entrepreneurial activity by modifying personal perceptions of entrepreneurship (Anderson & Jack, 2008). At the same time, educational strategies such as active learning, experiential learning, simulations, and social learning narrow the gap between academic experience and real-life requirements (Kassean et al., 2015).

Sloane (2014) asked a sample of 700 post-graduate workers about how many skills they could apply in their current job. The results were compared for different salary levels, labor mobility, and job satisfaction. Sloan found a significant wage penalty and a reduction in job satisfaction for overeducated workers. There is also research showing that overqualification at work is greater at higher levels of training (Di Paolo & Mañé, 2016).

Entrepreneurship skills are intracurricular and complement mandatory education. However, additional academic and technical qualifications do not always correlate with the ability to create a business. In 2013, the “Program for the International Assessment of Adult Competencies” (PIAAC) concluded that 20% of European university students were overqualified to work for others, but it did not consider whether they possessed qualifications relevant to business creation, such as communication skills, negotiations, and team leadership (Leuven & Oosterbeek, 2011; Quintini, 2011).

Research comparing data from the European Community Household Panel (UE-15) has pointed to overqualification in different labor market sectors (entrepreneurs, public employees, and regular workers). Entrepreneurs proved to be less overqualified (Congregado, Iglesias, Millán, & Román, 2016).

As for younger students, various research has been conducted at different educational levels (primary, secondary or tertiary). In the case of high school students, some researchers have analyzed how demographic and psychological variables such as risk aversion may affect entrepreneurial intentions (Dinis, Do Paço, Ferreira, Raposo, & Gouveia, 2013).

The average age of entrepreneurs may vary depending on whether youngsters regard entrepreneurial activity as a possible career option. McMahon and Huijser (2015) emphasized that the way entrepreneurship is perceived in graduate education is not appropriate to the new paradigms related to entrepreneurship.

As education in entrepreneurship focuses on attitudes, motivation and persistence (for example, not giving up after an initial failure to set up a business), it should be regarded as an inbuilt component of the curriculum (Welsh, Tullar, & Nemati, 2016). The likelihood of students engaging in entrepreneurship on graduation from college depends on their own self-understanding and self-esteem.

Harms (2015) and Fayolle and Klandt (2006) analyzed the entrepreneurial behavior of postgraduates and, despite some divergences regarding entrepreneurial intentions, their conclusions had one point in common: the fear of failure. In Tunisia, a curricular change created a track for potential entrepreneurs in business capacitation, which helped college students to prepare a business plan. Other research conducted on a sample of post-graduates one year after graduation showed how entrepreneurial skills improved and future aspirations were higher; yet on entry into the labor market, this only bore fruit as a slight increase in self-employment, while the overall employment rate remained constant (Premand, Brodmann, Almeida, Grun, & Barouni, 2016).

The standard international indicator for research purposes is Total Early-stage Entrepreneurial Activity (TEA), which measures the percentage of the working-age population (18–64) who are either nascent entrepreneurs or owner-managers of a new business.

According to GEM, participating countries may be classified into 3 categories (depending on their degree of competitiveness and economic development): resource-based economies, efficiency-based economies (developed industrial sector) and innovation-driven economies (service sector more important than industry). One of the field's major statistical resources are the GEM reports, which are multidisciplinary and take into account such entrepreneurship variables as demography or psychological behavior from an international perspective.

In view of the literature reviewed here, this paper will test these two hypotheses:

Hypothesis 1. There is no relationship between expenditure on education and entrepreneurial activity in young people.

Hypothesis 2. There is a relationship between young people and qualified entrepreneurial activity.

3. Data description and methodology

3.1. Data source, collection and sample

This study uses different data sources: the Global Entrepreneurship Monitor for 2009 and 2014 for data on entrepreneurship (GEM, 2010, 2015); the OECD report “Education at a Glance 2013: OECD Indicators” for 2005 and 2010 Expenditure on Tertiary Education as a percentage of GDP; and Eurostat database for data regarding the population's educational level. Table 1 shows the original data for this study.

The variables are defined as follows:

- TEA = percentage of working-age population who are either nascent entrepreneurs or owner-managers of a new business. (Source: GEM)
- YTEA = percentage of young population (aged 18–24) involved in