

The effect of entrepreneurial ecosystems on entrepreneurship in Portugal

ABSTRACT

This work analyses the variation in start-up creation across the Portuguese NUT3 regions, using data available from two different sources. The birth of startups is measured through notary acts of new company creation and activity start is measured through the first submission of salaries lists to ministério do trabalho e solidariedade social.

This data is analyzed with other social and economic variables trying to determine environmental factors that help explain the large differences between the regions.

Particular attention is focused on measuring the birth and the activity of the so called "entrepreneurial ecosystems", as defined in the literature (Alvedalen & Boschma, 2017; Boutillier, Carré, & Levratto, 2016; Kuckertz, 2019).

A huge difference is detected between the number of companies created in notary and the number of startups that actually submit their first salaries lists to Ministério do Trabalho e Segurança Social. This may indicate that a large number of startups fails before it actually starts paying salaries.

Keywords: Entrepreneurship, ecosystems, regional development, innovation

INTRODUCTION

Entrepreneurship's importance has been frequently highlighted in the literature and five reasons have been mostly pointed out: it contributes to the creation of job, it contributes to innovation, it increases the creation of wealth, it contributes to the development of the economy and of the society and, finally, it constitutes a more and more important career option for a good part of the workforce (F.C. Gaspar, 2009).

In face of the low levels of entrepreneurship that most Portuguese NUT3 regions show, the necessity for economic policies that may increase entrepreneurial activity is quite obvious.

The results also show that the demand derived factors assume an enormous weight in the explanation of the differences between the districts, which must inspire eventual actions of the local entities.

New policies are needed to further entrepreneurial activity in the interior regions and the islands.

ENTREPRENEURIAL ECOSYSTEMS AND REGIONAL DETERMINANTS OF ENTREPRENEURSHIP

The concept of entrepreneurial ecosystem (EE) is relatively new in the entrepreneurship literature (Blasi & Sedita, 2019). It is one approach to try to explain the differences in entrepreneurial activity among regions (Colombelli, Paolucci, & Ughetto, 2019).

The concept has attracted a lot of attention but clearly needs to be further defined (Alvedalen & Boschma, 2017). It was defined as "an interconnected group of actors in a local geographic community committed to sustainable development through the support and facilitation of new sustainable ventures" (Cohen, 2006, p. 3) and it also serves the purpose of compensating for the traditional focus of entrepreneurship literature on the individual entrepreneurs' or startups' actions, motivations and limitations (Alvedalen & Boschma, 2017). It is seen not as a formal institution or organization "but rather an informal plexus of relations... based on regional proximity" (Cunningham, Menter, & Wirsching, 2019, p. 552).

One of the advantages of the EE concept is assuming opportunities may not be exogenous and may be the result of the interactions between EE actors (Alvedalen & Boschma, 2017).

"Performance of EE is perceived to depend on interactions between three components:

individuals, organizations and institutions" (Alvedalen & Boschma, 2017, p. 6).

The importance of social capital for the success of the startup (Fernando C. Gaspar, 2009) is one other contribution of EE, as it becomes a source of social capital for the entrepreneur (Alvedalen & Boschma, 2017).

The influence of EE in the process and success of startups is nevertheless documented (Auschra, Braun, Schmidt, & Sydow, 2018).

The role of regional determinants in explaining differences of entrepreneurial activity has been subject to studies over the time (Bosma & Schutjens, 2011; Fernando C. Gaspar & Pinho, 2007). The subject has also been studied in the context of technology transfer policies, even though it focused only in that specific part of an EE (Cunningham, Lehmann, Menter, & Seitz, 2019).

One the problems patent in the literature is the undefinition about how to measure and evaluate any specific EE (Boutillier et al., 2016). Most studies see the EE as a network

(Alvedalen & Boschma, 2017), therefore the value of the EE will result from the sheer number of nodes. This work will try to contribute to lesser this gap.

METHODOLOGY

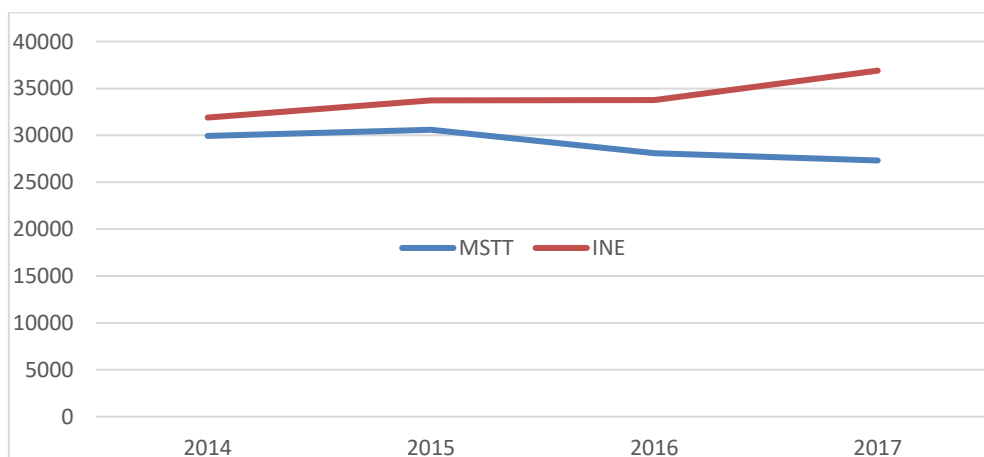
This project will collect measures of nut3 regional ecosystems, in the dimensions: Formal institutions, entrepreneurship culture, physical infrastructure, demand, networks, leadership, talent, finance, new knowledge, intermediate services (Boutillier et al., 2016) and university (Cohen, 2006). An entrepreneurial ecosystem index (EEI) will then be constructed.

It will then use data on both startup creation, collected from notary acts of new company creation, and activity start, measured through the first submission of salaries lists to ministério do trabalho e solidariedade social.

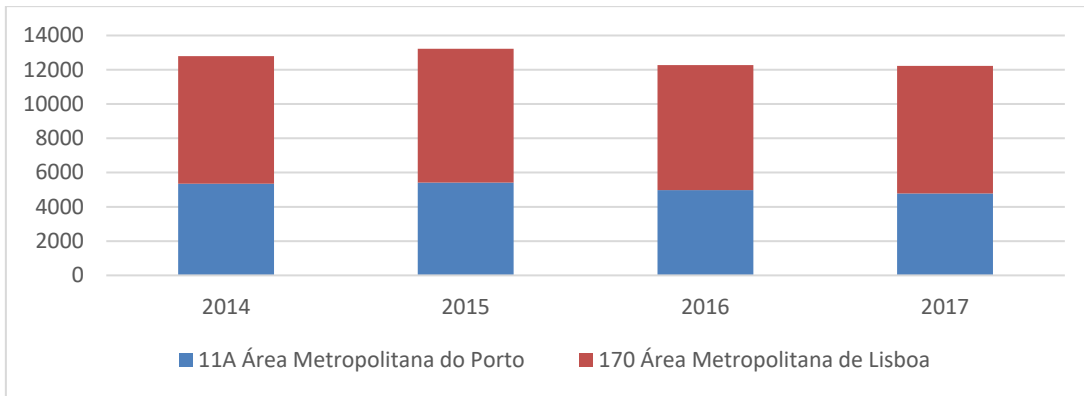
Portuguese nut3 regions are then compared using both aspects: the EEI and entrepreneurial activity (startup creation and startup activity start).

RESULTS

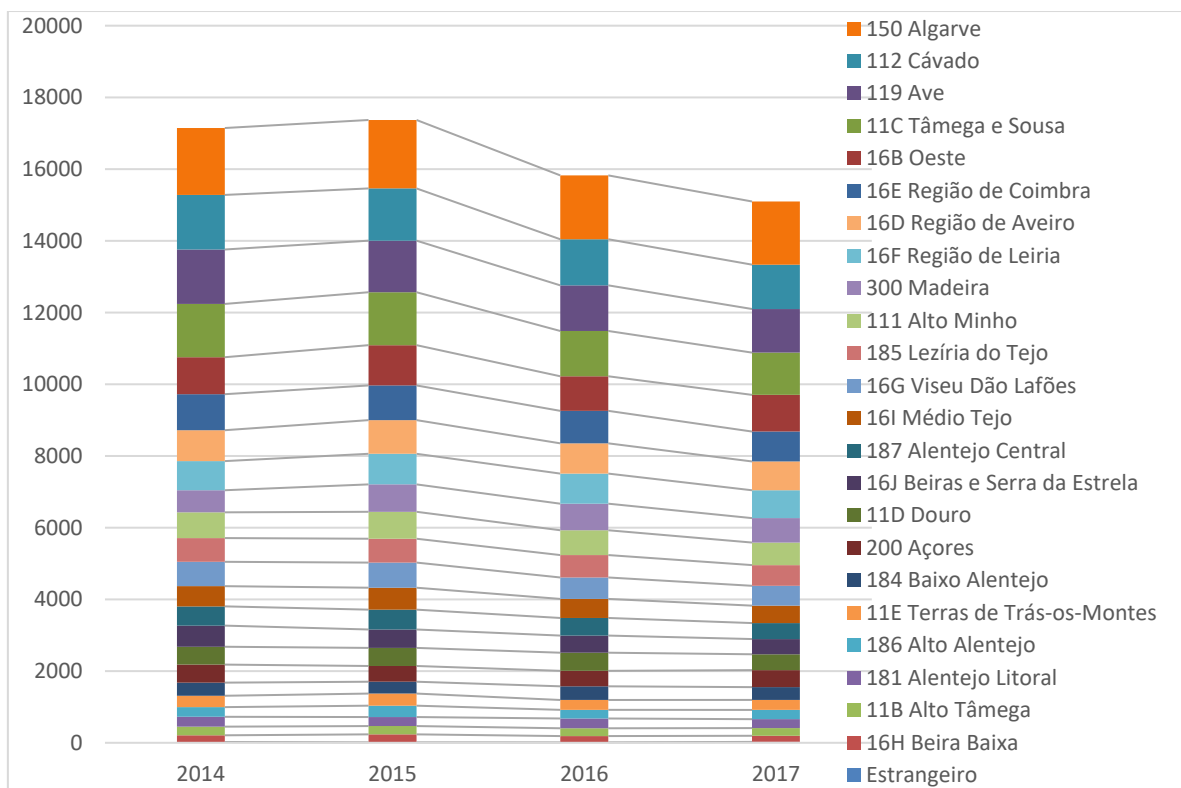
The first look at data shows a decrease in startups submitting their first salaries list in the post "troika crisis" period, whilst the number of new companies created in notaries increases steadily.



Looking at the geographical dispersion of the startups submitting their first salaries lists to MSTT, we need to split the graphic in two: one for the major cities (Lisboa and Porto nut3) and one for the rest of the country. Curiously, the drop in this number is due to the Porto nut3, where it drops from 5.346 to 4.777, while in Lisboa the change is minimal (7.453 to 7.445).



In the other nut3 regions the variation is clearer, being the Algarve the most active startup creator.



Comparing the year average of both figures by nut3, we can see the variation is substantial and larger in Lisboa, Porto and Madeira. There are substantially more companies being created in notaries than startups submitting their first salaries lists (this includes startups that pay only one salary, the CEO). This indicates many wannabe startups are created on paper but never really start, or start much latter after they are created.

	INE	MSTT	Variação
Área Metropolitana de Lisboa	50 462	7 501	85%
Madeira	3 569	699	80%
Área Metropolitana do Porto	25 058	5 130	80%
Região de Coimbra	4 177	928	78%
Região de Aveiro	3 835	862	78%
Região de Leiria	3 405	821	76%
Cávado	5 696	1 376	76%
Açores	1 771	462	74%
Algarve	7 005	1 830	74%
Oeste	3 914	1 037	74%
Ave	5 135	1 360	74%
Viseu Dão Lafões	2 241	633	72%
Alto Minho	2 429	698	71%
Tâmega e Sousa	4 636	1 351	71%
Lezíria do Tejo	2 118	633	70%
Médio Tejo	1 825	547	70%
Beira Baixa	606	190	69%
Alto Tâmega	718	225	69%
Alentejo Litoral	828	262	68%
Alto Alentejo	858	273	68%
Beiras e Serra da Estrela	1 513	502	67%
Douro	1 422	489	66%
Alentejo Central	1 415	507	64%
Terras de Trás-os-Montes	839	302	64%
Baixo Alentejo	821	358	56%

CONCLUSIONS

From the results obtained one can conclude that entrepreneurship in Portugal registers very low levels, probably in great part due to the historical evolution of the economy and of the Portuguese society and also due to the low levels of innovation and of access to knowledge creation.

It is easy to conclude also that the creation of new enterprises is particularly concentrated in the regions of Lisboa and Porto, whereas in other regions of the Country (especially in the interior and islands) a great lack of entrepreneurial dynamic is registered.

This is a worrying conclusion, due to the importance that entrepreneurship assumes in the economies of the century XXI, since the importance of entrepreneurship in the development and in the well-being of our society is unmistakable and the necessity of maintaining and increasing the rhythm of creation of new enterprises is the essential motor for economic growth in a supported development.

In this sense, the formation, the support, the promotion and the incitement of an enterprising culture and of the creation of startups will have to be one of the strategic priority objectives for any central or local government or of any institution (business

associations, universities, etc.) interested in the economic and social development of his region and of his country, particularly for the most discriminated regions.

To promote and to support entrepreneurship of the century XXI is to develop politics of formation orientated for the heart of the process of entrepreneurship helping entrepreneurs follow the road from idea generation to market success. The role of entrepreneurial ecosystems in this process can be extremely important and will be the subject

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