

The role of culture in entrepreneurial ecosystems: an investigation for European regions.
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Promotion of new entrepreneurial activity has been increasingly visible in many economies across the globe and is currently being shaped by an emerging literature on entrepreneurial ecosystems (see e.g. Stam 2015). In this paper we argue that within the regional entrepreneurship ecosystems approaches, entrepreneurship culture should be seen as one of the essential elements: we propose that regional entrepreneurship culture represents the glue that links the elements of the entrepreneurial ecosystem. However, entrepreneurial culture includes many facets and there is to date limited empirical research on how different dimensions of entrepreneurial culture (e.g. how individuals perceive and deal with opportunities, risk attitudes, status of successful entrepreneurs, media coverage etc.) connect to entrepreneurial outcomes. This paper brings together the literature on entrepreneurial culture and entrepreneurial ecosystems and comes up with regional indicators for entrepreneurship culture in European regions by combining data from the Global Entrepreneurship Monitor, the European Value Survey and the Eurobarometer Surveys on entrepreneurship. Supported by our results we argue – without being able to infer causal relationships - that entrepreneurship culture can be seen both as one of the key elements of an entrepreneurial ecosystem, as well as an essential feature that ensures optimal connections between other elements of a regional entrepreneurial ecosystem.

Entrepreneurial ecosystems and the role of culture

Entrepreneurial ecosystems

The concept of entrepreneurial ecosystem emerged relatively recently and consequently there is not yet a universally accepted definition. It requires a clear and universally accepted understanding of its two components (entrepreneurship and ecosystems) as well as the combination of the two. Entrepreneurship is a process by which opportunities to create future

goods and services are discovered, evaluated, and exploited (Shane & Venkatamaran, 2000). An 'ecosystem' – pulled out of the strict biological context - emphasizes a community of interdependent actors. The entrepreneurial ecosystem literature frequently adopts a narrow selection of what most scholars see as entrepreneurship. The literature for example tends to focus on “high-growth entrepreneurial firms” (Napier & Hansen, 2011) and “high-tech start-ups” (Senor and Singer, 2009). More in particular the entrepreneurial ecosystem literature focuses on the role of the (social) context in enabling or constraining entrepreneurship, the interdependencies between actors within the system (Stam 2015). It puts central the process individuals go through in their entrepreneurial endeavors while emphasizing the importance of context.

The concept of entrepreneurial ecosystems has received increasing attention from policy makers. However, according to Stam (2014), it suffers from a number of limitations: it is tautological - entrepreneurial ecosystems are recognized and praised where high levels of (some form of) entrepreneurship are perceived to be present; it only provides laundry lists of relevant factors (e.g. Isenberg, 2010; WEF, 2013), without a clear analysis of how these are interdependent in space and over time, and what the key mechanisms are; it does not provide a clear 'dependent' variable on what is a successful entrepreneurial ecosystem (either in entrepreneurial terms, or in broader welfare goals). In addition, it is not clear what the adequate unit of analysis is: the national economy, the regional economy, a sector, or a corporate system. Summarizing the critique: the entrepreneurial ecosystem concept lacks causal depth and is not properly demarcated. In spite of the critique, the concept includes several valuable elements for understanding the performance of meso-economic systems: it explicitly addresses the interdependencies in the context of entrepreneurship (going beyond a narrow market-hierarchy view of governance), and it provides a bottom-up account of the performance of meso-economic systems.

The role of culture

This paper builds on two premises. The first premise is that entrepreneurial culture forms the glue, the backbone of any entrepreneurial ecosystem. For entrepreneurial ecosystems to run adequately, a key role exist for forms of governance that enable connections that are sufficiently stable to enable investments but sufficiently flexible to allow recombinations for innovation to take place (Stam 2015). Thus, specific combinations of (local) formal and informal institutions govern entrepreneurial action. The seminal work of Williamson (2000) puts forward that in particular informal institutional settings are very persistent and hence hard to change, more so than formal institutions – the rules and plays of the game.

The second premise is that entrepreneurial culture is a multidimensional concept. As such, most regions will show shortcomings as well as strengths in different components that together make the entrepreneurial culture. Taken together, these premises imply that successful entrepreneurial ecosystems will be able to exploit the strengths in the entrepreneurial culture and alleviate the shortcomings in these entrepreneurial cultures.

Several papers have highlighted the importance of entrepreneurial culture for explaining regional levels of entrepreneurship, as for example convincingly analyzed by Obschonka et al. (2015). The notion that regional differences and informal institutions are very persistent over time is articulated by Fritsch and Wyrwich, (2014) in their analysis on German regions; even though these regions underwent significant changes in formal institutional settings, observed variation in entrepreneurial activity remained remarkably consistent over decades.

While these insights are important for policy makers, they do not equip them with the insights required to optimize entrepreneurial policies in order to advance economic development. Consistent with the Austrian Economics school of thought (see e.g. Boettke and Coyne 2003), we argue that the set of norms and values attached to entrepreneurial behavior

determine to what extent – and perhaps more importantly in what manner – entrepreneurial activity is conducted. Some components of entrepreneurial culture that are well developed may be capitalized on whereas other components that are not well developed may become explicit policy targets in the longer run. As such, we embrace the studies that have linked entrepreneurial culture to entrepreneurial activity, however we provide more nuance as to how single measures of “entrepreneurial culture” might be unraveled into different parts. In this respect we borrow from Scott’s (2001) division of (informal) institutions into cultural-cognitive and normative elements.

Data & Methods

We analyze regional levels of entrepreneurial culture regions in Europe by combining three data sources: the Global Entrepreneurship Monitor, the European Value Survey and the Eurobarometer. These are all individual-level datasets that include different items related to entrepreneurial perceptions, values and attitudes. After linking the data we end up with 120 regions and 16 potential indicators of (components of) entrepreneurial culture. Since our data is cross-sectional in nature, we cannot infer any causality. Our preliminary analyses mainly serve in (i) establishing statistical associations between elements of entrepreneurial culture and related types of entrepreneurial activity (for instance, is the regional variance in attitude towards *successful* entrepreneurs positively linked to the observed variance in growth- and innovation oriented entrepreneurship); and (ii) establishing the entrepreneurial culture *profile* per region by means of comparing the components to the average of sets of benchmark regions. The first type of analysis establishes the relevance of our measures, while the second type of analysis connects to the approach of entrepreneurial ecosystems, as it provides a profile of entrepreneurial culture for the region and can as such be useful for further developing the entrepreneurial ecosystem.

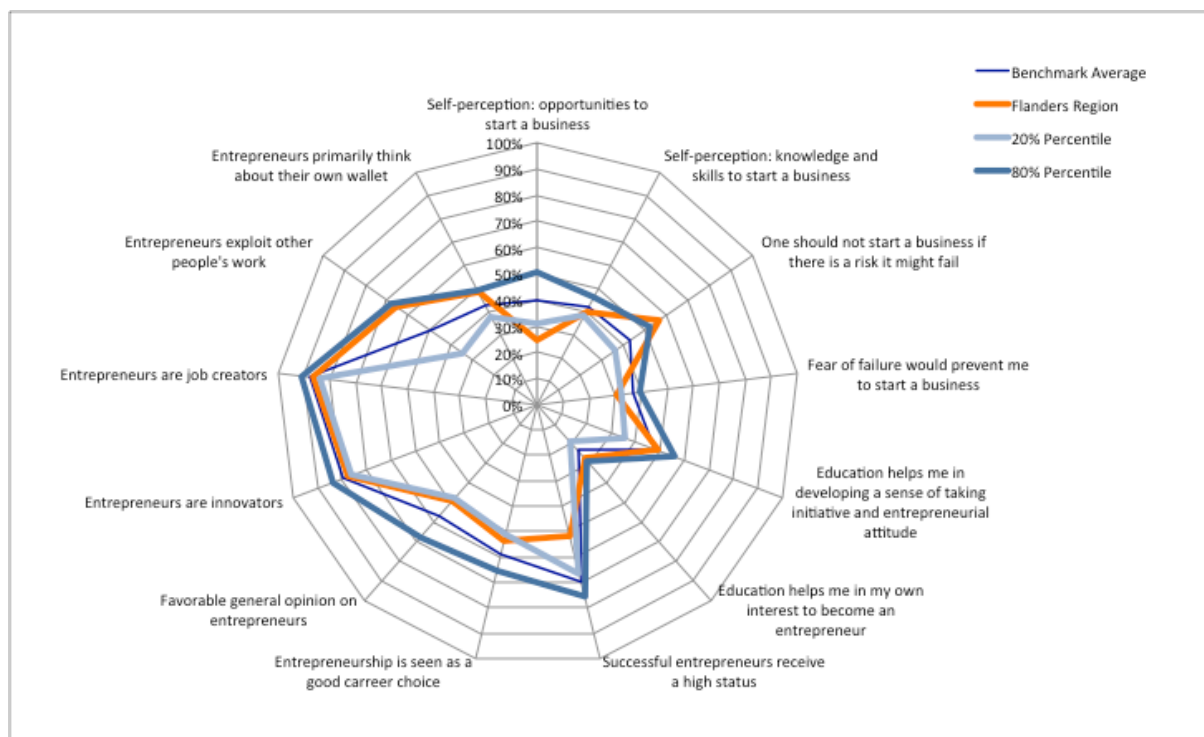
Preliminary Results and Implications

Our preliminary results lend support for a positive link between profiles of regional entrepreneurial culture and profiles of regional entrepreneurial activity that are derived from the Global Entrepreneurship Monitor. For instance, we find (moderately) positive correlations between individual self-perceptions when it comes to seeing good opportunities to start a business in the area where people live and the actual opportunity-motivated (early-stage) entrepreneurial activity. We also observe a positive link between perception of entrepreneurs as innovators and actual rates of (self-reported) innovative entrepreneurial activity in the region. As a last example, a positive link appears to exist between the assessment of education as a way to increase the appetite for entrepreneurship and the number of growth-oriented early-stage entrepreneurs in the region.

An example of an assessment of the regional entrepreneurial culture is provided in Figure 1 for the Belgian region of Flanders. Some components that are interesting for this particular region are the following. First, the attitudes towards successful entrepreneurs are relatively negative. Second, perceived opportunities to start a business are low. Third, education is valued quite well in the sense that it helps towards taking initiative and developing an entrepreneurial attitude. With this profile of entrepreneurial culture in Flanders, the observed values by Bosma et al. (2014) make sense: Flanders is characterized by relatively low early-stage entrepreneurial activity rates, low growth-oriented entrepreneurship but also by high levels of entrepreneurial employee activity – that is entrepreneurial behavior by individuals in their occupation as an employee. The last-mentioned type of entrepreneurship – closely linked to the concept of intrapreneurship – is also captured in Shane and Venkataraman's (2000) definition of entrepreneurship and reflects one way of entrepreneurial behavior caused by institutional settings in the vein of Boettke and Coyne. Hence, the entrepreneurial ecosystem in Flanders should perhaps underline the potential of entrepreneurial employee

activity while trying to get higher acceptance for successful entrepreneurs in the region. Recognizing the multifaceted nature of entrepreneurial culture and linking this to the entrepreneurial ecosystem may equip relevant players with more knowledge to advance the (entrepreneurial) development of the region. Adding our findings to other studies on entrepreneurial culture and those on entrepreneurial ecosystems we conclude that entrepreneurship culture can be seen both as one of the key elements of an entrepreneurial ecosystem, as well as an essential base for ensuring optimal connections between other elements of a regional entrepreneurial ecosystem

Figure 1 Example of a regional entrepreneurial culture profile for the Belgian region Flanders



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