Entrepreneurial ecosystems and public policy

Interest in the concept of an entrepreneurial ecosystem has been growing in recent years (World Economic Forum, 2013). The concept is rooted in ideas about the role of clusters in geographic locations and is linked to work about industrial districts and clusters of innovation (Feldman et al., 2005). An entrepreneurial ecosystem can be defined in a number of different ways, but it is common to consider an entrepreneurial ecosystem to be “[…] the union of localized cultural outlooks, social networks, investment capital, universities and active economic policies that create environments of supportive innovation-based ventures” (Spigel, 2015). The “eco” part of the word links back to an analogy of ecological systems that are morphogenic, flexible and constantly adapting in complex ways, while the “system” aspect of the definition suggests an organized quality to the way in which overall interactions occur. In recent public policy the concept of entrepreneurial ecosystems has become popular and policy professionals are increasingly interested to explore how they can create such ecosystems in their locality and for their communities (World Economic Forum, 2013). Typically, entrepreneurial ecosystems have a geographic component and may be considered to be located in a region, a city, a specific part of a city or around an anchor organization (e.g. a university, research lab or major corporation). This special issue is, therefore, focused on specific public policy considerations for the development and maintenance of environments that encourage entrepreneurship and innovation.

Research on entrepreneurial ecosystems has been developing and there is much prior relevant work on clusters, industrial districts and clusters of innovation (Roundy, 2016). Most study of the subject has been focused on major urban areas, such as, Silicon Valley, Boston, Washington DC and Boulder Colorado (Feldman, 2014) and more recently Chicago, Pittsburgh, and Richmond (Harper-Anderson, 2018). Study has focused on the attributes of entrepreneurial ecosystems, with a focus on the various components, how they interact and what aspects enable growth and development (Pitelis, 2012). Most studies in the subject look historically at the process through which an ecosystem has become established within a particular locality or focuses on conceptual arguments (Feldman, 2014). Current thinking has been criticized for focusing on predominantly successful ecosystems in major urban environments, for listing attributes without much consideration of causality or for neglecting the temporal nature and phases through which ecosystems might develop (Roundy, 2016). There are also disagreements in the literature over the exact role of certain attributes, some for example – show that universities are critically important while others are less conclusive. The role of public policy in supporting and creating entrepreneurial ecosystems is likewise unclear (Feld, 2012).

The purpose of the special issue is to consider a number of key areas in this stream of research and specifically to investigate the public policy implications. First, the special issue welcomed studies that explored entrepreneurial ecosystems in a general sense and the role of public policy in supporting such systems. Aspects of public policy focused on in the special issue call included: business support policies; public or government venture finance; makerspaces, incubation, and acceleration programs; government actions such as zoning, licensing, regulation and taxation on ecosystem formation and development; the role of immigration and/or migration; and, programs designed to support venture creation, small business survival and venture growth. Second, the special issue was particularly interested in submissions that explored entrepreneurial ecosystems in less obvious localities. In particular, it was interested in rural locations, smaller cities and university towns.
The purpose of this focus was to offset the overwhelming amount of research on urban locations, where papers are reviewing essentially established ecosystems. In this sense, the special issue was interested in ecosystems that were in different stages of development, for example, starting out, becoming established and/or beginning to fail or had failed. Finally, the special issue asked for papers focused on educational and learning aspects of entrepreneurial ecosystems. It called for work that focused on the role of universities and educational programs and reviewed how they supported the development of entrepreneurial ecosystems. In summary the issue called for article submissions on any topics related to the public policy and entrepreneurial ecosystems but was particularly interested in:

1. case studies of entrepreneurial ecosystems in non-obvious localities, in particular rural locations and smaller communities;
2. studies that analyzed empirically the impact of certain forms of public policy on the viability of an ecosystem;
3. articles that explored temporal perspectives and/or considered entrepreneurial ecosystems at different stages of development;
4. conceptual studies that considered public policy innovations and how they might improve the capacity of localities to build and maintain viable ecosystems;
5. studies that explored the role of the university within an entrepreneurial ecosystem; and
6. pedagogic and program reviews that examined specific programs and how they help build entrepreneurial ecosystems.

Of the large number of papers submitted and reviewed the editorial team selected six papers that are presented in this special issue. The papers focus on a range of topics including the role of crowdfunding; reviews of public policy interventions; studies focusing on ecosystems in constrained contexts, evolving ecosystems and the role of universities. A summary of each paper follows.

**Crowdfunding and entrepreneurial ecosystems (European Union)**

Availability of finance is a recognized constraint in many ecosystems and particularly challenging in constrained contexts, such as rural areas. Finance tends to follow the development of established ecosystems and can, therefore, be particularly challenging when a new location for entrepreneurial activity is just becoming established. In this paper public policies for equity-based crowdfunding are reviewed in terms of their ability to help establish new entrepreneurial ecosystems. The paper reviews policies in the European Union, to support crowdfunding mechanisms for financing entrepreneurial ventures. It concludes that policies are not aligned across nations and are often overly bureaucratic to be valuable in the context of highly innovative entrepreneurial endeavors.

**Entrepreneurial ecosystems and public policy (Poland)**

This paper reviews public policy to support the formation of entrepreneurial ecosystems in one nation and focuses on Poland. The work reviews public policies and assesses their impact on the actual creation and support of entrepreneurial ecosystems. The study shows that it is difficult for public policy to create appropriate conditions for entrepreneurship and that in some cases policy intervention gets in the way of naturally emerging developments. Consequently, the paper challenges the view that public policy interventions can help stimulate entrepreneurial ecosystems.
A transformation success story (Alabama, USA)
In this paper the focus is on a regional approach and concentrates on Muscle Shoals region in the northern part of Alabama in the USA. The paper provides a counterargument to the prior one in showing how five aspects of public policy have been important in helping create an ecosystem. These include the role of civic leadership; the establishment of support networks; the quality and connectivity of “place”; and the degree of interactivity between entrepreneurs in a locality. The paper shows some success in this story of public policy leadership in creating an entrepreneurial ecosystem.

Regional capability (Dublin, Ireland)
The next paper also focuses on a regional analysis and explores the evolution and resilience of local entrepreneurial ecosystems by placing an emphasis on the relationship between local entrepreneurs and the supporting regional infrastructure in Dublin, Ireland. The study focuses specifically on high technology, high growth ventures in the information technology sector and explores how resources recycle within an entrepreneurial ecosystem. The study concludes that regions can go through different ecosystem configurations at different times and that policy, particularly labor policy, can help encourage resilience as resource recycling occurs.

University ecosystems and under-represented communities
Here the special issue begins to explore university-based entrepreneurial ecosystems and in particular how they can become more inclusive of the wider community, while avoiding ‘picking winners’ from the existing elites. The paper focuses on how to extend the impact of entrepreneurship education and learning into under-represented communities and presents a conceptual model to help universities implement this work.

Ecosystems in peripheral places
The final paper also develops a conceptual argument but focuses on policy interventions in peripheral places, such as rural areas. The paper draws on the literature focused on peripheral places and contrasts it with the literature on entrepreneurial ecosystems, to offset the urban bias in much of the current published work on the topic. From the study the paper presents viable policy practices and interventions that are considered to have potential in the context of these locations.

Collectively these papers show a mixed picture for the role of public policy in the support of entrepreneurial ecosystems. It is clear, for example, that in some contexts public policy has failed to support the establishment and maintenance of viable localities, while in other instances it has been critical for offsetting constraints. Ultimately, all the papers allude to a role for public policy, but see it as a supportive and collaborative one, working with entrepreneurs who themselves ultimately lead the ecosystem and create the critical social networks that are required for ecosystem success (Feldman et al., 2005; Feld, 2012).

Jason Jolley
Voinovich School of Leadership and Public Affairs, Ohio University, Athens, Ohio, USA, and

Luke Pittaway
College of Business, Ohio University, Athens, Ohio, USA

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