23 July 2019

Entrepreneurial and Innovation Ecosystems in the UK and Japan -Place-based policy scenarios and options

Principal Investigator - Dr Fumi Kitagawa University of Edinburgh; UK-Japan SSH Connections Grants; Award reference - ES/S013687/1

Introduction

Internationally, the ecosystem concept is used as a tool by policymakers to promote innovation and entrepreneurship across city-regions. By building a partnership between the research and policy communities in the two countries, we aim to critically examine and further develop the concept of "entrepreneurial and innovation ecosystems" by engaging with policy user communities.

The UK and Japanese academic team¹ consists of members from Universities of Aston, Cardiff, Edinburgh, Glasgow and Sheffield; Universities of Hitotsubashi, Tohoku, Toyo, Waseda and the National Graduate Institute for Policy Studies (GRIPS), bringing international experiences from a diverse range of city-region and regional perspectives. The partnership also include institutional collaborations with the <u>Japan Local Government</u> <u>Centre (JLGC) in London</u>, and <u>the Centre for Entrepreneurship</u>, <u>SMEs</u>, <u>Regions and Cities at</u> <u>the Organisation for Economic Cooperation and Development (OECD)</u>, who as knowledge partners jointly add value through dissemination and engaging networks of practice.

In the first half of 2019, two international workshops were organised – one in the UK (University of Glasgow, 7-8 May), another one in Japan (National Graduate Institute of Policy Studies in Tokyo, 24-25 June). Key reflections from the two workshops are presented below.

Measuring entrepreneurial and innovation ecosystems – reflections from the workshop in Glasgow (7-8 May, 2019)

Colin Mason, Ben Spigel, Fumi Kitagawa

In May more than 60 academics, practitioners and policy-makers from the UK and Japan met at the University of Glasgow under the auspices of the ESRC's UK-Japan connections grant for two days of discussion to develop new, more granulated understanding of the heterogeneous nature of ecosystems and their complex interactions with public policies in the two countries.

The following seven themes emerged from these discussions.

1. Place matters and places are different

A focus on national ecosystems does not explain sub-national variations in entrepreneurial activity. Moreover, most of the sub-national focus is on city regions – but there are spatial disparities and different institutional conditions – what about rural and small town ecosystems? One size does not fit all, and the ecosystem concept itself does not give us magic solutions to place-based issues.

¹ Hiro Izushi (Aston Business School); Dan Prokop (University of Cardiff); Ben Spigel, Fumi Kitagawa (University of Edinburgh Business School); Colin Mason, Michaela Hruskova (University of Glasgow); Tim Vorley, Chay Brooks and Cristian Gherhes (University of Sheffield); Hiroyuki Okamuro (Hitotsubashi University); Koichi Sumikura (GRIPS); Kanetaka Maki (Waseda University); Michi Fukushima (Tohoku University); Akio Nishizawa (Toyo University).

2. Unpacking the 'black box' approach to 'processes'

Approaches to measurement need both quantitative and qualitative elements to be able to better assess and understand the place-specific ecosystem conditions. Metrics need to go beyond proxy measurements. The biases in the data bases used in econometric analysis need to be recognized and understood. We need a more contextualized and detailed understanding of processes, enablers and constraints on place-based ecosystems.

3. Combined and innovative methodological approaches

New and innovative ways to collect data and measurement approaches are developing. These include the use of big data, and different units of analysis (e.g. networks; co-working; events; ideas) in addition to firm-level analysis, which highlight interactions and relational dimensions among actors. The use of social media is one promising micro-foundational approaches to better understand interactive and relational nature of the ecosystem in a systematic way.

4. Historical and longitudinal approach to analyse change over time

It is important to understand how different resources and capabilities (e.g. human, financial, technological) are *recycled* in the ecosystem, and move between ecosystems (e.g. mobility of talents, graduate start-ups). Local capability changes over time, and support mechanisms need to evolve accordingly.

5. Blind spots in the existing data and issues of inclusivity in the ecosystem The policy focus on high tech and high growth entrepreneurship results in certain assumptions and *blind spots* in the existing ecosystem frameworks and data-sets. We need to be more conscious of the boundaries of the ecosystem and the actors who are visible, involved, and being measured in the existing system. We should note that data availability is driving much of the research agenda.

6. Diversity and links between innovation and entrepreneurship

The forms and nature of both innovation and entrepreneurship are diverse – 'early adoption' may be more important (for example, for SMEs) than new knowledge generation. Our understanding is limited in terms of the relationships between (open) innovation and entrepreneurship activities *in* and *across* the ecosystems and what kind of support may help nurture the synergistic links, locally, nationally and internationally.

7. Measuring and benchmarking can help place-based learning

Measuring and benchmarking place-based ecosystem may enable us to learn from similar and different regions. How different are the learning experiences and opportunities that are **embedded** and **communicated** in and across the ecosystems? Cultural, social and institutional differences also need to be recognised. Lessons can also be learnt from different contexts.

Place-Based Ecosystems: Making Connections between Entrepreneurship and Innovation – reflections from the workshop in Tokyo (24–25 June, 2019)

Fumi Kitagawa, Hiro Izushi and Andrew Stevens

Held in Tokyo at the National Graduate Institute for Policy Studies (GRIPS), over 100 participants gathered to discuss place-based innovation and entrepreneurial ecosystems from cross-national perspectives. The participants from Japan included over 10 local government officials from across the country, delegates from the Council of Local Authorities for International Relations (CLAIR), representatives of central government (e.g. Cabinet Office; Ministry of Economy, Trade and Industry), professionals including banking and finance sectors, researchers and practitioners engaged in local planning and development,

innovation and technology transfer officers from public research institutes, and NPOs (nonprofit organisations) working on entrepreneurial training, as well as academic researchers.

The workshop started with the session **Start-up policy, practices and open innovation – UK and Japan perspectives**, including presentations by senior representatives of the Japanese Cabinet Office, the British Embassy in Tokyo, innovation-centred businesses, and academic researchers and practitioners specialising in innovation and ecosystem policies. This was followed by the afternoon session **Place-based eco-systems – cases of metropolises – Tokyo, Osaka, Fukuoka**, with presentations by senior officers of Japanese metropolitan governments promoting industrial policies and strategies aimed at attracting foreign investors and entrepreneurs through international linkages, including Tokyo, Osaka and Fukuoka. The final session **Building Ecosystems – evaluating policies and data construction** focused on the evidence-based policy design, in particular, the use of firmlevel 'big data' in evaluating the local economic development, and the effectiveness of innovation measures for small and medium enterprises (SMEs). In each session, presentations by experts were followed by panel discussions, highlighting key points and issues.

Discussion and reflection points include:

- How to enable successful global open innovation by connecting large corporations and start-ups across national borders?
 - Both Japan and the UK need to **depart from the 'Silicon Valley' model and** *create new models* that meet specific needs of individual places.
 - In the Japanese context in particular, *mobility of talents*, combined with a shortage of experienced corporate managers, seems to be the bottleneck for innovation and entrepreneurship. Both top down and bottom up initiatives are needed to create mechanisms for talent circulation in the global context.
 - Creating the space and events '*Ba*' is important where different entrepreneurial actors can meet. This would include international exchanges between accelerators, incubators, and other creative opportunities.
- How to balance policy support for different types of start-ups in different geoeconomic contexts?
 - There are different roles for local governments at different levels: the importance of designing *multi-scalar support mechanisms* for start-ups and SME innovation was pointed out. In the Japanese context, growing roles are recognised for cities and towns rather than at the prefectural level.
 - Large metropolitan cities and smaller towns and places need to collaborate more to create larger ecosystems and enhance cross/inter-sectoral collaboration. However, a number of challenges are recognised regarding the 'identities' of places.
 - From the presentations (Tokyo, Osaka and Fukuoka), it appears that a far greater volume and number of support programmes are offered by local governments in Japan than in the UK, while both countries have relatively strong central governments.
- How to build evidence-based "place-based entrepreneurial and innovation ecosystems"?
 - The ecosystem approach needs to include **experimental governance** from a systemic point of view with goals, metrics, and decision making with a widening circle of actors. Balancing policy measures for both short-term growth (i.e. gazelles) and more locally-embedded, long-term growth is needed.
 - A concern was expressed that there is polarisation of start-up support in metropolitan areas and non-metropolitan areas, while there is some evidence in Japan pointing to a possibility of the effectiveness of some policy measures at non-metropolitan areas.

- Further research is required to investigate entrepreneurial ecosystems in nonmetropolitan areas in Japan and the UK. *Start-up and entrepreneurial ecosystem models for non-metropolitan towns and rural areas* are needed.
- The importance of *longitudinal data* and collaboration between academic, private, and government sectors for the setup of data collection and management is imperative.

In the concluding discussion, we were reminded of the ecological and biological perspective of the ecosystem concept. The ecosystem is defined as "a biological community of interacting organisms and their physical environment". Picking and choosing 'good practices' in the ecosystem at a particular point in time may not work – in the long term, different elements of the ecosystem influence each other, and there would be unintended consequences of certain policy measures.

Interim conclusion and ways forward

Beyond Japan and the UK, we recognise the *multiplicity of entrepreneurial ecosystem models across countries* in East Asia, North America and Europe. There is a dearth of evidence as to:

- 1. What are key drivers of the diversity of entrepreneurial and innovation ecosystems?
- 2. How do different entrepreneurial and innovation ecosystems vary in their performance?

We need to investigate the *institutional factors* further that could help us explain the differences between the different ecosystems. Echoing the earlier discussion in the UK (the UK-Japan ecosystem workshop in Glasgow, 7–8 May), the importance of *identifying appropriate metrics* was recognised. This depends on specific contexts that define the 'success' for a place-based ecosystem. Another interesting point of reflection from cross-national perspectives is the *time dimension*. For example, one of the speakers at the Tokyo workshop put it: "for both innovation and entrepreneurship, it takes 10 years for a firm to change their culture of the organization". Can regional cultures, in which firms are embedded, change within a similar time span? Recent studies in Germany show that "regional entrepreneurship culture" ² has remained almost unchanged over the last century. This opens up a set of interesting policy questions: how does a regional culture of entrepreneurship emerge and what can policy do to stimulate the development of such a culture? Can governments sustain long-term entrepreneurship cultures through changes in economic conditions so that substantial changes can be identified at both micro (e.g. firm, individual) and macro levels?

Throughout the two workshops, we came to realise that more granulated understanding of ecosystem thinking is required, with greater consideration of the institutional changes given the heterogeneous nature of places and complex interactions between actors and networks. We will organise a special session* at the <u>Regional Studies Association Winter conference</u> in London, 14-15 November 2019, which is open to wider contributions beyond geographical scopes of the UK and Japan.

*SS4: Understanding the Configurations of Place-Based Entrepreneurial Ecosystems: New Conceptual and Methodological Approaches

² Fritsch, M and Wyrwich, M (2014) The Long persistence of regional levels of entrepreneurship: Germany, 1925-2005. *Regional Studies*, 48(6) 955-973.