A Place-based Approach to Developmental Regional Industrial Strategy

David Bailey, University of Aston
Christos Pitelis, University of Brunel London and
Queens’ College Cambridge,
Phil Tomlinson, University of Bath
• ‘Value’ is at the core of modern industrial and regional policy, especially ‘sustainable capture of ‘co-created value’.
Value is ‘perceived worthiness’ to agents (Pitelis, 2009).

• Firms achieve a sustained competitive advantage by creating value from innovation and capturing this value (i.e. profit) in markets to a greater extent than their rivals (Porter, 1985; Pitelis and Teece, 2009; Adner and Kapoor, 2010).

• Regions can be a source of ‘value co-creation’ activities.

• EU Policy Focus towards Place-Based Approaches, building on regional capabilities and specialisms (Barca et.al, 2012) e.g. ‘smart specialisation’ and RIS3

• Smart specialisation strategies are designed to support actors in new innovation-based ‘activities’ with commercial potential (Foray, 2015).
Regional Competitive Advantage

Regions can create and co-create value and attain sustainable competitive advantage by focusing on the following elements:

1. Identify and build upon extant and evolving comparative advantages; ‘related variety’ argument (Frenken et al., 2007) e.g. UK ceramics industry

2. Regions need to ‘position’ this activity along relative cost-relative differentiation spectrum to allow the capture of value that has been co-created through the (often joint) identification of extant and emerging advantages. (Ideal position is low relative cost/high relative differentiation, which normally arises in highly innovative regions; e.g. Cambridge and London in the UK).

3. Enhancing regional dynamics requires ‘vehicles’ for supply side structural international competitiveness e.g. FDI; MNEs acting as anchor tenants in a regional ecosystem.

4. Regional specialisation within GVCs, which places them as ‘bottleneck’ players/assets; difficult to dislodge and allows them to capture (global) co-created value.
Smart Specialisation

EU level initiative (*EU 2014-2020 Cohesion policy*)

- Smart specialisation is based on the notion ‘regions can build upon their own comparative advantages to generate new specialisms through the ‘discovery of new domains of opportunity and local concentration and agglomeration of resources and competencies in these domains’’ (Foray, 2015).

- Non-horizontal/non-neutral

- Focus on ‘activities’ rather than sectors/firms per se, where there is potential for technological development, knowledge spill-overs, scale & agglomeration economies, and market opportunities

- Place-based: ‘new discoveries often emerge from existing (regional) technologies/specialisms’

- But critical to understand nature and dynamics of regional ecosystem and networks therein (Giulani, 2007).
Knowledge and Business Networks

- **Knowledge networks**: firms deliberately seek out suitable partner organisations to share knowledge and solve complex technical problems (Giuliani, 2007). Research and developmental knowledge.

- **Business networks**: subset of firms and entrepreneurs deliberately connected to explore, create and (jointly) pursue business opportunities (Österle, et.al, 2001) e.g. Value chains. Technical compatibility/operational knowledge.

Knowledge created in the KN, must **feed** the BN (Clarysse et.al, 2014) in order to **create value***. The structure of the BN identifies the **value captured** and in what proportions by the different actors involved in the specific product.
Regions and Anchor Tenants

• Yet the dynamics and structure of each type of network are fundamentally different (Iansiti and Levien, 2004). There is no natural link between them.

• **Anchor Tenants** are a vehicle to facilitate connections between different types of actors not only *within* the KN and BN separately, but also *across both* networks.

• This is critical to *create* and *capture value*.

• Anchor Tenants are significant, locally-based organisations heavily engaged in R&D, with the absorptive capacity to apply new knowledge in a particular technological field (Agrawal and Cockburn 2003)
Anchor Tenants

- **Public Anchor Tenants (PuAT):** Universities and Public Research Organisations
  - Conduct ‘blue sky’ research
  - Facilitate **External Knowledge Network** links with MNCs & SMEs and government
  - Engage in **Value Creation** activities (e.g. in Developmental and Applied Research stages)
• **Private Sector** Anchor Tenants (PvAT): OEMs, MNCs
  
  - Help to identify ‘technological domains’ for commercial exploitation
  - Involved in *Value Creation* and *Value Capture* Activities via their business networks
  - Can act as a magnet for SMES who wish to access wider business network
Combined PuAT & PvAT networks
Both PuAT & PvATs can play a positive role in the development of new regional specialisms. This requires strategic collaboration between the two.

New PuATs need to play a key facilitating role to realise the development of new regional specialism e.g. IAAPs - (onsite) knowledge transfer team to help establish and strengthen existing local and international knowledge networks.

PvATs act as a magnet for SMEs who want to participate in the PvAT’s knowledge and business networks facilitating Value Creation and Value Capture (and make the public anchor tenant more attractive).

Wider role for University in supporting emerging clusters/regional specialisms; technological and managerial skills.
Anchoring Value Creation/Capture

- Critical Adjunct: Ensure policy can anchor value creation and capture within regional ecosystem

- Value often created in KN but captured by few players in BN (Thomas and Autio, 2015)

- Significant evidence MNCs take advantage of publicly funded KNs, yet shift production to lower cost locations in their wider BN (Christopherson and Clark, 2007; Cowling and Sugden, 1994)

- Need to enhance Relational Embeddedness; strong linkages between local production base and FDI – ‘sticky places’ (Markusen, 1996).

- SS strategies ought to be complemented with skills/training in regionally-embedded industries, alongside promoting a regional diversification strategy within specialised technological domains so as to encourage synergies in related technologies, (McCann and Ortega-Argilés, 2015)
• Continual review of regions’ comparative advantages and positioning; and consistency with policy

• IP focus upon reindustrialisation and locally-based manufacturing.

• Innovation occurs not only in labs, but also in production circles. Off-shoring of core skills and capabilities can be detrimental to innovation (Pisano and Shih, 2009)

• Local SMEs can, in this context, be encouraged to specialise in “bottleneck” parts, which are outside the radar or interest of the “giants”, but of importance to their own objectives e.g. Germany’s Mittelstand” (its highly specialised advanced manufacturing SMEs)

• Public/Private collaboration critical e.g. catapults
Thanks for listening