SETTING THE STAGE: CLUSTER POLICIES

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Why focus on clusters?

- Everyone wants their Silicon Valley Cluster
- But what makes “Silicon” work?
- Can we repeat that with Graphene or Synthetic Biology?
- Can we shorten the time it takes to foster new industries? (accelerate transitions)
Innovation hotspots in ICT, biotechnologies and nanotechnologies, 2006-08

Source: OECD STI Scoreboard 2011 based on OECD, REGPAT Database.
National innovation policies increasing focus on collaboration

Major areas of changes in national STI policies, 2016

Churning rate in the policy mix, 2016
% of total policy initiatives, all countries

Where do cluster policy fit in this changing context?

- Regional Policy?
- “New” Industrial Policy?
- Next production revolution?
- Place-based economic development?
- Global/local value chains?
In smart specialisation, firm entry is desirable to generate agglomeration externalities (clusters) and a diversity of innovators (large and small).

In this scenario growth is endogenous as externalities and spillover effects lead to growth.

Implicit is the incentives for entrepreneurship and innovation (R&D, education, technology).
Structural change through clusters

- Start up dynamics (high start up rates but slow growth for avg firms)
- New enabling technologies as disruptors – role of public research
- Business model innovation
- Bottom up versus top down incentives for change
- Policy co-ordination (national, regional, local)
- Longer -term needs and short-term political agendas
Conditions that affect the landscape for clusters include:

– Institutions (HEIs, PROs)
– Framework policies
– Technological attributes /infrastructure
– Demand factors
– Economies of scale and product life cycles
– Market dynamics
– Industrial policies

In almost all government can play a role!
What is the new paradigm?

- Openness in Innovation Clusters
-Aligning the policy mix
-Need for new forms of financing and public intervention
Key element: Openness

• Building extra-regional connections is key
• Importance of cross-border flows of knowledge and spill-overs
• Involvement of multinationals and local SMEs (think global, act local phenomenon)
• Internationalisation of clusters, innovation networks
Lets discuss!