Smart Specialisation and the New Industrial Policy Agenda

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Innovation policy is about the rate....
...and the direction of inventive activities

The Rate and Direction of Inventive Activity:
Economic and Social Factors

A CONFERENCE OF
THE UNIVERSITIES–NATIONAL BUREAU
COMMITTEE FOR ECONOMIC RESEARCH
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THE COMMITTEE ON ECONOMIC GROWTH
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• But influencing the direction of innovation has become a taboo for several decades
• *Let’s take care of the rate and let the markets decide about the direction*
  – Policy should not select projects according to preferred fields or any such criteria but respond to demand that arises spontaneously from the industry
• Dominance of horizontal policies – emphasizing framework (general) conditions
  – Supply side
  – Demand side
• OECD/EC consensus

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**Horizontal policies work to a certain point**

• Of course horizontal policy does not harm; improving framework conditions is necessary
• It minimizes distortions and government failures
• It is consistent with trade economists argument about policy in the age of globalisation’s 2nd unbundling
  – « *It is not clear whether in today’s world economy increasingly dominated by global production chains, it makes any sense to even try to encourage the establishment of local industries in particular areas* » (Maskus & Saggi)
But Horizontal Policy shows limitations in two cases

- **Case of less developed/transition regions (countries)**
  - Horizontal policy did not reduce the knowledge gap
  - When the knowledge gap has been somewhat reduced, this did not translate into real economic progress

- **Case of Grand Challenges (e.g. climate change, energy)**
  - By definition it cannot provide the right response
  - If international carbon price was set and environmental costs fully internalized...

- These are two cases where it is needed to go beyond horizontal policy so as to accelerate the rate of innovation *in certain directions*
  - Smart specialisation strategies
  - Mission oriented policies

- In these cases, innovation policy calls for a strategic vision, involves the selection of projects according to this strategy, requires good policy design

A good policy design is needed

- Let’s not re-invent the old policy style – which was subject of fair criticisms
- “Although it is certainly true that not everything can be done at once, focus on selected areas for large investments to the neglect of the rest of the economy is a highly questionable strategy. Why it would be preferable to allocate scarce capital so that some activities have excellent infrastructures while others must manage with seriously deficient structure is not clear: without further evidence, it would appear to be a distortion”. (Ann Krueger)
### What is a new industrial policy?

- The Government does not know *ex ante*
  - Against the old industrial policy paradigm: "the government knows from the start which fields or technologies should be developed and therefore the policy confines itself to setting up the incentives for private industry to carry out the plan".
  - "*What if, as I and many others assume, there are no principals...with the robust and panoramic knowledge needed for this directive role?*" (Sabel)
  - The discovery process is an issue in its own right.

- Industrial policy needs to be decoupled from sectoral prioritisation
  - The prioritisation exercise should be done *at a finer level of granularity* (new activity)

- The policy has an experimental nature.
  - Flexibility, evaluation

### RIS3 (smart specialisation strategy)

- Putting in place a process:
  - to identify future domains where competitive advantages can be built
  - to concentrate resources on a few number of domains where the emergence of micro-systems of innovation is supported
  - to help these domains to grow
    - Provision of specific capabilities and complementary resources,
  - to measure progress
    - Innovation, job creation, export
  - RIS3 = supporting the emergence and development of local micro-systems of innovation, in certain domains,
Knowledge economy

Top regions

Spillovers?

Less developed regions

Innovation culture in SME

Incubators

Doctoral programs

Knowledge economy

Biotech & ICT in fisheries and canning industry

Footwear industry and development of advanced manufacturing technologies

Animal genetics for breeding

« The idea that the government can disengage from specific policies and just focus on general framework conditions in a sector neutral way is an illusion based on the disregard for the specificity and complexity of the requisite publicly provided inputs and capabilities »
Hausmann and Rodrik, 2006
Microsystems of innovations emerge from connections between entrepreneurs, suppliers, research, lead users, etc. to open and explore a new domain of opportunities.
Smart specialisation has two faces

- Building capabilities (through the exploration of a new domain of opportunities)
- Driving structural change (modernisation, etc.)
  - A region can «import» all inputs factors for structural changes and get them without building capabilities. This is OK but this is NOT smart specialisation
  - Or it can «import» some factors AND build capabilities. This is smart specialisation
- Local capabilities formation is central but the goal is not autarkic, self-sufficient regions
A problem of choice, identification and information

• The problem: how to identify these domains, these directions?
• Same problem for Grand Challenges: the political determination of a GC does not give innovation direction (at detailed level) and there are plenty of options
• Should we let the government dictating the direction, the detailed priorities?

1- Entrepreneurial discovery

• The government does not have innate wisdom or the ex-ante knowledge about future priorities.
• Decentralization is superior to central planning
• The discovery process forms an integral part of political action - strategic interactions between the government and the private sector.
• This is the essence of entrepreneurial discovery.
Entrepreneurial discovery (cont.)

- **Entrepreneurial discovery is the costly and unavoidable process of generating the necessary information about the value of future domains of development**
- **E means entrepreneurial (in a broad sense)**
- **D means discovery, not *ex post* rationalisation of a pre-determined set of objectives**
- Based on this information, the Government can select a few number of new activities according to criteria about potential impact, feasibility etc.

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*Nine criteria to assess *ex ante* projects or domains and select priorities*

- *Proximity to market*
- *Does the activity open a new domain potentially rich in innovation and spillovers?*
- *What is the degree of collaboration, the number of partners involved?*
- *Is public funding needed?*
- *What is the significance of the activity for the regional economy?*
- *What is the capacity of the region to keep the successful activity on its territory?*
- *Can this activity drive the region towards leadership in the selected niche?*
- *What is the degree of connectedness of the activity *vis-à-vis* the rest of the regional economy*
- *Private firms are ready to submit themselves to monitoring and performance audits.*
2- No sectoral prioritisation

- What is prioritized is not a sector but the new activity
  - Sectoral prioritization creates distortions
  - Activity level is the right one to see in detail the pieces of the knowledge economy that a region or country can take as a basis for its RIS3

3- The policy has an experimental nature

- A few bets are placed on various domains
- RIS3 is a living document
  - After n years a new activity is no longer new (as a success or a failure it needs to exit)
  - New discoveries happen all the time and a few need to be integrated in the strategy
- *Ex ante* and *ex post* evaluation
  - The point is not to reduce the risk of mistakes but the costs of mistakes
  - *Ex ante* assessment
  - Use of clear benchmarks and criteria for success and failures in *ex post* assessment
The future of a new industrial policy is conditional to such sophisticated design

- Entrepreneurial discovery as an efficient solution to a critical informational problem
- Mid-grained level of granularity (no sectoral priorities)
- Experimental nature, flexibility and evaluation

- A smart process to identify and select new domains and support the emergence and early growth of a few micro-systems of innovation
- A process which never ends
- The challenge of improving government capabilities
Final comments

• As in many other policy fields (health, education, social insurance, infrastructure) the question is not whether we should have a policy but the debate should focus on how to make it
• How to design a policy to reconcile the possibility for government to make strategic choices (set priorities) with the engine of innovation (decentralized entrepreneurial dynamism, entries, competition)?