# Understanding and Managing Industrial Transitions

**Dimitrios PONTIKAKIS and Anabela MARQUES SANTOS**

**JRC.B3 Territorial Development**

Brussels, 14 November 2019

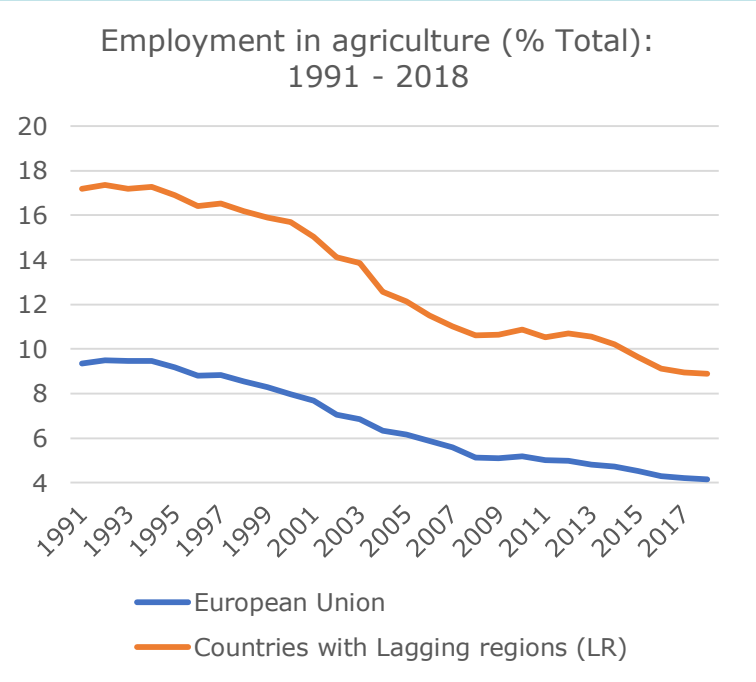
European Commission

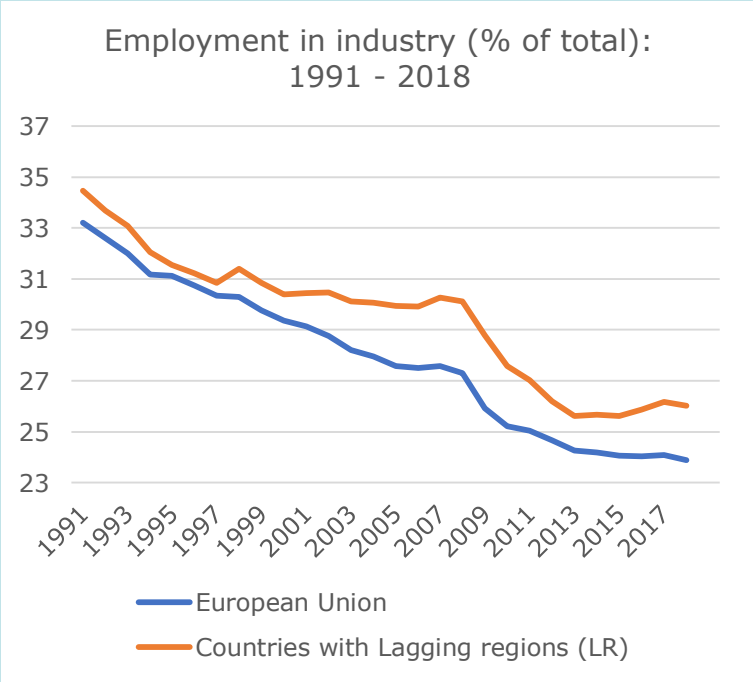
# Challenges of Lagging Regions (1/3)

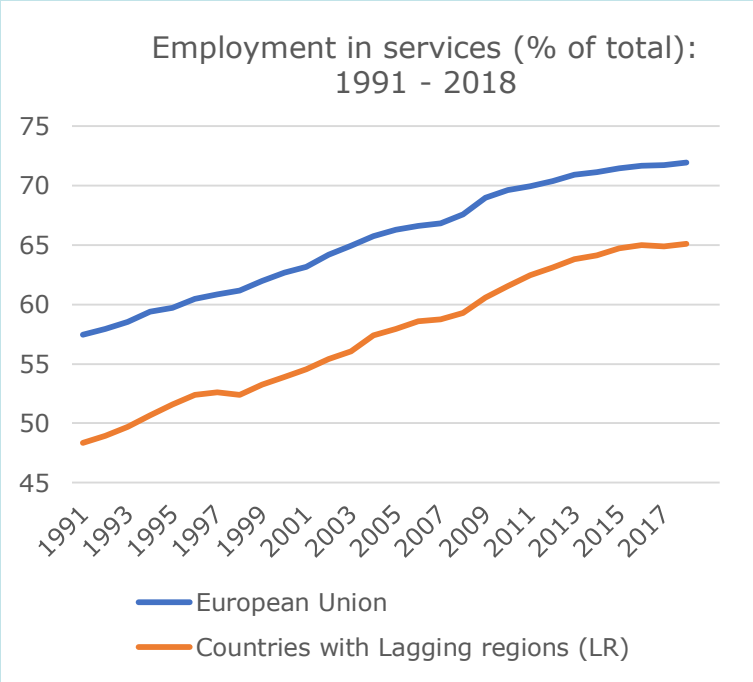
- Lagging regions: Regions with low growth / low income per capita
- Specific issues related with smart specialisation strategies (S3)
- Smart specialisation strategies can play a central role in responding to deindustrialisation ➔ JRC staff are supporting the implementation of RIS3s in Lagging Regions

- <u>Long-term challenges:</u>
  - Industrial decline and mass emigration
  - Structural change: low-productivity agriculture / low value-added services

# Challenges of Lagging Regions (2/3)




Source: World Bank
Note: Countries with Lagging regions: Greece, Italy, Spain, Portugal, Bulgaria, Hungary, Poland and Romania. Industry includes: Mining and quarrying, Manufacturing, Construction and Public utilities (electricity, gas, and water)

# Challenges of Lagging Regions (3/3)

- Long-term challenges (continuation):
  - Lacking large-scale production and business innovation
  - Barriers to investment (e.g. access to finance, risk/uncertainty and attractiveness)
  - Societal and environmental challenges (e.g. demographic change and resource efficiency)
  - Large infrastructure gaps

**Pressing need to develop knowledge-intensive production capabilities**

→ Problem: no framework available for full-blown industrial policy!

# Objective and Scope JRC Working Group

**KEY OBJECTIVES:**

- Contribute to the development of an integrated policy framework in support of industrial transitions
- Provide appropriate lessons for the revision and extension of S3

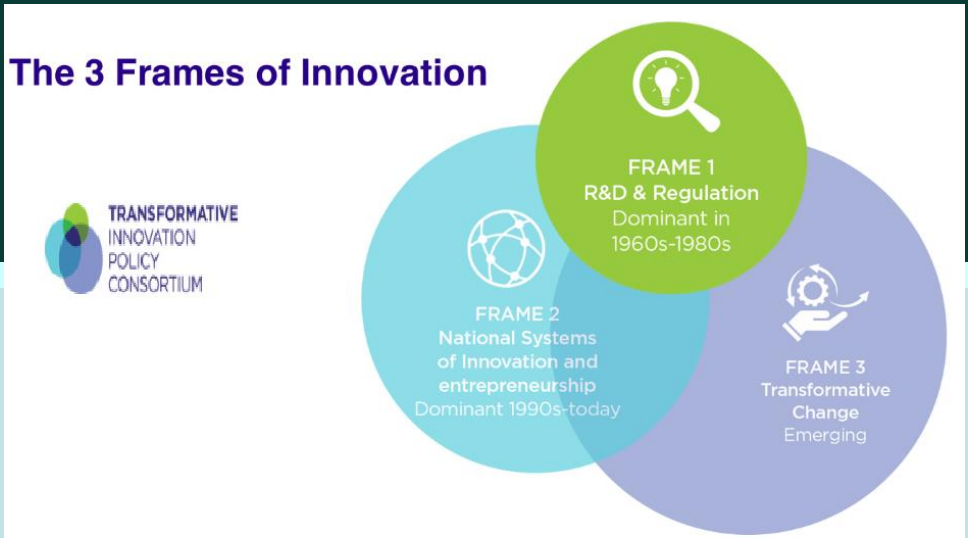
**CENTRAL TO THE APPROACH:**

- Two-sides of the transition: not just threats/downsides, but also *opportunities*
- Interdependencies: Interdependencies can reveal unnoticed levers for change
- Cross-portfolio coordination: e.g. R&I, skills/education, employment, large physical infrastructures (energy, transport, environment), public procurement
- Cross-stakeholder mobilisation: engage with both supporters and detractors

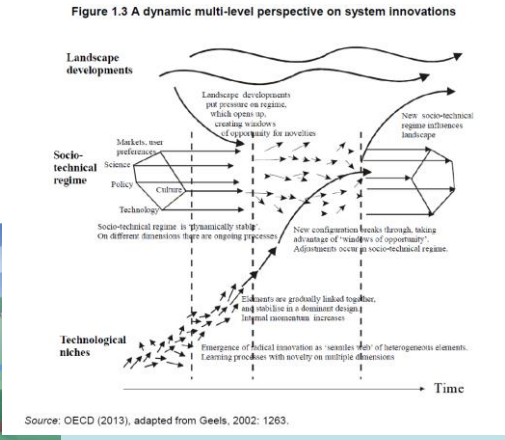
# Conceptual framework

- Literature on system innovation / " Transition management"
- Main reference: Geels (2002)

- Not the same as "*innovation system*"!
- Builds on:
  - Socio-technical transition experiences (mostly in NL)
  - Multi-level perspective









Some references:

- OECD (2015), System Innovation: Synthesis Report, Directorate of Science, Technology and Innovation, https://www.innovationpolicyplatform.org/sites/default/files/general/SYSTEMINNOVATION_FINALREPORT_0.pdf
- Transformative Innovation Policy Consortium: http://www.tipconsortium.net/
- Geels, F.W. (2002), 'Technological transitions as evolutionary reconfiguration processes: A multi-level perspective and a case-study', Research Policy, 31(8-9), p.p. 1257-1274. Available at: https://www.sciencedirect.com/science/article/pii/S0048733302000628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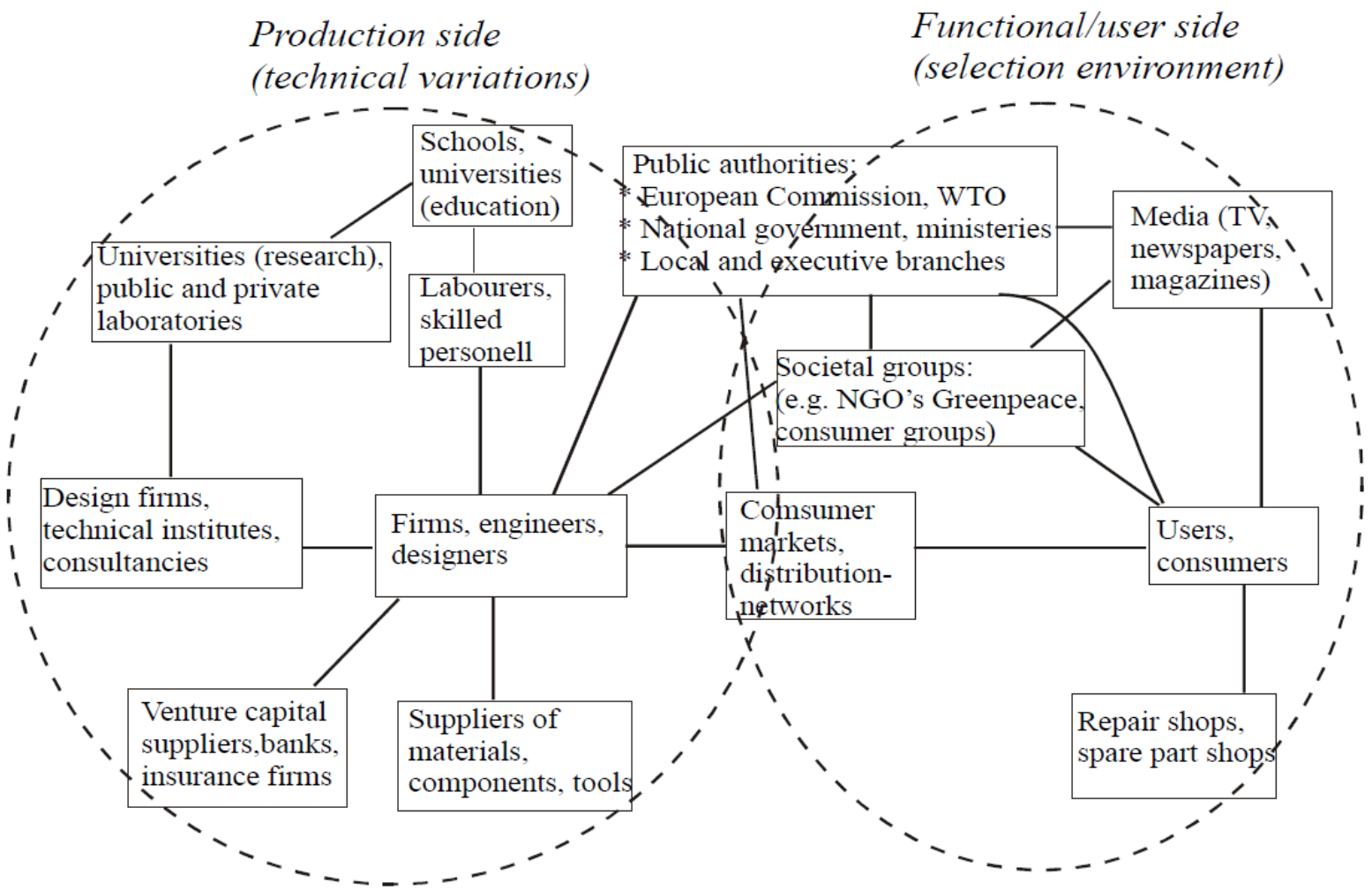
# Not just R&I, not just '3-ple/4-ple helix'

**Figure 1.2 Societal groups involved in system innovation**

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# POINT Reviews – what are they?

- Structured methodology: POINT (*Projecting Opportunities for INdustrial Transition)*
- Developed internally at JRC, with contributions from leading experts (WG Advisory Board)
- Draws from expertise on system innovation/industrial policy/foresight
- Contributes to the evidence base for fulfilment criterion 6: "*Actions to manage industrial transition*" (without prejudice to the final decision of the EC)

# POINT Review Pilots

- ~50-page reports, product of thorough expert review
- First wave: Andalucía, Greece, Bulgaria
- Catalonia participates with own resources
- Romania (under discussion)
- Selected areas: renewable energy/storage (Andalucía + Greece) and Industry 4.0 (Bulgaria)

## Steps:

- Map existing production and consumption systems
- Envision future configuration of systems that meet objectives
- Develop recommendations across 4 axes

# POINT Review outcomes

<u>Suggestions along 4 axes of actions</u>

- Governance of government
- Support coalitions
- Managing resistance to change
- Experiments, reforms, policies and instruments

→ to address both opportunities and threats (downside of the transition)

→Co-define a policy experiment

- Low total cost/quick signalling
- In area with high spillovers
- Potentially scalable / replicable

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# WG Outputs and outcomes

Advisory Board with distinguished experts

First meeting 9 July 2019

Next meetings 9 December 2019, March 2020 [TBC]

Expected outcomes by June 2020:

→ **POINT Review methodology** Technical Report (end 2019)

→up to 3 **transition reviews** in lagging territories (spring 2020)

→co-develop **policy experiments** (scalable/replicable)

→A horizontal **synthesis report** (June 2020)