Governing research and innovation politics in a challenging era: Evolution or Reconfiguration of the Greek research and innovation regime during the crisis?

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Structure

- Research Questions-Theoretical approach
- The Fragmented Triple Helix and the politics of Innovation: 1990s
- Smarting Research policies: The new research agendas of 2010s
- The quest of the innovation pathways: The three types of innovation as policy drivers during the crisis
- Crisis and research networks in reconfiguration

Analytical Framework

Framings of Innovation
(Johan Schot and Ed Steinmueller, 2016)

Co-production of science policy and society
(Jasanoff, 2010)

Mission oriented driven innovations
Entrepreneurial State (Mazzucato, 2013 &2015 & 2016)

Science as quasi public good: Networks as sociotechnical actors to reconfigure the meaning of science as public good (Callon, 2004)

Innovation Policies since 1980s

1970s Emphasis on Technology Transfer as pattern of industrial innovation

Mid-1980s Innovation system under structural change

- Establishment of Ministry of Science and Technology/ Later General Secretariat of Research and Technology
- Research infrastructures and technology intermediaries

1990s: Towards a long term science and technology policy

- Implementation of the Operational Programme for Research and Technology
- Research infrastructures and supporting institutions/organizations (i.e. Patent Office)
- Linking university research with industry

2000-2006: Furthering Institutional Reforms and Intermediaries

- Increase of funding to R&I
- Support spin-offs & incubators& science and technology parks & Regional Innovation Poles

apostathis, 2010; Katselli, 2000; Komninos & Tsamis, 2008; Collins & Pontikakis, 2006; Kaltsogianni et al. 2014

Attending S&T Parliamentary committees 2010-2014

- Emphasis on the applied research as a necessity for the developmental strategy of the country: No research per se
- The quest to link research with real economy, entrepreneurship and a sustainable development pattern
- Identification of a rich human capital in research and university infrastructures: Human capital as basis for growth
- The quest for research collaborations between enterprises and research organizations or Universities
- Facilitate or establishing measure in order to secure the participation of companies in research projects and collaboration with academia
- Linkage between applied research and entrepreneurship by giving incentives to the researchers

The sight from the Labs: Interviewing researchers during the Greek crisis

Mid 1990s a branching point in research practices

- Funding through state started to be reduced; Funding from EU
- No continuity

ighly competitive funding schemes

- Recently emphasis on regions and less developed regions
- Concern for researchers in Athens

esearch a route to development: Further emphasis on applied science research

esearch groups with a priority the IPRs & publications

ecessary legal and managerial infrastructures, expertise and funds (writing and ewriting the patent specification)

- The quest for building bridges between research and industry
- Researchers need to stay on the bench

he quest for a national strategy for the promotion of IPRs and the ommercialization of research

- 'A national technology transfer office'

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- Competitive EU research funds and private sector
- Basic research important for the sustainability of the research lab
  - Excellence and Research topic
  - Ethos of blue sky research
- Inventor and Owner of Patents: Bionature Co. spin off
  - Research on MicroNeutrophins
  - Amyotrophic Lateral Sclerosis, ALS
- IPRs are necessary: IPRs can direct research rather than put obstac
  - 'In my lab there is a culture to protect and manage carefully IP'
- 'I am not a businessman': Technology Transfer Office needs to be w organized with people from the corporate world
- Brain Tech Co. :
  - Ex-vivo neuro platforms; Neuro tissue bioengineering: 3D scaffolds for neur cell cultures; development of neuroimplants and neurobiosensors
  - 'I want to be political': From the 'leftist liberal' researcher a life achieveme
  - Linking research with the growth of my country

13 Greek ‘specialisation’ Regions 2014-2020

Create ‘specialised’ regions

Research Centres and Universities at the centre – driving force

Increase cooperation between public-private investment(s), Universities a research centres, Industry, Enterprises

Incorporates fundamental EU principles for R&I and excellence, within a K context

Policies of Knowledge Economy as Politics of Knowledge

- Knowledge Economy as ‘socially responsible development strategy’ (Fotakis, 2018)
- NEW Production model based on Knowledge Economy
- Political Priorities
  - Boosting research, innovation and entrepreneurship

Brain Drain as pressure and legitimacy trigger

- 2000-2005  2.552 new scientists

- 2009-2014  20.281 new scientists

Source: Bloomberg, June 2015; Fotakis, 2018

A new Research and Innovation Framework? : The three pillar model 2015-2020

Capacity maintenance and extension

Innovation & entrepreneurship

Framing 1 & 2
Basic Research and Smart Specialization

Flagship Initiatives → Towards Framing 3

(Source: Fotakis interview 2018 & Fotakis 2018 presentation)

Three innovation types in the innovation chain

market-based* innovation** →(results from) ***demand-driven research

supply-side* innovation**→ results from ***curiosity-driven research, basic (blue sky) or applied

Innovation from ***policy-led*** research

Fotakis et al., (2014), 'The role of Universities and Research Organisations as drivers for Smart Specialisation at regional level' Luxembourg: Publications Office of the European Union, p. 18

Hellenic Foundation for Research and Innovation (HFRI) : Looking at the Blue Skies

240m EUR (EIB and Public Investment Funding)

Curiosity Driven Research as a tool for the 'Transformation' of the country and the Economy

vs

Demand Driven Research

Grass roots research initiatives

Appropriating the model of NSF, ERC, DSF

Kostas Fotakis (Deputy Minister of Research and Innovation): "HFRI is a new institution with characteristics that constitute a deep reform in the Greek Research area. With this institution, the research community shapes, bottom-up, the landscape for basic research […]. This kind of Research is a necessary precondition for qualitative innovative applications with potentially great/large scientific and economic added value." (National Documentation Centre, Innovation, Research & Technology, 2016, Issue 105, p. 9)

Flagship Initiatives: Network building fo Mission oriented innovation

Establishing research networks for research with strong social dimension

2 Flagships:

- Agro-Food and Biotechnology
  - Oil; Wine; Honey
- Precision Medicine (May 2018)
  - Distribution and Diffusion of information
  - Linkage of infrastructures
  - Standardization of collection and sample analysis
  - Linkages with networks abroad

(Source: Fotakis interview 2018 & Fotakis 2018 presentation)

National Network for oncology
11 leading research organizations
20 oncology clinics/ departments in Public Hospitals
4 national patients organizations

Evolution or Reconfiguration?: Conclusion

ple Helix as a process of long lasting process due to structural dimensions in the Greek case

k of state policy increased the active role of specific hubs and leading individuals: Hidden emergence of repreneurial science

15-2017: Reinventing 'Basic Research' as a driver of Innovation

The 'linear model' as a political project
Legitimacy through a rhetoric and ideology of 'Excellence'

sic Research' & Smart Specialization starting points for innovation

aming 3 → State as Networker: Mission driven innovation (INNOVATION POLICY 3.0)

dless transformation towards the Entrepreneurial State?