

Advanced Analysis of Technology Policy

GE04-2236

MSc Programme

Science and Innovation Management

30 May, 2007

Educatorium Gamma

9.00 - 12.00 hr.

[dr.ir.](#) H. van Lente

The exam consists of 9 open questions.
Each question has the same weight.
Please be as clear and concise as possible in your answers.

RTD Toolbox

Question 1: Output

In evaluation of Research and Technology Policies the `output' or `impact' of these policies can be very diverse. Discuss 5 types of outputs and the ways they can be measured.

Question 2: Network Analysis

One of the evaluation methods is the so-called `Network Analysis'. Give a description of this method by discussing:

- the aim of this method
- the type of data that is produced -
the strengths
- the limitations
- the applications

Question 3: Productivity Studies

One of the evaluation methods is the so-called `Productivity Studies'. Give a description of this method by discussing:

- the aim of this method
- the type of data that is produced
- the strengths
- the limitations
- the applications

Question 4: Limitations

What, in general, are the five main limitations of the evaluation of innovation policies.

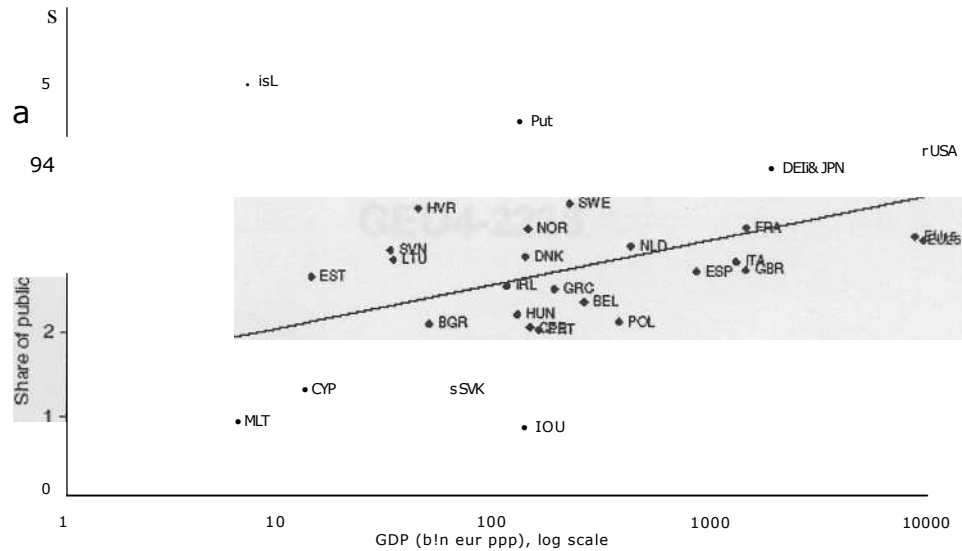
Question 5: Terms

What is:

- the OSLO Manual `formative'
and `summative' benchmarking
- the cluster approach

Question 6: Comparisons

Comparisons between countries often will be seen as having policy implications. The figure below is from the report *Innovation Policy: Europe or the Member States?* (CPB, 2006). Give 3 implications that can be derived from such a picture.



Source: Eurostat; a list of country codes is provided in Annex A EU 15 mid EU 25 have been omitted from regression.

Articles:

Question 7

What are the three scenarios that Kuhlmann (2001) distinguishes. Discuss their plausibility.

Question 8

Discuss five implications of the Systems of Innovation approach discussed by Edquist and Hommen (1999).

Question 9

Central in the analysis of Van der Meulen and Rip (1998) is the notion of heterogeneous aggregation. Explain why they think it is such a key notion. Give an example from their text.

Articles AATP Exam

Charles Edquist, Leif Hommen, Systems of innovation: theory and policy for the demand side, *Technology In Society* 21 (1999) 63-79 Bessant, J. and Rush, H. 1995. 'Building bridges for innovation: the role of consultants in technology transfer'. *Research Policy* 24: 97-114. Van der Meulen, B. and Rip, A. 1998. 'Mediation in the Dutch science system'. *Research Policy* 27: 757-769. Kuhlmann, S. 2001. 'Future governance of innovation policy in Europe -- three scenarios'. *Research Policy* 30: 953-976.

Harro van Lente and Jon van Til (2007), 'A Combined Roadmapping-Cluster Approach For Emerging Technologies', *International Journal of Foresight and Innovation Policy*, Vol 3(2), 121-138