

# National Innovation Policies and the Global World – the Finnish Perspective

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*HECER is a joint initiative of Helsinki School of Economics, Swedish  
Business School and University of Helsinki. [www.hecer.fi](http://www.hecer.fi)*

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## This talk

1. Economics and Innovation Policy.
2. Applying the logic to a small open economy.
3. Risk.
4. Case Finland.
5. Conclusions.

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## 1. Economics and Innovation Policy

- Two basic observations:
  1. Invention necessitates upfront investments.
  2. The fruits don't flow only to the inventor.
- Example: malaria drug.
  - Investment: Time of inventor.
  - Value to society: saved lives.

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## 1. Economics and Innovation Policy

- → The society benefits from the inventive efforts of innovators more than they do.
- → Public support.
- Optimally "close the wedge" between private and social incentives to innovate.
- "The Society" = all mankind.

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## 2. Small Open Economy

- Now two societies:
  1. The small open economy.
  2. The rest of mankind.
- The wedge is no more between benefits to mankind and the inventor.
- The wedge is between the benefits of the SOE and the inventor.

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## 2. Small Open Economy

- Example: A Finnish innovation.
- Finnish population .08% of world population.
- → most of consumer surplus goes to the rest of mankind.
- → most of knowledge spillovers goes to firms in other countries.

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## 2. Small Open Economy

- → the Finnish government has less reason to support innovation than a "world" government would have.

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### 3. Risk

- Risk is often mentioned as a motivation to support private R&D.
- This incentive is not affected by the SOE argument.
- BUT 1. Good reasons to believe firms do want to take risk, and do take risk.
- BUT 2. Execution problems in encouraging risk taking.

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### 4. Case Finland

- It is of crucial importance to try to measure the magnitude of social benefits from R&D.
- Takalo, Tanayama and Toivanen (2006) use Finnish data and Tekes R&D subsidies.
- They study firms' decisions to apply for subsidies, and Tekes' subsidy decisions.
- IDEA: Tekes decisions reveal the value of the project to Tekes.

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- RESULT 1: Benefits to firms much larger than benefits to rest of society.
- RESULT 2: Subsidies double those benefits of R&D that do not go to firms.
- Cost-benefit?

## 5. Conclusions

- Innovation policy rests on market failure justifications.
- These apply to a much smaller degree to SOEs.
- Important to quantify social benefits of private R&D.
- The SOE argument suggests:
  1. Coordination of R&D policy within bigger units.
  2. Enhancement of appropriability.