



EUROJÄRJESTELMÄ  
EUROSYSTEMET

# Comments on "Financial Innovation in the UK"

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# Summary of "Financial Innovation in the UK"

- ◆ **Objective:**

- A) ascertain the determinants of financial innovation
- B) ascertain the determinants of innovation success

- ◆ **Motivation:**

little empirical evidence on financial innovation

- ◆ **Data:**

UK Community Innovation Survey 2005

- ◆ **Method:**

- A) logit
- B) generalised Tobit (type 2 Tobit, probit selection equation)

- ◆ **Results:**

- A) firm size, educated workforce, R&D expenditure, external finance, cooperation
- B) R&D, human capital , cooperation

## Question: Objective / Motivation

There is a lot of research on the determinants of innovation and their success. (Kleinknecht & Mohnen 2002).

We know:

1. firm size matters
2. internal skills matter
3. R&D matters
4. cooperation matters (Cassiman & Veugelers AER 2002, Lehtoranta 2005, Leiponen 2003)
5. product vs process (Miravete & Pernias JIE 2006)

## **Question: Objective / Motivation cont.**

-> Why should we expect financial innovations to differ from other innovations?

Suggestions:

1. discuss differences between financial innovations – innovations in manufacturing (Lerner 2006, JFE)
2. estimate the model on all data and compare to your results.

## Question: Data

- ◆ Questionnaire sent to 28 000 firms, of which 4% (1 185) were financial firms
- ◆ 675 financial firms responded of which 539 used
- ◆ 43% (232) engage in innovation
- ◆ 33,5% (181) successful ->78% of all that engage
- ◆ 31% (168) report positive sales-> 72% of all that engage in innovation

## Question: Data cont.

-> Do you have sample selection? How do the financial firms relate to other firms?

Suggestion:

1. Compare financial firms to whole data, other data.
2. Describe data very carefully
3. Discuss oversampling

## **Question: Method – A) determinants of innovation**

->Should you correct for sample selection?

Oversampling of firms that engage in innovative activities (43%)? -> weighted MLE

->How does the decision to engage in R&D differ from the decision to engage in innovation?

# Question: Method – B) determinants of success

## Three stages in the innovation process

1. engage in innovation (43%)
2. succeed in innovation (33,4% of all, 78% of those that engage)
3. sell the innovation (31% of all, 72% of those that engage, 92% of those that succeed)

## You model:

1. probability to succeed
2. amount of sales



# Question: Method – B) determinants of success cont.

My suggestion

1. Probability to engage in innovation
2. Amount of sales (Raymond et al 2002)

=> two limit tobit model with selection

# References:

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- ◆ Olavi Lehtoranta: Determinants of Innovation and the Economic Growth of Innovators - tracing the evolution of innovative firms over time, VTT WORKING PAPERS 25, 2005
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- ◆ Wladimir Raymond, Pierre Mohnen, Franz Palmz and Sybrand Schim van der Loe: *An Empirically-Based Taxonomy of Dutch Manufacturing: Innovation Policy Implications*, 2002