

# WP6: Role of Multinationals for Information on R&D

Measuring R&D Globalisation: a Study on Outward R&D in Finland

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## Premises

- Why are we interested in the globalisation of R&D?
- How to improve the statistical information and measurement on R&D in MNEs?
- A state-of-the-art report

## Aims of the pilot study in WP6

- Testing how this kind of survey works as a source of information
- Information on outward R&D  
(R&D in foreign affiliates of domestic firms)
- R&D surveys in comparison with the The EU Industrial R&D Investment Scoreboard

## Survey questionnaire

**Statistics Finland**  
 BUSINESS STRUCTURES  
 Science, Technology and Information Society  
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**KEI**

Information collected with this questionnaire will be regarded as confidential based on the Statistics Act (260/2004). No information on an individual group will be published or handed to a third party outside this project.

### Information on Finnish Multinational Companies' Research and Development (R&D) Activities Abroad

#### 1. General Information

Group \_\_\_\_\_

Contact person \_\_\_\_\_

Contact information (telephone, fax, e-mail) \_\_\_\_\_

#### 2. Does the Group or Company have Foreign Subsidiaries conducting R&D in 2003 and/or 2004 ?

YES  If the answer is yes, we ask for an estimate for R&D expenditure and personnel (HC) by country 2003 in/or 2004

NO  If the answer is no, we ask you to return this questionnaire or let Statistics Finland otherwise know it

Country	R&D personnel Head count (HC) as at 31.12.		R&D expenditure (EUR 1,000)	
	2003	2004	2003	2004
<b>Total</b>				

Questions related to preceding information

Which were the most important problems providing the information?

\_\_\_\_\_

\_\_\_\_\_

Which of the following two variables gives a more reliable picture of R&D activities' country division by foreign subsidiaries in your group:

R&D personnel  R&D expenditure  No difference

Which of the following two variables is easier as for providing data:

R&D personnel  R&D expenditure  No difference

How confidential are the data concerning country division of R&D activities from the company view (please tick the appropriate alternative):

- Entirely public, possible to release as such
- Released for research purposes and possible to publish at a such industry level, which doesn't allow obvious identification
- Released for research purposes and possible to publish only at total industry level
- Data are not disclosed

#### 3. Motives for R&D Activities in Abroad

Please estimate the importance of the following reasons in conducting R&D activities in the host country by circling the appropriate figure. A general view of all host countries is requested.

	Unimportant	Slightly important	Important	Extremely important
Giving support to local production and marketing	0	1	2	3
Getting into closer contact with important markets (lead market)	0	1	2	3
Acquiring technology	0	1	2	3
Good availability of skilled R&D personnel	0	1	2	3
Close connections with local universities and research institutes	0	1	2	3
Cost savings in R&D	0	1	2	3
Other reasons (which?)	0	1	2	3

Further information (e.g. relevance of the motives, important motives missing?)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## Implementation of the survey

- Survey questionnaire to 30 Finnish companies in November 2005
- UBO in definition of the country of origin Business Register, FATS statistics
- Data collection completed in the end of January 2006 response rate 90
- 17 companies conducted R&D abroad, 10 companies not
- Responses overall quite good and adequate
- Problems mentioned in the survey questionnaire

## Study results

- 2004 figures for the companies in the KEI survey:
  - 38.5 % of R&D expenditure in foreign affiliates
    - of this 50 % in America, 44 % in Europe, 5 % in Asia and Australia
    - of this 86 % in electronics industry, 6 % metals and engineering, 5 % wood processing
  - Outward R&D share by industry
    - ✓ wood processing 45 %
    - ✓ electronics industry 40 %
    - ✓ metals and engineering 35 %
  - 35.8 % of R&D personnel abroad

## Study results (cont.)

- Variables' reliability: 47 % no difference
- Variables' easiness: 41 % no difference
- Data confidentiality
  
- Motives for conducting R&D abroad

Motive	Level of importance, % of total					Total	mean
	0	1	2	3			
Giving support to local production and marketing	6	12	29	53	100	2,3	
Getting into closer contact with important markets (lead market)	0	24	41	35	100	2,1	
Acquiring technology	13	44	38	6	100	1,4	
Good availability of skilled R&D personnel	0	41	59	0	100	1,6	
Close connections with local universities and research institutes	0	59	35	6	100	1,5	
Cost savings in R&D	24	29	41	6	100	1,3	

- Comments on motives...

## EU Scoreboard as a source of R&D data

- Data provided in this publication seems to be reliable with some exceptions
- Comparison of R&D survey data with information in the EU Industrial R&D Investment Scoreboard data
- Useful as a source of information for R&D funding abroad



## Conclusions & further work

- This kind of pilot survey seems to be an easy way of getting information on outward R&D
- Companies generally cooperative
- Results comparable with other studies
  
- Continuation with analysis
- Final report in August 2006