

Globalisation of R&D and the Role of MNEs

KEI seminar 6 October 2005

Mikael Åkerblom

Statistics Finland

Contents of presentation

- Why are we interested in the globalisation of R&D
- Research issues
- Next steps

Why are we interested in the globalisation of R&D

- Dominant role of a few big multinationals of R&D
- Not enough known about the interdependence between domestic and foreign part of multinationals
- Globalisation affects the quality of national statistics

Research issues

- Difficulties in breaking down R&D resources of multinationals between various countries
- Statistics on inward R&D (R&D in domestic affiliates of foreign firms)
- Statistics on outward R&D (R&D in foreign affiliates of domestic firms)
- Reasons for R&D globalisation

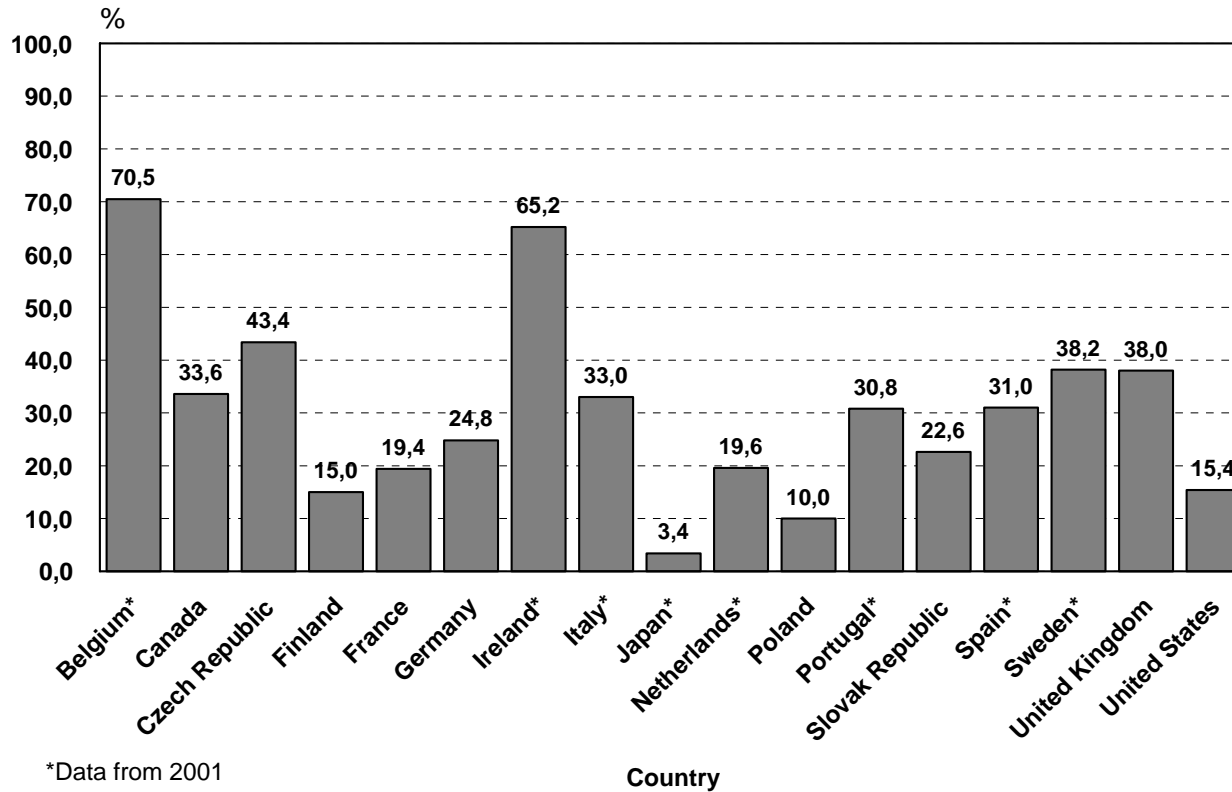
Difficulties in breaking down R&D resources by country

- Most of the financial information on R&D available on business unit level, not on the enterprise level
- Information on R&D personnel more easily available by site
- Financial flows of R&D very difficult to trace within groups

Statistics on inward R&D

- The identification of foreign companies using the ultimate beneficiary owner criteria difficult (official business register, private registers, survey information)
- The effects of previously domestic companies becoming foreign

R&D expenditure of foreign affiliates as a percentage of R&D expenditure of enterprises in some OECD countries in 2002



*Data from 2001

Source : OECD, Main Science and Technology Indicators; Statistics Finland; Belgian Federal Cooperation Commission, CFS/STAT.

Statistics on outward R&D

- A variety of sources
 - R&D surveys
 - Special surveys linked or not linked to R&D surveys (like FDI surveys)
 - Utilising information from company reports
- Identification of parent companies

Statistics on outward R&D (cont.)

- Shares high in Finland, France, Germany and Sweden (between one third and half)
- US share around 15 per cent
- In bigger countries more balance between inward and outward than in smaller countries
- In new member states inward R&D investments more important

Reasons for R&D globalisation

- Various classifications of types of R&D units (some common features)
 - Green field investments
 - R&D units acquired through acquisitions of existing companies
 - Relocation of R&D units

Reasons for R&D globalisation (cont.)

- Various reasons for R&D abroad (some common features of various classifications)
 - Proximity to local markets, adaptation of products for various markets
 - Acquisition of specific knowledge or other technology based factors
 - Establishment of global R&D centers

Next steps

- The OECD Globalisation Manual foundation for future work
- The new EU R&D Scoreboard gives systematic information on R&D on the company level
- Further work in the work package to develop various methodological options. This will be done in co-operation with an OECD task force developing indicators on R&D globalisation

Next steps (cont.)

- Workshop in Helsinki 2-3 March 2006 on the topic
- Final report August 2006