

# **Workshop**

on Indicators in the Knowledge Economy (3rd KEI Workshop)

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## **International flows of R&D expenditure: evidences from the Italian business R&D survey**

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# 1 The structure of the ISTAT R&D questionnaire

1. Filter question to identify R&D performers	7. Intramural R&D expenditure by type of R&D	13. Subsidiaries performing R&D abroad	19. Publications
2. Intramural R&D expenditure by type of costs	8. R&D personnel by occupation & education	14. R&D organisation	20. Public R&D funding
3. Extramural R&D expenditure by recipients	9. R&D personnel by age class	15. R&D sub-contracting	21. R&D and innovation
4. Intramural R&D expenditure by source of funds	10. R&D personnel by NUTS2 regions	16. R&D collaboration	22. Intramural R&D expenditure by technological areas
5. Intramural R&D expenditure by NUTS2 regions	11. R&D personnel by type of R&D	17. R&D consultants	23. Recently hired employees
6. Intramural R&D expenditure by sector of destination	12. Forecasts for years t+1, t+2	18. Patents	24. Origin of recently hired employees

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## 2

# Information available from the R&D survey (1)

The ISTAT Business Register provides some basic information on national and multinational enterprise groups

But also a question is answered at the end of the questionnaire about enterprise groups.

**Does the enterprise belongs to a group?**

If yes,

Is the enterprise:

- a parent company / an intermediate enterprise / only a subsidiary

If it is not a parent company

Where does the parent company is based?

- **Italy** (please, provide the **fiscal identification code**)
- **Abroad** (please, specify the **country**)

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# 3 Information available from the R&D survey (2)

## Intramural R&D expenditure by source of funds (breakdown)

### Enterprises from the same group:

- Based in Italy
- Based abroad

### Other enterprises:

- Based in Italy
- Based abroad

### Central Government:

- acquisition R&D services
- subsidies
- loans
- other support schemes

### Local Authorities:

- acquisition R&D services
- subsidies
- loans
- other support schemes

### Public Research Institutions

### Other Italian public bodies

### Private Non Profit Institutions

### Italian Universities

### Foreign Institutions

### European Union

### Self-funding

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# 4 Information available from the R&D survey (3)

## Extramural R&D expenditure by recipients (breakdown)

### Enterprises from the same group:

- Based in Italy
- Based abroad

### Other enterprises:

- Based in Italy
- Based abroad

### Public Research Institutions

### Private Research Institutions

### Italian Universities

### Foreign Institutions

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# 5 Information available from the R&D survey (4)

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## Subsidiaries performing R&D abroad

If the enterprise has subsidiaries performing R&D abroad, please provide the following breakdown of such R&D activities:

**Countries**

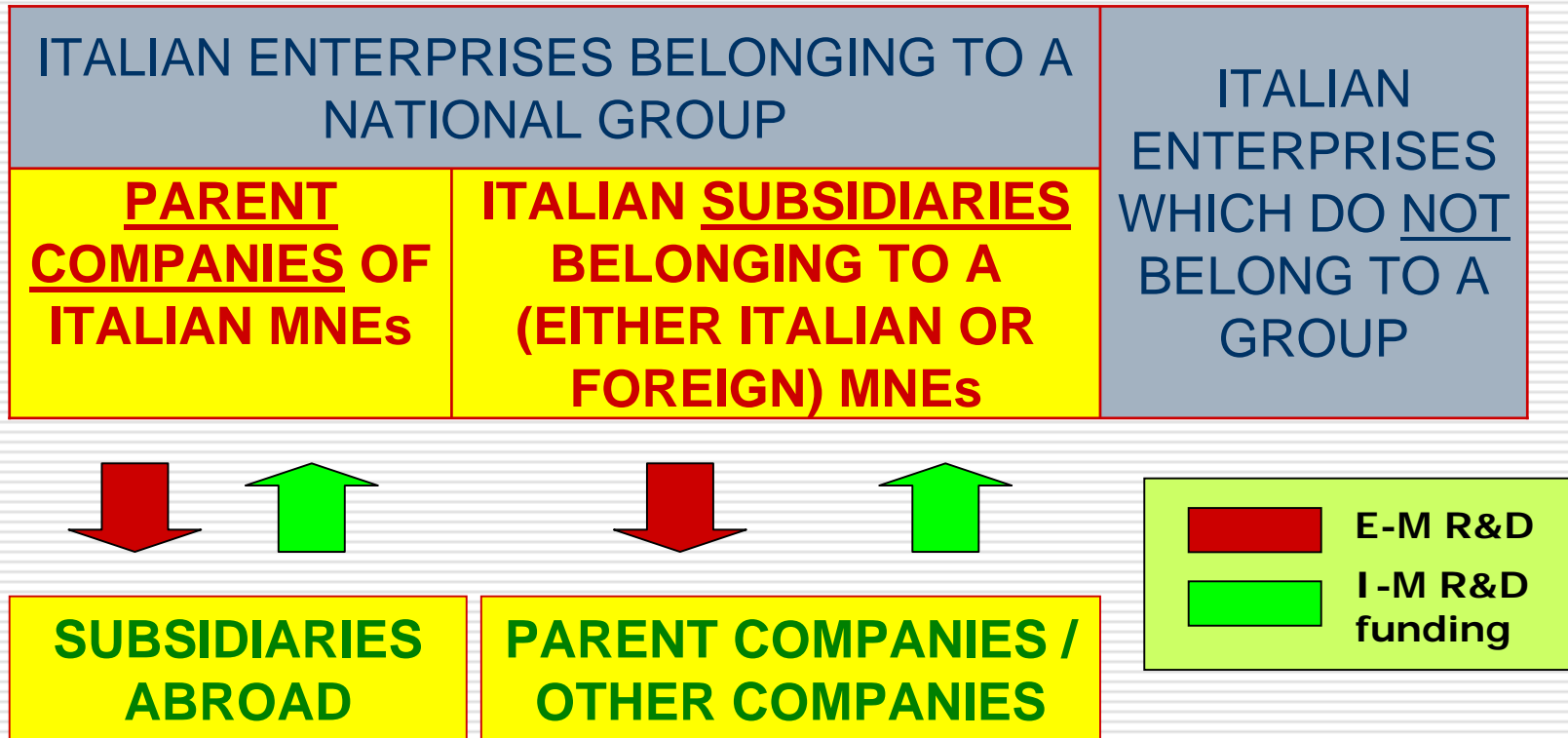
**Total intramural R&D expenditure in each Country**

**Total R&D personnel in each Country**

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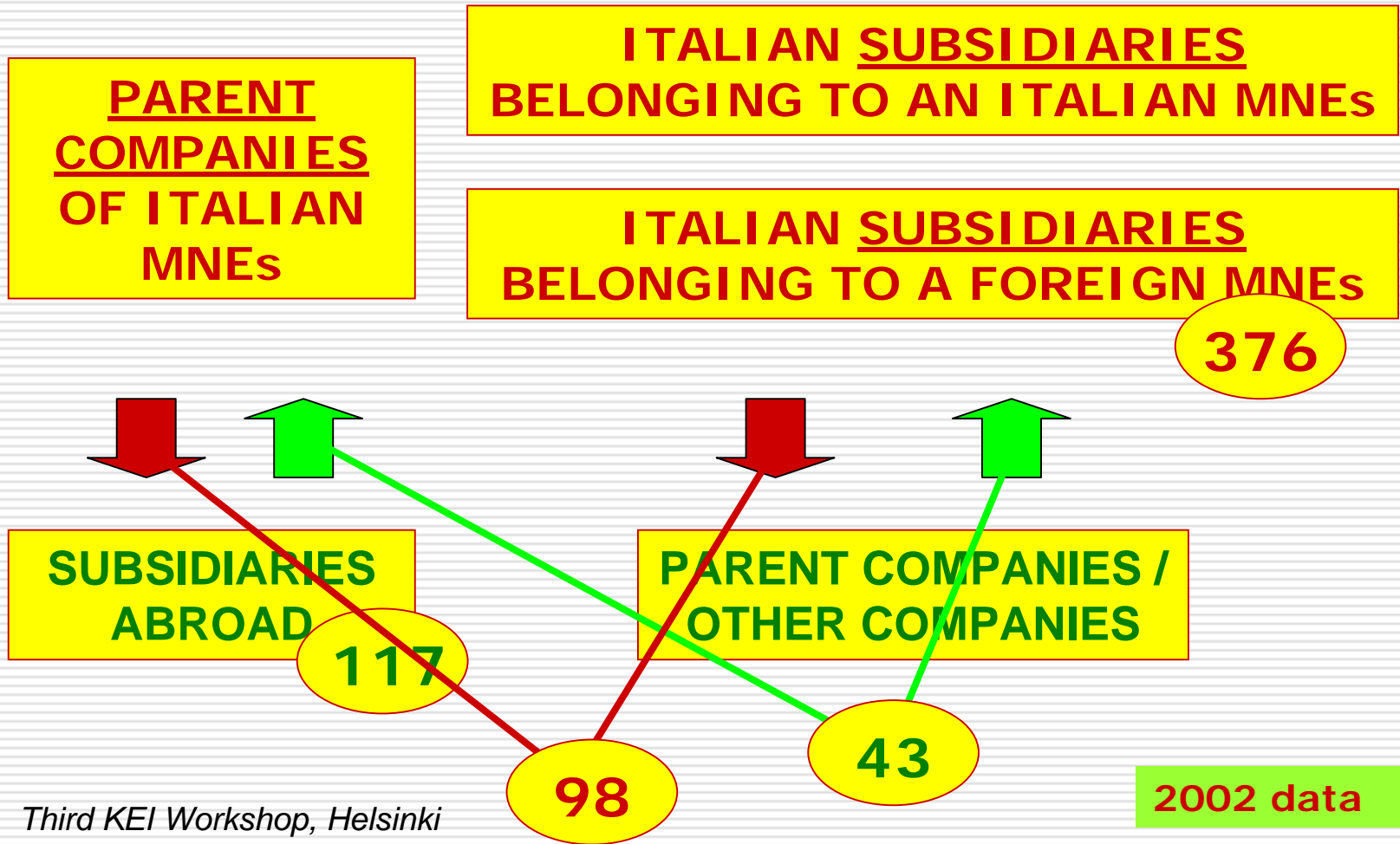
# 6 Targeted groups of enterprises (1)



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# 7 Targeted groups of enterprises (2)



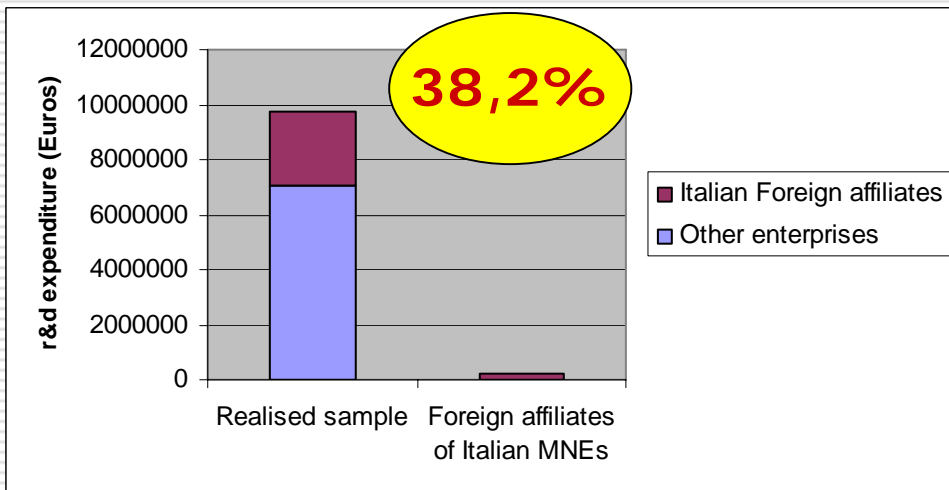
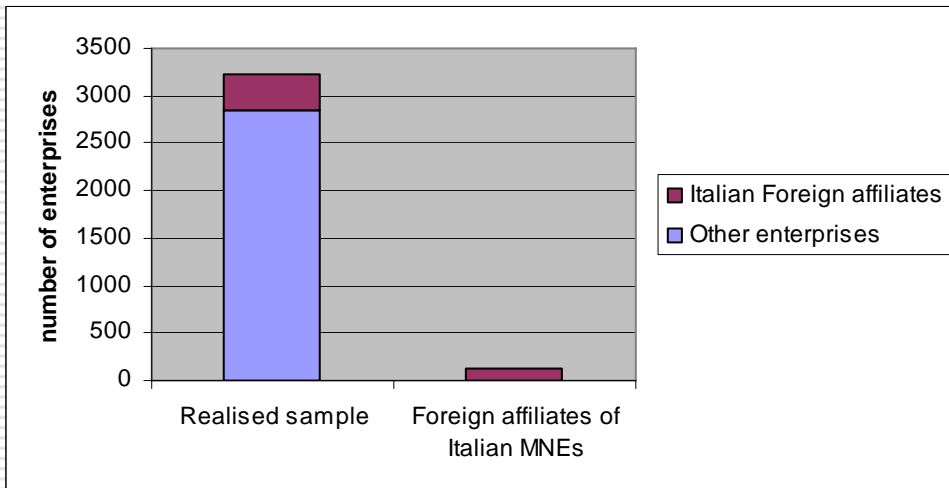
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# 8 Targeted groups of enterprises (3)

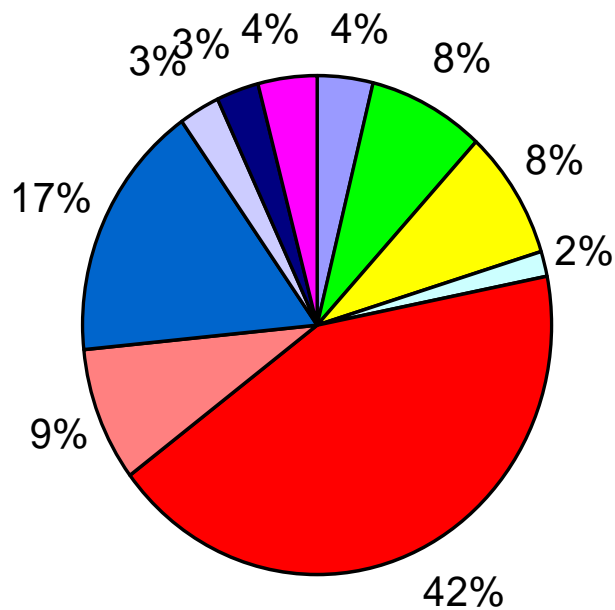
2002 data



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# 9 R&D flows (1)



- Belgium
- France
- Germany
- Luxembourg
- Netherlands
- UK
- USA
- Sweden
- Switzerland
- Other countries

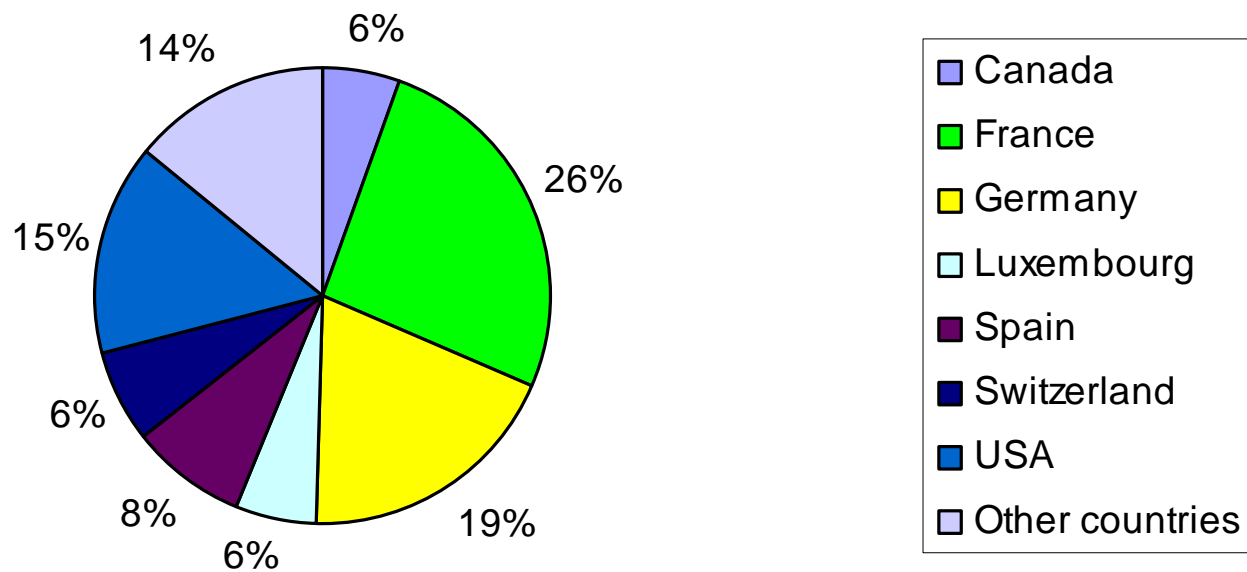
**I-M R&D Exp. of Italian FA by Country**

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**2002 data**

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# 10 R&D flows (2)



**I-M R&D Exp. of FA of Italian MNEs by Country**

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**2002 data**

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# Future plans

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- Further integration between different (statistical, administrative) sources at national level.
- Analysis of intra-group R&D flows (checking data from the IPTS Scoreboard).
- Comparison – both at macro and micro level – of the results of the ISTAT business R&D survey with business R&D data from other countries:
  1. France, Germany, Switzerland, as main partners in business R&D
  2. US, UK, Belgium, the Netherlands, Spain, Sweden, as relevant partners.
- Development of a common framework for R&D and FATS statistics at national level.

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