

TURNOVER AND OUTPUT MEASUREMENT FOR R&D ACTIVITIES IN GERMANY

"25th Voorburg Meeting" in Vienna 20th to 24th September 2010



- 1. Definition of R&D activities
- 2. R&D activities in Structural Business Statistics
- 3. Market conditions
- 4. Evaluation of standard definitions and market condition



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R&D activities in Germany

- Main characteristic is further development
- WZ 2008: No further breakdown on the 5-digit-level
- Three types of institutions operate in R&D activities
 - Government and universities
 - Private non-profit institutions
 - Businesses



R&D conducted by businesses

External R&D

- R&D as main economic activity
- Research projects/studies not for own use
- Market service

Internal R&D

- Main economic activity different from R&D
- Predominately industrial sector
- Research projects/studies for own use
- Non-market service



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Method of data collection

- 15% sample survey covering a wide range of services industries
- Observation unit is "enterprise"
- Output is measured in terms of turnover
- Results are broken down by economic activity only
- Results are available since reference period 2001



SBS about R&D

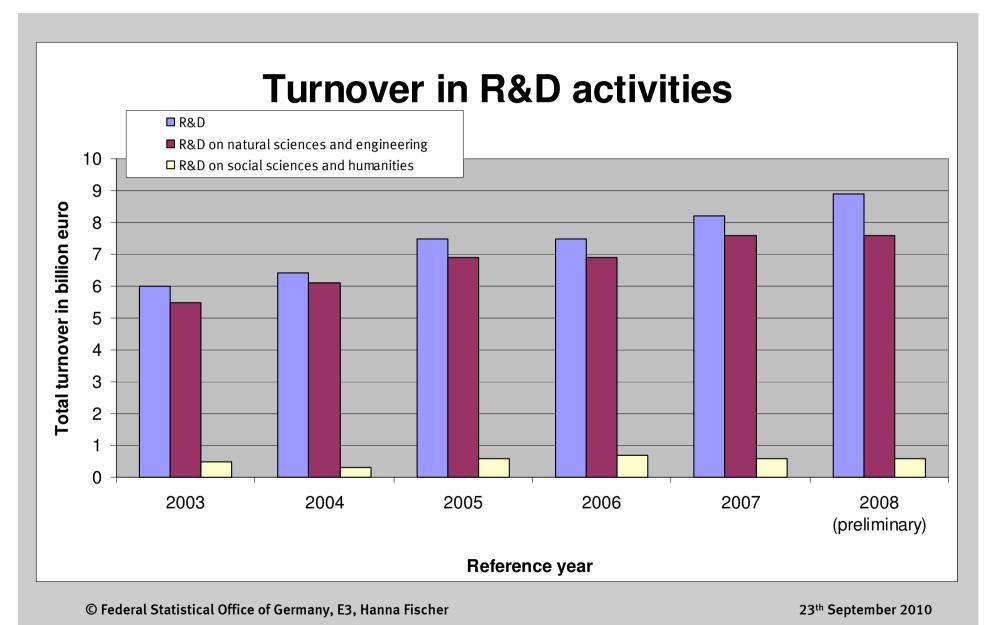
- SBS captures the output of all enterprises whose main economic activity is R&D
- Sample size 36.9% of all R&D enterprises
- SBS results point the characteristics of R&D activities up



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Statistisches Bundesamt







Importance of subsidies

NACE Rev. 2	Total receipts in million euro (preliminary)	Thereof subsidies in %
Profressional, scientific and technical activities	202.8	0.9
Legal & accounting activities	41.6	0.0
Activities of head offices; management consultancy activities	67.5	0.1
Architectural & engineer-ing activities; technical testing & analysis	49.7	0.1
Research & development	9.5	18.2
Advertising & market research	23.6	0.0
Other professional, scientific & technical activities	10.9	0.1



Output in relation to expenditures

NACE Rev. 2	Total turnover in million euro (preliminary)	Share of expenditures of total turnover in %
Profressional, scientific and technical activities	190.2	82.7
Legal & accounting activities	40.6	65.8
Activities of head offices; management consultancy activities	58.9	95.2
Architectural & engineer-ing activities; technical testing & analysis	48.4	81.0
Research & development	8.9	118.7
Advertising & market research	22.9	78.8
Other professional, scientific & technical activities	10.5	63.8



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Outside the scope of SBS

- Huge part of R&D is conducted by institutions not covered by SBS of services industries
 - Internal R&D
 - Government, private non-profit institutions not exercising an economic activity
- Measurement of output in terms of turnover is not straight forward
 - Only market services directly cause turnover
 - R&D without success
 - Basic research



THANK YOU FOR YOUR ATTENTION

Hanna Fischer

Destatis, Bonn

Phone: +49 (0)611 / 75-8555

Fax: +49 (0)611 / 75-8961

E-Mail: hanna.fischer@destatis.de

