Working Party on National Accounts

Task force on Research & Development: final report

To be held on 4-5 October 2012
OECD Conference Centre
Beginning at 9:00 a.m. on the first day

This document has been prepared by Jens Gruetz (Eurostat) and will be presented under item 4 of the draft agenda

The complete document is only available in PDF format

JT03327447

Complete document available on OLIS in its original format

This document and any map included herein are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area.
Task Forces on R&D

• Inputs into production process and outputs of production have become more "intangible". However, research and development (R&D) services have not been so far included in gross fixed capital formation in ESA 95.

• All European Union countries gather statistical information in the field of research and development. These estimates must be harmonised, clearly identified and discussed between the Member States.

• Two Task Forces worked towards the capitalisation of R&D in National Accounts.
Task Force on R&D – State of play

- The main objective of the first Task Force was to prepare templates for supplementary tables of R&D with the long-term aim of capitalisation of R&D.
- The second Eurostat Task Force on Research and Development (R&D) completed two rounds of the R&D questionnaires, analysed the results of the supplementary tables, in particular the reliability of the data and the main difficulties encountered in completing them.
Task Force on R&D – State of play continued

• The vast majority of Task Force members concluded that they see no major obstacles against implementing the capitalisation of R&D in National Accounts.
• They supported the recommendations of the Task Force.
Task Force on R&D – Templates

• Two templates for the calculation of output of R&D, based on:
  • Frascati Surveys
  • Other data sources

• Templates for
  • Gross fixed Capital Formation,
  • R&D assets, Consumption of fixed Capital
  • Impact of reclassification of R&D on the value added by industries
  • Impact of reclassification of R&D on GDP
Task Force on R&D – Recommendations

a) Full consistency between the data in the agreed compulsory R&D tables and the national accounts should be ensured in the course of the capitalisation of R&D services;

b) until the R&D stocks are available, the consumption of the R&D assets used in the production of R&D services does not have to be taken into account in the estimates of the R&D output (as a part of the consumption of fixed capital);

c) the input method is recommended in the calculation of R&D in volume terms;
Task Force on R&D – Recommendations continued

d) geometric depreciation function is recommended as a reference method in the calculation of the consumption of fixed capital of R&D; however, countries that have developed alternative methods may continue to use them;

e) the R&D services subcontracted by one R&D company to another R&D company should be recorded as intermediate consumption. However, the possibility of recording the output of R&D companies net of subcontracted R&D or on a gross basis would be left open to countries that encounter problems in obtaining data needed to adjust the Frascati intramural expenditures on R&D to gross recording;
Task Force on R&D – Recommendations continued

f) all expenditures by government on Intellectual Property Products (IPPs), including freely available R&D, should be recorded as GFCF, if they satisfy the requirement that IPPs is intended for use in the production of more than one year;

g) the net operating surplus of market producers of R&D is derived as mark-up including unsuccessful R&D. The mark-up may be calculated as industry specific or as a single mark-up for all industries. To ensure stability of the mark-up time series, an average or a weighted moving average of several years should be used;
Task Force on R&D – Recommendations continued

h) Service Life estimates used in the calculations of R&D should be based on dedicated surveys or other relevant research information, including information of other countries with comparable market/industry characteristics. Where such information is not available, a single average service life of 10 years should be retained. It is also recommended that the above mentioned Service Life estimates should be investigated regularly, e.g. every 10 years.
Task Force on R&D - Reliability of the results
Impact of reclassification of R&D on Gross Domestic Product – Preliminary data

Source: Results of the questionnaire on capitalisation of R&D in 2011 (blue) and in 2012 (green)
Task Force on R&D - Reliability of the results
R&D expenditure and impact of reclassification of R&D on Gross Domestic Product – Preliminary data

Source: Results of the questionnaire on capitalisation of R&D of 2012, and GERD database
Task Force on R&D - Reliability of the results
Self-assessment of TF members

• Do you consider the impact of the reclassification plausible?
  Mostly: Yes
  Others: Preliminary and/or incomplete estimates

• Is the impact on GDP coherent across the approaches?
  Mostly: Yes
  Others: Incomplete; Reconciliation with SUT needed

• Other remarks
  Revisions/Reclassifications announced
  Need to explore different sources for Export/Import
Thank you for your kind attention!

Jens Gruetz
Eurostat C1
Jens.GRUETZ@ec.europa.eu