REGIONAL R&D SATELLITE ACCOUNT: CONCEPTS, DATA, AND METHODS FOR PREPARING PRELIMINARY R&D PRODUCTION BY STATE STATISTICS

Discussion

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• Comments from perspective of R&D statistics co-ordinator at OECD

[some prior track record in national accounts and R&D capitalization in UK and at OECD]


• Not necessarily representing views of OECD, esp. with regards to regional statistics or national accounts.
Questions for discussion

• General thoughts about the project?
  – Feedback on data and methodology?

• How should BEA prioritize work next?

• Communication questions:
  – Should BEA present the statistics with a focus on R&D-intensive industries as proposed or some other way?
  – What can BEA do to inform the data users on the usefulness of these new data?
Welcome this first step of a broader project – good job
  – Focus on R&D production up until now \(\Rightarrow\) GFCF, income, etc later
  – Address relevant questions on structure of economic production, consistent with national and regional accounts

Task: Allocating national*industry NIPA R&D categories to state level.
  – Magnitudes: \(\{\text{GO} + \text{VA} + \text{EC}\} \times \{\text{own account} + \text{for sale}\} + \text{R&D employment}\)
  – Definitions for some concepts verging on the equivocal, e.g. VA and R&D employment, but satellite account gives some freedom \(->\) clarify
  – Use of NSF/NCSES regional stats in combination with other Census/BLS/BEA sources.
    * Domestic groups with regional breakdowns \(->\) establishment level imputations. Total payroll as allocation index.

Some questions on handling of:
  – Business R&D sold on market to other business \(\neq\) Regional BERD minus BERD self funded (page 9, first bullet)
    – Correct to “Business R&D sold in market”. (Count selling also to other sectors)
  – R&D performed by auxiliary establishments of larger companies. Does this include aux to foreign cos?
  – R&D funded by others as a transfer (e.g grants) – connected to US NIPA idiosyncrasies, NCSES data now allows more nuance
  – Subsidies on production implied by R&E tax credit (factor cost to market prices) – already accounted for in NIPA R&D? But regionalised?
Potential priorities?

• More accurate allocation of regional GERD data to establishments via data linking with “closer” R&D performance index
  – R&D linked occupational labour costs/salaries?
• Other spatial dimensions (metro areas, rural)
• Allocation of regional (and national) R&D to industries also for non-business.
• Move to relevant constructs to measure regional productivity etc....
  – Many challenges...
    • M&A etc distorting construction of R&D capital stock measures
    • R&D stock is available to all units in a group
      – > “econ benefit” to individual states from R&D performed in other states
• Regional differences in prices of R&D components, esp. R&D personnel salaries
  – but attention to quality dimensions too
Communication

• Explain what these statistics add on to available regional NSF/NCSES R&D statistics –
  – consistency with regional accounts and measures of geographic industrial “footprint”
  – account for/ explain main differences → compare side by side?
  – Is there a similar initiative for software? Recognise software role within R&D – and delocalisation of such work...

• R&D intensive industries as aides to presentation - Good idea
  – Attention to specialist “R&D industry 5417” interpretability by users.

• Analytical products on the changing R&D footprint
  – E.g.: Within / between industry decomposition of R&D output intensity changes for different states, i.e. changes in size of industries given average R&D intensity vs changes in the R&D intensity within industries.
Congratulations on the good work and progress so far
And especially inter-agency collaboration
Thank you

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