Where Should BEA Go on Non-Market and Near-Market Accounts?

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Issues in non-market accounts

- Non-market accounts are the "next frontier" in social accounts.
- Of great importance because so much goes on outside the market's boundaries.

Two recent reports:

- National Research Council, Nordhaus and Kokkelenberg, eds., *Nature's Numbers*, NAS Press, 1999.
 - National Research Council, Abraham and Mackie, eds., *Beyond the Market* NAS Press, 2005.

Environmental and Natural Resource Accounts

Central question:

Congress and the NAS asked: Should the U.S. national economic accounts be broadened to include activities involving natural resources and the environment?

Short answer:

Yes. Developing a set of comprehensive nonmarket economic accounts that includes natural resources and the environment is a high priority for the nation.

But, these should not yet be incorporated into the "core accounts" of the NIPA.

Non-market Accounts

- Many of the same issues as environmental accounts, but even larger set of possible issues and topics
- *Beyond the Market* concludes:

"Nonmarket accounts would be particularly helpful in improving our understanding of the sources of growth in the economy.... The limitations of national accounting data reflect the reality that neither economic production nor contributions to social welfare stop at the market's border, but extend to many nonmarket activities. Failure to account for these activities may significantly distort policy makers' sense of economic trends and the desirability of potential policy interventions."

... more from Beyond the Market

- Major new development is production of time use data for the U.S. (American Time Use Survey).
- Priorities according to *Beyond the Market* should be:
 - household production
 - investments in formal education
 - investments in health
 - selected non-profit and govt sectors
 - environmental assets and services

Next steps for BEA (Putting on my BEA hat and taking off my NAS hat)

- 1. BEA still has its platter full with the core accounts
 - industry, profits, prices, NAICS, ...
- 2. I do not recommend introducing environmental, naturalresource, or non-market elements in the core accounts
- 3. However, supplemental accounts can be very useful in illuminating important economic questions
- 4. Major new steps should be in the "near market" sectors
 - minerals (particularly oil and gas depletion and additions)
 - research and development accounts
 - education accounts

Next steps, cont.

- 5. BEA can undertake or encourage work in non-market sectors:
 - household production (particularly with new time use data)
 - health accounts (joint venture with other govt agencies)
 - others as per interest and funding

Analytical issues of time use

Development of time-use data will lead to whole new area of economic theory, empirical work, and social accounting.

Time use is central to non-market production:

- Work comprises only 14 percent of adult time use (ATUS for 2003).
- Labor likely to be preponderant non-market input into non-market production (think of cooking).
- But several thorny issues remain in using them for non-market accounts. Especially:
 - Simultaneous use
 - Valuation of time

Simultaneous time use

Dealing with simultaneous use is unresolved problem in most studies.

Some alternative approaches are:

- (1) Designate primary and secondary activities.
- (2) Treat activities additively so that people might have a "36 hour day."
- (3) Create compound activities (e.g., babysitting and TV watching are a composite commodity).
- (4) Forget about it (ATUS ignores secondary activities except child-care).

Particularly important issue for home production

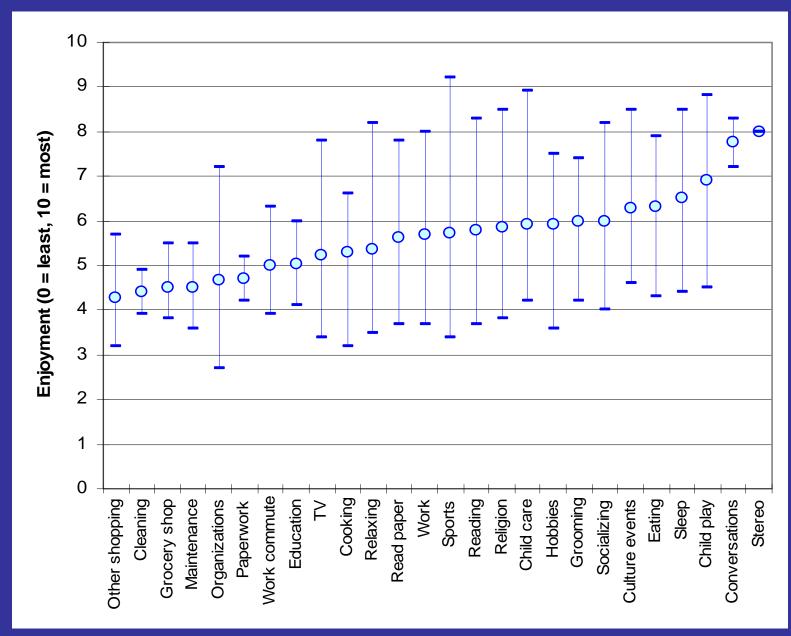
- much home time is multiple activity
 - example: "housework" in ATUS might be "cooking, childsitting, house-sitting, pet-sitting, listening to radio, talking to friend, waiting for FedEx delivery, and planning work."
- Using wage rate or cleaning rate will undervalue home production because ignores other outputs.

Pricing time use

Pricing time use will be serious problem in non-market accounts:

- Usual convention is opportunity cost (after-tax wage).
- Wage approach is almost certainly not correct because time is non-storable service:
 - Value of time varies substantially over course of day.
- Surveys suggest that this does not predict intrinsic value of activity (see next slide).
- Major area for fruitful research!

Ranking of Enjoyment of Different Activities from Surveys



John Robinson and Geoffrey Godbey, Time for Life: The Surprising Was Americans Use Their Time,

Summary of recommendations for BEA:

- 1. Continue major focus on core accounts.
- 2. Do not (yet?) include environmental, natural-resource, or non-market elements in the core accounts.
- 3. Develop supplemental accounts for:
 - minerals (particularly oil and gas depletion and additions)
 - research and development accounts
 - education accounts
- 4. Encourage or joint venture work in selected non-market sectors:
 - household production, health accounts, and others as per interest and funding