### Developing Nonmarket Accounts: Implementation Issues

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### NAS Recommendations: Conceptual

- The NAS recommendations address many issues critical to the successful implementation of nonmarket accounts:
  - Use of satellite accounts
  - Focus on production
  - Maintenance of double-entry accounting
  - Estimation of prices and quantities
  - Use of market prices or proxies thereof
  - Overall consistency with current accounts
  - No single aggregate measure



#### NAS Recommendations: Practical

- Cross-agency collaboration:
  - Key panel recommendation
  - Critical to keeping focus on core accounts
  - Critical to acquiring resources, expertise, and appropriate review for such estimates
  - Also, important to providing confidence in the credibility (and use) of such estimates
- Phased development
  - Focus on areas with largest net returns



#### Implementation Issues

- Pigou: National accounts should include elements that reflect economic welfare that can "be brought directly or indirectly into relation with the measuring rod of money"
  - Emphasized that the word "can" might mean anything from "can easily" to "can with mild straining" to "can with violent straining"



### Implementation Issues

- From many users of the accounts perspective much of what is in existing accounts comes under "can with mild straining" and things like the value of stock options, and the accrual value of pension under "can with violent straining"
  - As measured by reliability, accuracy, and credibility



### Implementation Issues: Government and Non-Profits

- Cautionary note: Atkinson report
  - U.K. experience in this area underlines the importance of extensive research, vetting, and phased implementation (in satellite accounts)





# Implementation Issues: Government and Non-Profits (Cont'd)

Education: Output indicators, PDV earnings, and market prices

- BEA is conducting research in this area and will produce a range of estimates for use in Satellite Accounts
- BEA will collaborate with Department of Education and other members of the education/economic research community
- No plans to modify NIPAs at this time



## Implementation Issues: Government and Non-Profits (Cont'd)

- Services of government capital:
  - Data on capital stocks, depreciation, and interest rates available to estimate the service value/cost of government capital
  - Long-term research agenda will look at market rental proxies and prices, but more likely solution will use government borrowing cost



### Implementation Issues: Government and Non-Profits (Cont'd)

- Non-profits:
  - R&D:
    - BEA has a collaborative project with NSF that will produce satellite account estimates
    - Data required for treatment as investment and for capitalization are available
      - Difficult issues include, choice or rates of return, depreciation, price deflators, and other tricky data and conceptual decisions
  - Other non-profits:
    - Highest return will be in areas where proxy prices can be applied



### Implementation Issues: Household Production

- Input prices and quantities
  - BLS Time Use Survey will provide key data on inputs classified by activity
    - Unresolved issues include time series consistency, valuation of time, and joint activities
  - BEA Capital Stock can provide baseline for capital services
  - BEA Government services by function will provide important new data
- Output prices and quantities
  - Little or no data on prices and quantities



### Implementation Issues: Household Production (Cont'd)

- Macro
  - Most data available; difficulties are in necessary assumptions
- Micro data
  - Judgment and resource involved in converting
     I-O could be significant



#### Implementation Issues: Health

- Health: Need to proceed incrementally and collaboratively
  - Improved measures of prices and real output for existing measures
    - A large proportion of potential improvements in measures of real output may be achieved through improvements in existing price and output (and input) measures
    - Improved BLS PPI medical measures are an example
    - Other improvements include possible use of for profit measures for nonprofit health services, and diseasespecific cost of illness accounts



### Implementation Issues: Health (Cont'd)

- Health: Need to proceed incrementally and collaboratively (cont'd)
  - Longer-term efforts with HHS and researchers are needed that focus on:
    - The relationship between health expenditures, household and other inputs, environment, and health status; and from health status to marginal economic value



### Implementation Issues: Natural Resources

- Natural resources:
  - Although difficult, most of the components are market transactions and assets, the problem is that many investments are "own account" activities or are bought and sold in "thin" markets
  - A number of countries now produce resource estimates so in some sense feasible



#### Implementation Issues: Environment

- Environment:
  - Many difficult conceptual, empirical, source data, and political issues
    - Focus on source data development and research – collaboration with EPA; with EPA and other line agencies leading the effort
    - Collaboration with external researchers within research fora



#### Implementation Issues: Benefits

- Broader perspective will provide a more informed picture of the economy
- Certain nonmarket accounts can help understanding of market economy across industries, sectors, and regions
- New data, concepts, and methods hold potential for improving the core accounts