

BEA's 2011 Research Agenda

BEA Advisory Committee Meeting November 5th, 2010



Office of the Chief Economist

Ana Aizcorbe

We are building a "prototype" account for medical care



Example of a Health Account

| <u>Inputs</u> | Outputs |
|-----------------------------|-----------------|
| Medical care | Health status |
| Market labor/capital | Longevity |
| Volunteer labor | Quality of life |
| Time invested in own health | |
| Other consumption items | |
| Research and development | |
| Quality of environment | |
| | |

Source: Beyond the Market



Features of the Prototype Account

- The prototype will be a first step.
 - It will not "fix" all problems but will improve as much as possible given existing data and methods.
 - In areas where there is no consensus on methods, we will provide alternative estimates (e.g., allocating spending by disease)
- We can provide prototype spending and industry accounts
 - Data on nominal expenditures by disease that are consistent with CMS's National Health Expenditure Accounts
 - Improved price deflators for spending that account for cross-industry shifts in treatment protocols
- We will not be able to adjust for changes in the quality of treatments (outcomes)

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Other Research Areas

Price Indexes

- "Implications of Consumer Heterogeneity on Price Measures for Technology Goods" (Shapiro and Aizcorbe)
- "Drug Innovations and Welfare Measures Computed from Market Demand: The Case of Anti-Cholesterol Drugs" (Dunn)

Semiconductors

 "Capital Services in Microprocessor Production" (Aizcorbe, Kortum, Pillai)



Office of the Chief Statistician

Dennis Fixler



Research Themes

- Revision Studies: patterns of revisions to estimates; focus on GDP revision study to be published in February 2011
 - Comparison of performance of GDP and GDI; time series analysis (Kalman Filter/common trend methods)
- Prices: R&D price index; Firm price behavior for new products (quality adjusting prices for wireless services); aspects of competition between geographically differentiated firms (transportation margins for IO tables given FOB prices)
- Financial Services: measurement issues in imputing Financial Intermediary Services Indirectly Measured (FISIM)



Research Themes

• Current account measurement:

Impact of vertical specialization (vs) trade on goods trade measurement; increasing vs means trade shifts from final goods to intermediates—potential double counting

Impact of transaction costs for newly traded goods (changes in composition of trade)

• Econometrics:

Factor models and estimators for describing dependence across two dimensions of a dataset (e.g. space and time)

Isolating changes in regional economic variables from changes in macroeconomic variables—such as changes in GDP by state versus changes in GDP



Industry Accounts

Tom Howells



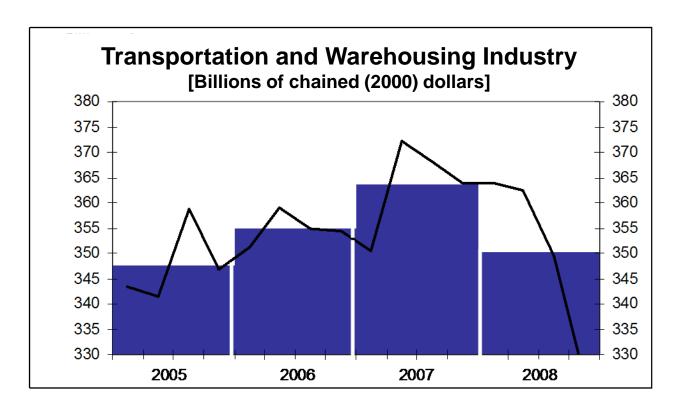
Industry Accounts Directorate

- Quarterly GDP by Industry
- Capitalization of Intangibles
- Industry-level Production Account
- Energy Goods and Services



Quarterly GDP by Industry

- Balanced I-O framework
- Double deflation





Capitalization of Intangibles

- R&D price indexes
- R&D asset depreciation
- Incorporation of capitalized R&D and artistic originals planned for 2013

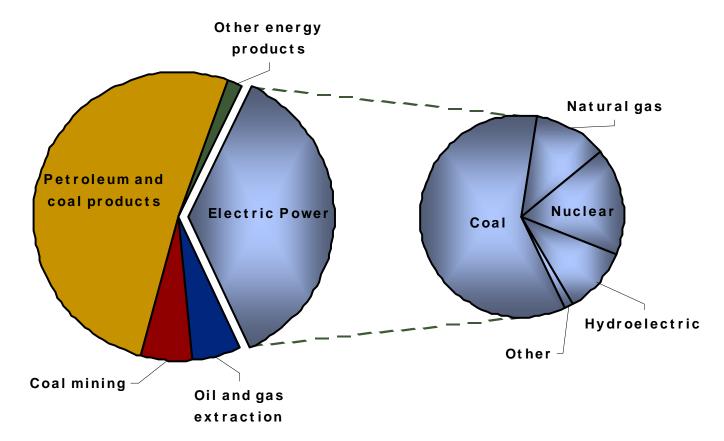
Industry-level Production Account

- Full industry breakout
- Measures of K and L from BLS
- Measures of E, M, and S from BEA
- Prototype released in late 2011 with industry estimates for 1998-2007



Energy Goods and Services

- Utilize microdata from EIA
- Expand energy-related categories from 8 to 40





Regional Accounts

Carol Robbins



Regional Directorate

- Regional price parities
 - Spatial price indexes
 - Extend with American Community Survey
- Local personal income statistics
 - Accelerate release by six months
 - Plan to implement by end of 2012
- Personal income and defined benefit pensions
 - Shifting from cash basis to accrual basis
 - State distribution of personal income is altered



Regional Directorate (continued)

- GDP by County
 - Prototype statistics for all U.S. Counties-early 2011
 - Annual Data for 2001-2008
- GDP by State by NAICS industries
 - Backcast for 1990-1996
- R&D as investment in GDP by State statistics
 - Satellite account update
 - CES microdata for state by industry impacts
- PCE by State



International Accounts

Ned Howenstine



International Accounts

- Modernization
 - International standards
 - Other improvements
- Analysis
 - Reliability
 - Statistical Discrepancy
 - Trends



Globalization

- BEA data
 - Services offshoring, location of R&D
- Data links
 - Occupational mix, employment, wages (BLS)
 - Domestic performance (employment, productivity), plant location & churning (Census)
 - R&D (NSF/Census)

Improvements and Expansions in National Accounts

- Actuarial measures of household income from defined benefit pension plans.
- Excluding expected costs of defaults from the measure of implicitly-priced borrower services of banks, better measurement of the reference rate used to distinguish implicitly-priced depositor and borrower services, and other improvements in measures of depository institutions.
- Artistic originals as capital assets.
- Improved lifespan estimates for cars and trucks, and use of lifespan estimates in measuring net capital stocks of trucks.
- Capitalizing residential acquisition and disposal costs.

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Improvements & Expansions in National Accounts, cont.

- Development of improved estimates of mortgage interest paid and imputed rent.
- Comparison of NIWD profits and S&P 500 earnings.
- Reconciling financial accounting and tax accounting measures of profits using IRS M-3 data.
- Revise and extend estimates of GDP for US territories.
- Development of R&D satellite account estimates.
- Analysis of long-term trends in PCE.
- Reconciliation of health expenditures in GDP and in the NHEA (CMS)



Basic Research

- Measures of depreciation rates that separately identify age, vintage and time effects.
- Differences between industries in rates of return on invested capital, and alternative ways of measuring the value of industries' capital stocks.
- International transactions of multinational corporations involving tax haven affiliates.
- Measurement of import and export prices for durable goods and for crude commodities.