State and Local Government in the National Accounts

Bruce Baker

Chief, State and Local Government Branch

Government Division

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Why a NIPA State and Local Sector Account?

- Comprehensive coverage of all accounts:
  - General funds
  - "Rainy day" funds
  - Capital (bond) funds
  - Federal (grant) funds
- Separate current and capital accounts.
- Consistent treatment across governments.
- Framework for macroeconomic analysis.

National Income and Product Accounting 101

There are many purposes of the NIPAs, including:

- To measure the output of the economy (GDP and related measures).

- To show government fiscal balances.

- To measure national saving, personal saving, etc.

The accounts are a system of double entries.

- For every product there is an income, and vice-versa.

- In concept, product = income.

- Output can be measured by accounting for product directly or by accounting for incomes.

- In practice, there is a statistical discrepancy.

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The national accounts show separate sectoral accounts.

- Private enterprise income account
- Personal income and outlay account
- Government receipts and expenditures account
- Domestic capital account
- Foreign transactions current and capital accounts

Many of the transactions in these accounts are between sectors and thus "cancel out" in measuring output.

- Only final demand counts as output.
- Intermediate products cancel out to avoid double counting.

Our Focus

GDP = Consumption + Investment + Government + eXports - iMports

- We will focus on the "G" for Government sector:
  - Federal subsector
  - State and local subsector

Things You Should Know About the NIPAs

General procedures

- Outputs in the NIPAs are generally measured at market prices.

- However, for government, which does not sell most of its output in the market, outputs are estimated by using inputs at cost as a proxy for outputs.

- Dollar amounts are shown at annual rates.

- Percent changes are shown at annual rates.

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Current versus capital

- A distinction is made between current expenditures (and receipts) and capital expenditures (and receipts).

- Non-current revenue includes estate taxes (considered a capital charge) and Federal grants for capital purchases.

- Non-current expenditures include investment in structures, equipment, and software.

- Current expenditures include services provided by capital. This is measured by depreciation, a proxy for the services actually provided.

Coverage issues

- Pension funds are recorded in the personal (household) sector because the assets are held on behalf of employees, not governments.

- Unemployment insurance, a joint Federal / state program, is treated as a Federal program only in the NIPAs.

- Purchases of non-produced assets such as land are excluded because these transactions do not result in production.

- Capital gains are also excluded because they represent changes in the value of existing assets.

- Indian tribes are treated as local governments, and their businesses, including casinos, are treated as local government enterprises.

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Imputations

- Certain non-cash transactions are included:
    - Financial services provided without fees / imputed interest.
    - Brokerage services provided without fees.
    - Pension fund administration provided without fees.

Treatment of sales

- General government expenditures are shown net of sales revenue.

    - Final demand is recorded in the right sector. Services purchased by households are "C" not "G".

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Government enterprises

- Government enterprises are governmental units that behave like businesses.
- These include utilities, port facilities, transit, housing, lotteries, parking, etc.
- They have a "mixed treatment" in the NIPAs.
- The surplus (profits) of enterprises is a revenue item for general government.
- Their investment is included in government investment.
- Their intermediate consumption and output is treated like a business. Sales are recorded as personal consumption expenditures or intermediate consumption by businesses.

Estimation Methods for
State and Local Subsector

- Methods are quite different for "current" estimates versus "historical" estimates.

- Our general approach is like "putting together a puzzle with missing pieces."

- Use of all available data from many sources.

Estimation Methods for State and Local Subsector: Historical Period

For periods two years back and beyond, the Census Bureau's *Government Finances* (GF) surveys are available. The surveys include:

- All 50 states

- Certainty sampling of largest 50 local governments

- Probability sampling of smaller governments: cities, counties, towns, special districts

Estimation Methods for State and Local Subsector: Historical Period

Government Finances

- GF is comprehensive in scope and highly detailed in coverage

- GF is the "backbone" of the state and local government account

- Average fiscal years from GF into calendar years

- Interpolate calendar years into quarters using related indicator (if available)

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Additional details are filled in from other sources:

- Bureau of Labor Statistics (BLS) employment, hours, and wages data
- BLS employment cost index, employer costs for employee compensation
- BLS consumer and producer price indexes
- Census construction (Value Put in Place) surveys, quarterly tax survey
- Federal source data including Medicaid
- Special methods used for compensation
- BLS wage data is used for wages
- Other sources

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Estimation Methods for State and Local Subsector: Current Estimates

Basic method:

- Current estimates are extrapolated from most recent GF-based estimates.

- Quarterly and monthly data sources are used, where available (see major sources identified above).

- Otherwise, trends are extrapolated.

- Many extrapolations are performed in real (constant dollar) terms and inflated with price indexes, e.g. petroleum.

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Special methods are used for consumption of fixed capital (depreciation).

- A "perpetual inventory" model is used to estimate capital stocks.

- Inputs include investment, price indexes, and depreciation rates.

- Outputs include gross and net capital stocks and depreciation.

Special methods are used for compensation.

- Real compensation is estimated from BLS employment and hours data.

- Nominal wages are estimated by reflating real wages using the BLS Employment Cost Index.

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State and Local Government Tables

Table availability

- For tables, see BEA's website www.bea.gov "Publications: Interactive Data" or "Gross Domestic Product: Interactive NIPA Tables." Also published in *Survey of Current Business.*

- Government tables are in section "3".

Selected tables (available every month):

- 3.3 Current Receipts and Expenditures (looks like a budget)

- 3.9.x Consumption Expenditures and Gross Investment

- 3.10.x Consumption Expenditures and Gross Output
    - Where "x" denotes "family relationship" as follows:
        - 1 Percent change
        - 2 Contributions
        - 3 Quantity indexes
        - 4 Price indexes
        - 5 Level (in dollars)
        - 6 Level (in chained dollars)

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Annual tables (available following annual revisions):

- 3.4 Personal Current Tax Receipts

- 3.5 Taxes on Production and Imports

- 3.6 Contributions for Government Social Insurance

- 3.7 Government Current Transfer Receipts

- 3.8 Current Surplus of Government Enterprises

- 3.12 Government Social Benefits

- 3.13 Subsidies

- 3.14 Government Social Insurance Fund Current Receipts and Expenditures

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Late Tables (published two months after annual revision):

- 3.15.x Government Consumption Expenditures and Gross Investment by Function

- 3.16 Government Current Expenditures by Function

- 3.17 Selected Government Current and Capital Expenditures by Function

- 3.19 Reconciliation of State and Local NIPA to Census Table

Three Measures of Spending

Government spending can be thought of in three ways:

- The broadest measure is "total spending" or current expenditures plus net investment. This measure includes everything governments spend money on:

    1) Services produced and provided to the public by government
    2) Government investment
    3) Benefits to households
    4) Subsidies to business
    5) Interest on their debt

- Drill down to final demand, which is only items 1 and 2. Everything else is intersectoral, and thus does not count in GDP.

- Drill down further, to value added, which is the difference between the value of the output, or services, produced by government and the value of the intermediate inputs (goods and services) that they purchase from businesses. Government value added is the contribution of government to GDP and to national income, and it equals employee compensation plus services provided by government capital.

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- For purposes of deflation, we deflate only components one and two. Government final demand.

- Now Steve Andrews will talk about how we estimate price deflators.

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The Future of the State and Local Government Accounts

Convergence with the SNA

- The SNA is the internationally-based *System of National Accounts, 1993.*

- Supported by the United Nations, World Bank, IMF, OECD, and the European Community.

- Receipt and outlay accounts are integrated with balance sheets.

- BEA made a major step in moving towards the SNA in the 2003 Benchmark.

- Summary tables were redesigned and terminology was changed.

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Harmonization of NIPAs and Flow of Funds

- Related to SNA mandate of balance sheets, BEA and the Federal Reserve Board are working to integrate FRB balance sheets with BEA income and product accounts.

Separate state accounts and local accounts

- Separate accounts have been produced on an irregular basis for many years.
- Most recent article in June, 2003 *Survey of Current Business.*
- Forthcoming article in October, 2005 *Survey.*
- Future status as annual tables.

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Ongoing research

- Accrual accounting
- Move government corporations and quasi-corporations into the corporate business sector
- Identify non-profits serving government and move them into the government sector
- Quantify in-kind compensation