National Income and Product Accounts

Jesús Fernández-Villaverde University of Pennsylvania

National Income and Product Accounts

- What is the goal?
- When did it begin?
 - 1. U.S.: Simon Kuznets (Nobel in 1971).
 - 2. U.K.: Richard Stone (Nobel in 1984).
- Elaborated by Bureau of Economic Analysis and published in the *Survey of Current Business*. http://www.bea.gov/
- Constant development of better measures of economic activity.

NIPA Entries

- NIPA is organized around 7 accounts and 299 tables.
- Double entry: resource and use.
- Comprehensive view of the economy.
- Integrated with industry, wealth, regional, and Input-Output accounts.

Basic Information

- Computation of GDP: Sum of Valued Added by all the firms and households in the economy.
- Main input: "value data."
- Information: surveys+imputed values.
- Value added: Final Sales-Intermediate Consumption.
- Special treatment of homes.

Labor and Capital Share

• Labor share: the fraction of GDI that goes to labor.

Capital share: the fraction of GDI that goes to capital.

• Labor Share= $\frac{\text{Labor Income}}{\text{Gross Domestic Income}}$

• Capital Share = $\frac{\text{Capital Income}}{\text{Gross Domestic Income}}$

• Proprietor's Income?

Quantity and Price Indexes

• Laspeyres quantity index:

$$L_0^t = \frac{\sum p_{i0}q_{it}}{\sum p_{i0}q_{i0}}$$

• Paasche quantity index:

$$Pa_0^t = \frac{\sum p_{it}q_{it}}{\sum p_{it}q_{i0}}$$

• Chain index (or Fisher):

$$F_{t-1}^t = \left(L_{t-1}^t \times Pa_{t-1}^t\right)^{0.5}$$

- Problems of real indexes. Preference for nominal.
- We can define price indexes in an analogous way.

Some Nontrivial Issues

- Releases of information and revisions.
- Seasonal adjustment: X-12 ARIMA.
- Methodological changes.
- International comparisons: SNA-93 revision 1.
- Technological innovation: hedonic pricing.
- Underground economy.
- Non-market activities.
- Welfare.

Additional Sources of Information

- Fixed Assets.
- Satellite Accounts.
- Regional Economic Accounts.
- Industry and Input-Output Accounts.
- Flow of Funds Accounts (Board).
- Census data.