National Income and Product Accounts

Jesús Fernández-Villaverde
University of Pennsylvania
National Income and Product Accounts

- What is the goal?

- When did it begin?


- 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.