Overview of the GTAP Framework

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**Presented at the ARTNeT-GIZ Capacity Building Workshop on
"Practical tools for Impact Assessment of Free Trade Agreements"
23-27 January 2017, Bangkok**

Basic features

- Standard GTAP assumptions:
  - perfect competition, constant returns to scale
  - static model, no intertemporal choice, no dynamics
  - international trade in differentiated products (Armington assumption)
- Non-standard features
  - Constant Difference of Elasticities (CDE)
 - Transport sector
  - Global bank

Regional household

- ...is an entity that
  - owns the factors of production and can tax other entities (firms, activities)
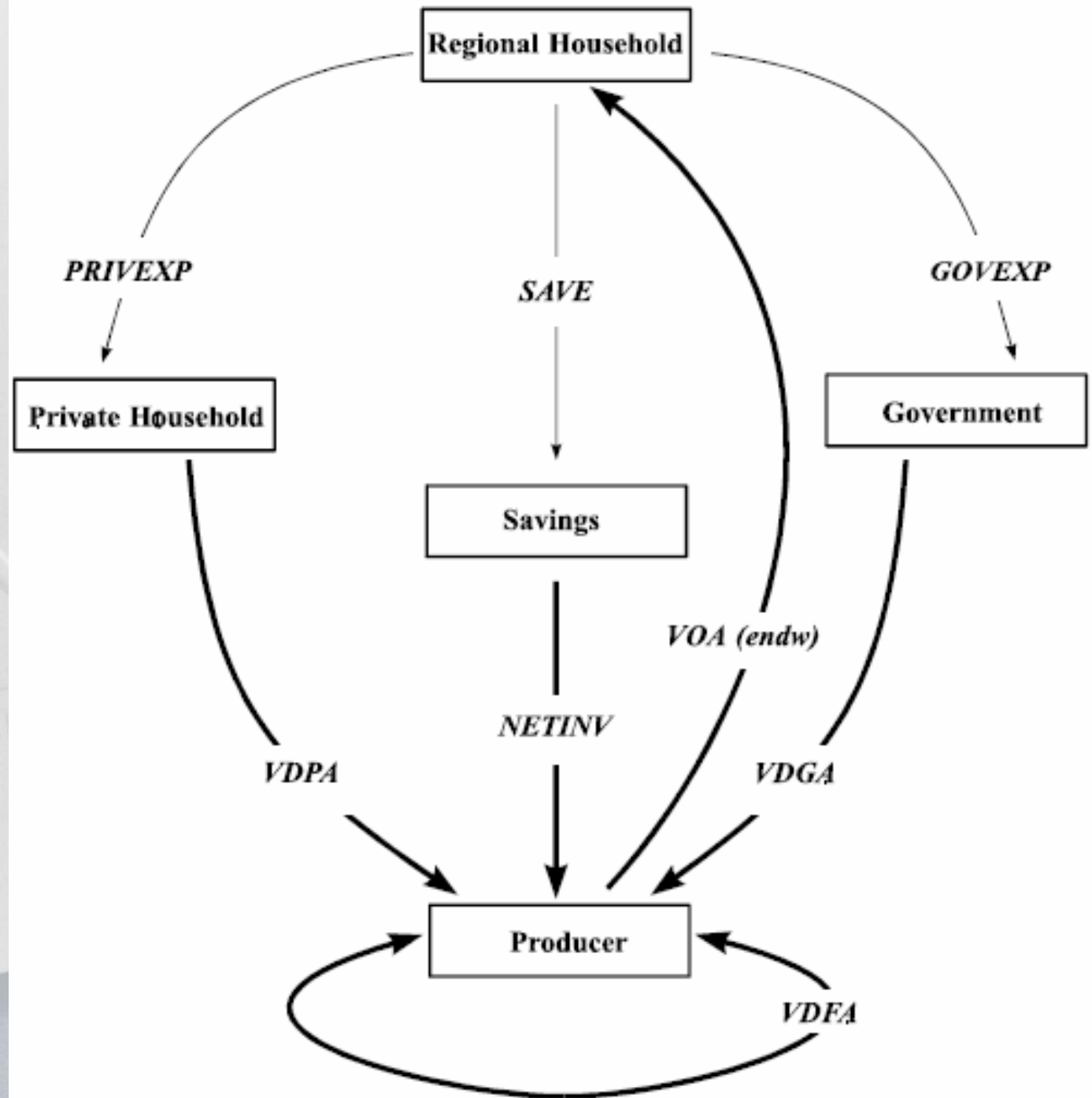 - decides on the consumption expenditure

Regional household: preferences

The regional household

- Allocates expenditures on
  - private consumption (PRIVEXP)
  - public consumption (GOVEXP)
  - savings (SAVE)

Cobb-Dougals per Capita Utility Funciton
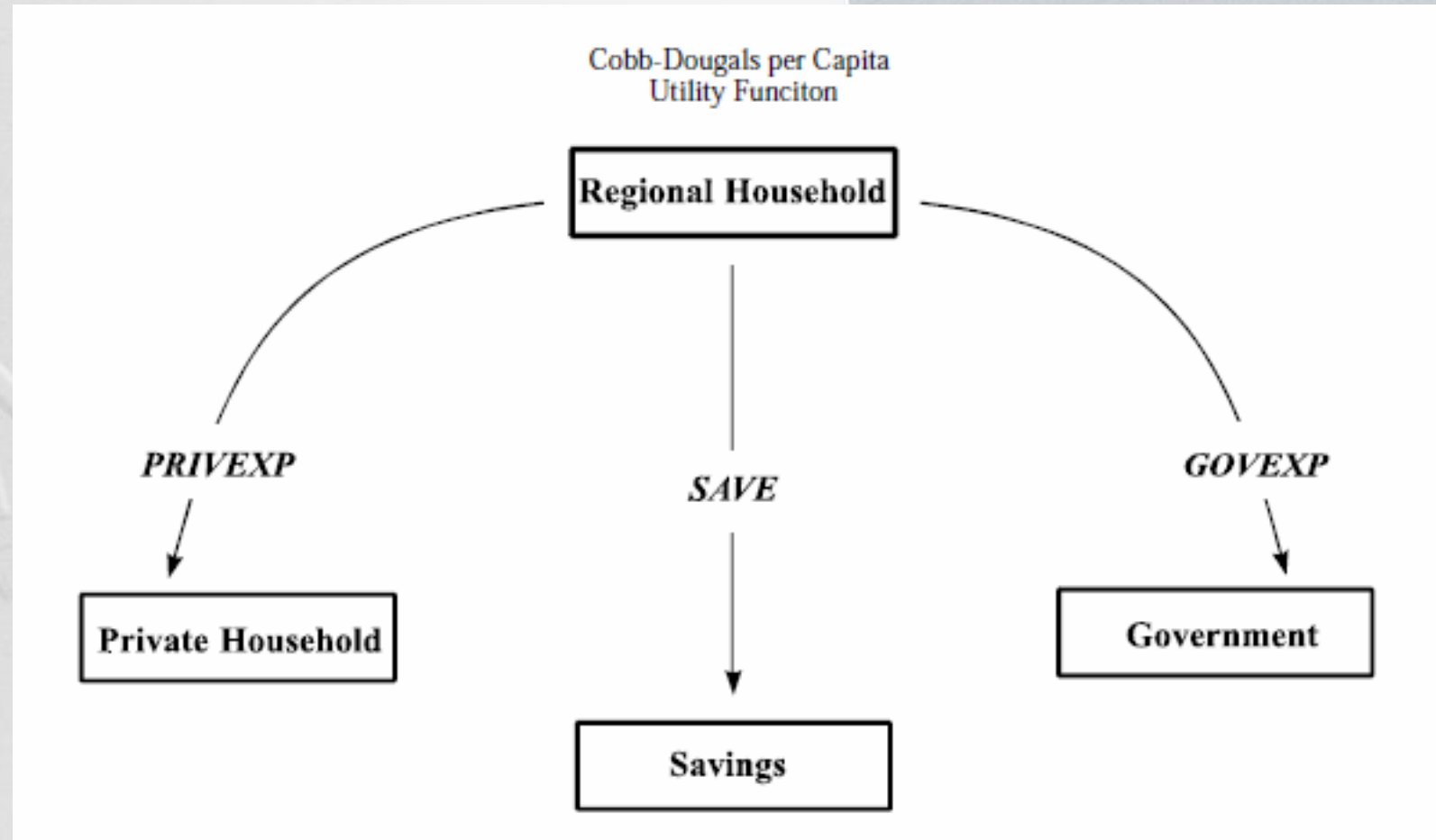
Circular flow in the closed economy

Closed economy with taxes

- Regional household can tax:
  - Private consumption
  - Public consumption
  - Producers
- Regional household owns factors so taxes only distort prices
- Tax revenues have nothing to do with govt consumption.

Market prices/Agent prices

Model is built along these lines

- Agents make transactions through markets

- Each transaction is actually two transactions agent-market-agent

- In transactions seller-market
  - agent's price is the seller price
  - market price is the seller price plus taxes

- In transactions market-buyer