

Model Layout

Model layout

- i and n denote countries $i, n \in \mathcal{I}$
- 1 sector
- Endowment: N workers
- Trade elasticity θ
- Trade cost are iceberg d_{in}
- w_i are wages
- workers are freely mobile

Solving the model

Income

$$E_n = w_n N_n$$

Labor market clearing

$$w_n N_n = \sum_{i \in \mathcal{I}} X_{in}$$

Expenditure

$$X_{in} = \frac{T_i (w_i d_{in})^{-\theta}}{\Phi_n} E_n$$

Multilateral resistance term

$$\Phi_n = \sum_{i \in \mathcal{I}} T_i (w_i d_{in})^{-\theta}$$

Price index

$$P_i = \Gamma \Phi_i^{-\frac{1}{\theta}}$$

Aggregate labor

$$\sum_i N_i = N$$

Utility

$$U_i = \frac{w_i}{P_i} B_i$$

Productivity

$$T_i = \bar{T}_i N_i^\beta$$

Amenity

$$B_i = \bar{B}_i N_i^\beta$$