

Excluding the composition effects of transport costs changes

- For the ad-valorem component, we estimate the following equation:

$$\ln(\hat{\tau}_{ikt}) = \delta + \underbrace{\sum_{i \neq \text{AFG}} \alpha_i \cdot \mathbb{1}_i}_{\simeq \tau_k} + \underbrace{\sum_{k \neq 011} \beta_k \cdot \mathbb{1}_k}_{\simeq \tau_k} + \underbrace{\sum_{t \neq 1974} \gamma_t \cdot \mathbb{1}_t}_{\text{"Pure" TC}} + \epsilon_{ikt} \quad (1)$$

- With $\hat{\tau}_{ikt} = \hat{\tau}_{ikt}^{ice}, \hat{\tau}_{ikt}^{adv}$ previously obtained

- For the additive component:

$$\ln(\hat{t}_{ijt}) = \ln \left(\underbrace{\prod_{i \neq \text{ARG}} \alpha_i \cdot \mathbb{1}_i}_{\simeq t_i} + \underbrace{\prod_{k \neq 011} \beta_k \cdot \mathbb{1}_k}_{\simeq t_k} \right) + \sum_{t \neq 1974} \gamma_t \cdot \mathbb{1}_t + \epsilon_{ijt} \quad (2)$$

- Underlying rationale

- Equations (1) and (2): Preserve our specification of the ad-valorem and the additive costs (Equation (??))
- Equation (1) estimated using OLS, Equation (2) using non-linear least squares (by transport mode)