"It Takes More Than One Moment..." Discussion

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Summary

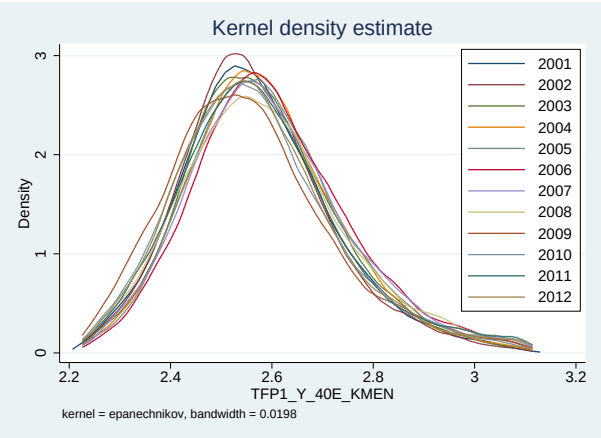
- Estimate country-sector-year gravity model
- Explain country fixed effects with productivity distribution
  - Does the distribution help explain exporting behavior? (YES)
  - Which productivity distribution fits observed exporting behavior? (log normal)
- Angles to view contribution:
  - Open the black box "gravity equation"
  - Better understand drivers of trade flows

How to interpret these results?

- Correlation of firm productivity distributions to exporting country fixed effects
- How causal can we interpret these results?
  - Omitted variable bias is not addressed
  - Simultaneity is not addressed
  - Identification comes solely from structural assumption
- Additional control variables?
- More precise derivation of the implied relationship?

Discussion of Method

- Estimate country-sector-year gravity model
- Explain country fixed effects with productivity distribution
  - Given the proposed model, is a fixed effect correct?



- Productivity distribution is known
  - Use model to determine functional form of effect
  - The same distribution faces each export country

Discussion of Method

Table: Testing hypothesis

	Theory	Empirical Model	
	Comparative Statics	Mean	Skewness
Pareto	$\frac{dI_i}{dk_i} < 0; \frac{dskew}{dk_i} > 0 \rightarrow$	$\beta_2 = 0$	$\beta_3 \neq 0$
LogNormal	$\frac{dI_i}{d\mu_i} > 0; \frac{dI_i}{d\sigma_i^2}; \frac{dskew}{d\sigma_i^2} > 0 \rightarrow$	$\beta_2 \neq 0$	$\beta_3 \neq 0$

- Identification of distribution relies on $\beta \neq 0$
- This is much more likely than $\beta = 0$ ex ante
- Biased towards log normal?
- Yet, can confirm log normal with firm level data