

# Discussion on “How Did China’s WTO Entry Affect U.S. Prices?”

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## Research Question:

How does China's WTO entry affect U.S. price index?

- Estimate the magnitude
- Identify the channels and the magnitude of each channels

## Contribution

- First to propose the importance of the "China's own input tariff reduction upon WTO entry" channel
- Show that the newly proposed channel is significantly more important than the well-documented tariff uncertainty channel

## Research Strategy

- Multi-hierachies of intruments to extract the WTO effect
- Reduced form estimation derived by structural form model

## The mechanism

- Two possible sources (i.e. Sato-Vartia price index component & Feenstra variey component):
  1. Lower Chinese export prices
  2. More varieties from China  
(increased entry of Chinese firms into U.S. market)

# Mechanism

$$\ln \frac{P_{gt}}{P_{g0}} = \text{China } P_g + \text{China } V_g + \text{Other } P_g + \text{Other } V_g$$

$\widehat{\text{China } P_g}$  (-0.049)

price instrument



lower export price



TFP



import variety instrument

input tariff reduction



WTO

$\widehat{\text{China } V_g}$  (-0.026)

export participation instrument



higher export participation



tariff uncertainty instrument

export tariff uncertainty relief



# Comment 1

- Policy Implications for the U.S.?
- Pass-through channel?
  - Markup / market share effect?
  - Is China mainly exporting final goods or intermediate goods?

	U.S. Price	China $P_g$	Other $P_g$	China $V_g$	Other $V_g$
$\widehat{\text{China } P_g}$	-0.049	-0.018	-0.045	0.001	0.012
	65.2%	23.3%	59.2%	-1.0%	-16.3%
$\widehat{\text{China } V_g}$	-0.026	0.001	0.000	-0.029	0.001
	34.8%	-1.9%	-0.1%	37.8%	-1.1%
WTO effect	-0.076	-0.016	-0.045	-0.028	0.013

# Comment 1

## Pass-through channel?

- More informative to further decompose  $Other P_g$  and  $Other V_g$

$$\ln \frac{P_{gt}}{P_{g0}} = \text{China } P_g + \text{China } V_g \\ + \text{US } P_g + \text{US } V_g + \text{Other}' P_g + \text{Other}' V_g$$

- $\widehat{\text{China } P_g}$  has big effect on  $(\text{US } P_g + \text{Other}' P_g)$
- Effect on  $\text{US } P_g$ ?
- If so, effects might be similar to output tariff reduction (decreasing price of imported output)
  - In literature, mixed findings on effects of output tariff reduction
- Effect on markups
- Effect on firm TFP

# Comment 1

Pass-through channel?

- Does China mainly export final goods or intermediate goods?
- If China is also exporting intermediate goods to the U.S., same mechanism of this paper applies too
  - Decreasing price of imported input is similar to input tariff reduction

## Comment 2

- $\hat{M}_{\max,ft}$ : instrument for the expenditure on imported inputs in the common set
- “...many firms did not have common imported inputs over the entire sample period, ...”
- Input imports may be associated with replacing local inputs with higher quality imported inputs, rather than variety expansion?
- Has the model already incorporated/considered this possibility?  
If not, can the model be extended to allow for this possibility?



- Mapping from structural model to estimation model

$$\begin{aligned} & \int_{\varphi} v(\text{before WTO}) dG - \int_{\varphi} v(\text{WTO}) dG \\ &= (T_h - 1) \left[ F_g + (1 - \delta) F_g^E \right] \end{aligned}$$

$$(T_h - 1) \rightarrow \left( \ln \bar{\tau}_h - \ln \tau_h^{MFN} \right) - \left( \ln \bar{X}_g - \ln X_g^{MFN} \right)$$

- $Firm FE \times \ln(Gap_g) \times WTO_t$ ?
- Heterogeneity in the propensity to participate export market because of the product characteristics?