

Discussion of “ESG Shocks in Global Supply Chains”

by Bisetti, She, and Žaldokas (2023)

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Outline

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- ▶ **Big picture**

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- ▶ Econometrics

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- ▶ Suggestions

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- ▶ One likely reason: Customers do not want to buy from ESG sinners!
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 - US firms reduce trade with foreign suppliers after ES(G) incidents
- ▶ Maybe not too surprising. . .
 - Same idea documented in Koenig and Poncet (2022)

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- ▶ We really need to know how domestic firms' actions change foreign suppliers' ESG to design effective "supply-chain-ESG regulation"

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Table 3: The Effect of Supplier E&S Incidents on Trade

<i>Dep. Var. =</i>	Log(1+Containers)	1(Trade>0)	Log(1+Containers)
	(1)	Extensive Margin (2)	Intensive Margin (3)
Treat Supp×Post	-0.111*** (0.039)	-0.042*** (0.014)	-0.095* (0.054)
Pair×Cohort FE	Yes	Yes	Yes
Firm×Year×Cohort FE	Yes	Yes	Yes
Obs.	990,439	990,439	410,322
Adj. R ²	0.392	0.160	0.640

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“We show that U.S. firms cut imports by 11.1%. . .”

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- ▶ E.g., at $E[y|x] = 0.942 (= E[y])$, estimated semi-elasticity is $\approx 23\%$

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- ▶ β -estimates from $\text{Ln}(1+y) = X\beta + \nu$ may even have the **wrong sign!**
- ▶ Simple solution to Problems 1 and 2: **Poisson regressions**

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“Conditional on trade continuation, container shipments drop by 9.5%. . .”

Intensive Margin (aka Conditional on Positive Effect)

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$$\underbrace{E[Y|D=1] - E[Y|D=0]}_{\text{Total Effect}} = \underbrace{[\Pr(Y > 0|D=1) - \Pr(Y > 0|D=0)]}_{\text{Extensive Margin}} \\ \times E[Y|Y > 0, D=1] \\ + \underbrace{(E[Y|Y > 0, D=1] - E[Y|Y > 0, D=0])}_{\text{Intensive Margin}} \\ \times \Pr(Y > 0|D=0)$$

where $D = 1$ indicates that treatment was received (i.e., $\text{Treat Supp} \times \text{Post} = 1$)

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$$\underbrace{(E[Y|Y > 0, D = 1] - E[Y|Y > 0, D = 0])}_{\text{Intensive Margin}} = E[Y_1|Y_1 > 0] - E[Y_0|Y_0 > 0]$$
$$= \underbrace{E[Y_1 - Y_0|Y_1 > 0]}_{\text{Causal Effect}}$$
$$+ \underbrace{E[Y_0|Y_1 > 0] - E[Y_0|Y_0 > 0]}_{\text{Selection Bias}}$$

where Y_1 and Y_0 denote potential outcomes for $D = 1$ and $D = 0$, respectively (i.e., “what would have happened if treatment were/were not received”)

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Suggestions

1. Focus on “How potent are trade cuts for changing suppliers’ ES(G)?”
2. Poisson instead of $\ln(1+y)$ throughout
3. Drop analysis of intensive margin