

COMMENTS ON “SELECTION AND MARKET REALLOCATION:
PRODUCTIVITY GAINS FROM MULTINATIONAL PRODUCTION”,
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SUMMARY

- Very important and policy-relevant question: how does MP affect host country? How does MP affect domestic firms in host country?
 - Example from China: “Market in exchange of technology&capital”
- Effect of MP on domestic firms?
 - Productivity spillover? (within-firm effect)
 - Crowding out domestic firms? (between-firm effect)
 - Tougher competition in factor market (selection).
 - Tougher competition in output market (reallocation).
 - Others?...e.g. attracting foreign capital in joint venture?
- This paper considers the first two (probably the most important) effects of MP on host country, and tries to disentangle them from each other.

SUMMARY

Basic Theoretical Framework: a GE model of heterogeneous firms with domestic production, export, and MP decisions, based on Melitz (2003) and Helpman, Melitz, and Yeaple (2004).

- Three productivity cutoffs: $(\underline{\theta}_D, \underline{\theta}_X, \underline{\theta}_M)$ —depending on MP intensity.
- MP affects the productivity and revenue of domestic firms, via
 - Within-firm effect: increases productivity, increases revenue
 - Between-firm effect: increases productivity, decreases revenue.
- Three hypothesis for empirical testing:
 - ① H1 (within-firm effect): MP shifts domestic productivity distribution rightward. (productivity change of continuing firms)
 - ② H2 (between-firm selection): MP raises the cutoff productivity for domestic firms. (survival of existing firms)
 - ③ H3 (between-firm reallocation): MP shifts the revenue distribution leftward. (change of revenue distribution for all domestic firms)

SUMMARY

Use ORBIS data to detect and disentangle the within-firm and between-firm effects—after nicely controlling for endogenous MP entry.

Major findings:

- 1 Find evidence for H1-H3.
- 2 Although both within and between firm effect increases domestic productivity, the latter is much more important.

GENERAL COMMENT

- Important question both academically and policy wise.
- Theoretical model standard, yet enough to generate interesting empirical hypothesis.
- Empirical results carefully and nicely done, with strong results consistent with the conjecture.
- Overall I love this paper.

SPECIFIC COMMENT 1: MP EFFECT ON ENTRY?

- The selection effect may include MP effect on both entry and exit.
- The model does predict that MP also reduces entry given the higher productivity cutoff and exogenous draw of initial productivity and entry costs.
- Entry rate and exit rate are found to be highly positively correlated in some firm/plant level data (e.g. Roberts and Tybout, 1996 Colombia).

I am curious about how entry responds to MP in the Orbis data (and its implication on between-firm effect)?

SPECIFIC COMMENT 2: PRODUCTIVITY MEASURE?

- Revenue productivity measure does not completely reflect MP's productivity effect, due to
 - MP changes output prices
 - MP changes input prices

These changes are absorbed in the revenue productivity measure.

- Output price?
 - Data?
 - Estimate markups? De Loecker and Warzynski (2012)

SPECIFIC COMMENT 2 (CONT...): FACTOR PRICES AND BETWEEN-FIRM SELECTION.

- Two roles of input prices in this paper:
 - Affect selection.
 - Affects productivity measure.
- Input prices unobserved. Can we do something to at least partly controlled for it? (Grieco, Li, and Zhang 2016).
 - Separate factor prices from productivity.
 - productivity dispersion is much larger after controlling for factor price heterogeneity
- How does this affect the MP effect—especially the between-firm effect? My understanding is that given the much larger productivity dispersion the between-firm effect will be even larger.

SPECIFIC COMMENT 3: ASYMMETRIC SPILLOVER

The within-firm spillover effect of MP may be very asymmetric across countries. Consider the developing country VS developed country case

- MP from US to China: Chinese firms may learn more from US MP.
- MP from China to US: US firms may learn little from Chinese MP. Although the between-firm effect exists in both cases.
- I think the bottom line is that controlling for this asymmetric effect may strengthen the within-firm effect for developing host countries.

Why care? Policy relevant: we want to know which country benefits from these channels, besides the mean effect.

COMMENT 4: STRATEGY TO IDENTIFY REALLOCATION EFFECT (FOR CLARIFICATION).

- MP effect on revenue ($r_D(\theta)$) is indirect through changing endogenous variables (P, θ, w), as specified in the model revenue share $\frac{r_D(\theta)}{E} = (\frac{\alpha P \theta}{w})^{(\epsilon-1)}$. Dividing the ex-ante and ex-post revenue equations gives

$$\ln \frac{r'_D(\theta)}{E'} - \ln \frac{r_D(\theta)}{E} = (\epsilon - 1)(\beta_P + \beta_\theta - \beta_w)$$

- An interaction term of MP entry z_{Mj} is added to form the estimation specification (14) on page 21

$$\ln \frac{r'_D(\theta)}{E'} - \ln \frac{r_D(\theta)}{E} = (\epsilon - 1)(\beta_P + \beta_\theta)z_{Mj}$$

- It is not clear why we can do this. Or instead the following equation is estimated for Table 7?

$$\ln \frac{r'_D(\theta)}{E'} - \ln \frac{r_D(\theta)}{E} = \beta z_{Mj}$$