COMMENTS ON “SELECTION AND MARKET REALLOCATION: PRODUCTIVITY GAINS FROM MULTINATIONAL PRODUCTION”, BY LAURA ALFARO AND MAGGIE CHEN

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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


- Three productivity cutoffs: \((\theta_D, \theta_X, \theta_M)\)—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?
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 \( (P, \theta, w) \), as specified in the model revenue share \( \frac{r_D(\theta)}{E} = \left( \frac{\alpha P \theta}{w} \right)^{(\epsilon-1)} \). 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?
  \[
  \ln \frac{r_D'(\theta)}{E'} - \ln \frac{r_D(\theta)}{E} = \beta z_{Mj}
  \]