Reply to referee 2

The paper assesses the effects of exchange rate movements on firm's export market entry and exit. The results suggest that an exchange rate appreciation decreases the probability of entry and increases the probability of exit in line with the previous literature.

The direction of results is in line with earlier research, however, the estimated effects are very large compared to the literature. I am not sure to what extent this is due to issues around specification and interpretation. Below are my concerns as well as suggestions for improvement:

The 60% and 70% reductions/increases in hazard rates for entry/exit compare are large compared to the literature. Fitzgerald and Haller (2014) estimate a change in participation of less than 1% in response to a change in the exchange rate of 1%. The same is true for Berman, Martin and Mayer. This huge difference needs to be investigated and explained. Suggestions on how to do this are explained below:

1 First, if as described in Section 3.2 a cloglog model is actually applied and the results in Tables 6 and 7 are not the results of running probit regression with an entry/exit dummy on the left hand side, the results need to be interpreted much more carefully. In particular, the size of the effects cannot necessarily be read directly from the coefficient estimates (reread Jenkins (2005) cited in footnote 5). Moreover, all the interaction effects and base effects of variables that have interaction effects included need to be evaluated at specific points.

Answer: first, the results for exit are estimated by cloglog regression. The results for entry are estimated by probit regression and the marginal effects are presented directly. Second, we can't interpret the results directly from the size of the coefficients, and we have changed the coefficients into hazard ratio. After transformation, the size of exit effects become much lower, but the size of entry effect remains still large. The potential reason to that large effect is that Chinese exporters enjoy low market power, so that they are very sensitive to appreciation. Third, we include the interactions in all specifications in order to investigate the heterogeneous effects of firms.

2 If indeed a hazard model is estimated, I am not following on how this works for entry. What is the hazard of entry?

Answer: in fact, the probit model is used for the results of entry, we have corrected it in the paper.

3 Could the strong effects be a consequence of the characteristics/composition of the merged sample?

Answer: as I know, Chinese exporters are very sensitive to appreciation, which could be real reason for the large effects.

4 Another issue is measurement: to what extent is exit and entry driven by firms coming in and out of the panel/ markets as a result of them crossing the reporting threshold? Also the definition of entrants suggests that export spells where firms enter the export market/ a new export market for the first time are not covered by this analysis at all. Is this the case? If so, the interpretation needs to reflect this.

Answer: we define entrants in year t as those firms don't export to country c in year $t-1$ but in year t and denote $Entry_{ict}$ as entrants which is binary variable. We define exiters in year t as those firms that export to country c in year $t-1$ but not in year t and denote $Exit_{ict}$ which is also a binary variable. According to above definition, dependent variables are country specific so it can cover new export market.

4 In comparison to previous literature it is important to investigate how much of the difference is due to the different methodology used.

Answer: We must admit that we exaggerate the novelty of our paper, there is no big difference in methodology, we use the cloglog model only because the data fit it. Therefore, we have lowered the contribution in the introduction.

- Introduction:

5 In parts this is a somewhat eclectic description of the literature. For example, is it not clear why the pass-through literature is relevant in this context or the discussion around the Marshall-Lerner condition (if this is indeed relevant an explanation of what this condition is should be included).

Answer: We agree the point of referee that such literature doesn't fit the context well, so we accept the suggestion by deleting such literature and adding some other related paper.

6 The introduction could be greatly enhanced if the results found in the present paper were put into the context of the related literature and an effort was made to identify potential sources of differences.

Answer: we have rewritten the introduction a lot, especially in the part of literature review.

Further comments:

-Table 1: Are the results figures presented in this table converted constant RMB? If so what is the base year?

Answer: No, these figures are nominal.

- When describing the data, please explain how the cleaning and the merging affects coverage. I.e. after each step report what percentage of sales, employment and exports the resulting sample accounts for as a share of the initial data.

Answer: Yes, we have added it. "After filtering, we obtain a sample with 1649163 observations, which accounts for about 60% of the original dataset."

- Table 2: it is not clear whether this table captures only firms that exported in 2002 and all consecutive years or whether it also includes firms that are still in operation but no longer export. Regarding the column on the number of entering firms: is it the number of firms entering exporting or the number of newly established firms? Given that re-entry seems to be large part of the sample, it would be useful to quantify what fraction of export spells it accounts for.

Answer: as indicated in the paper, We use the information on the yearly export delivery value to identify whether a firm enters into or exits from foreign markets. So for exiters, they are possibly remain at the domestic market. The number of entering firms is the number of firms entering exporting markets.

- REER: what are the weights going into this based on?

Answer: the REER is CPI-based

- Construction of TFP: where does the 15% depreciation rate come from (or the 5 or 10%), i.e. provide motivation or a reference (value) for China? Where do the price indexes come from? At what level are they measured? Please provide summary statistics for the estimated TFP results (number of observations, R2). Are the TFP results estimated on the full sample or on the matched sample?

Answer: we adopt 15% depreciation rate by following Yu, M. (2014). All kinds of price indices are from China Statistical Yearbook. The productivity is estimated at two digit CIC sector-level

using the filtered production dataset. We provide summary statistics in table 5.

- General points on the tables:

o At what level are the industries defined?

Answer: two digit CIC sector-level

o What do we learn from the results presented in column 1 of tables 6 and 7?

Answer: we report results of column 1 in order to testify that our results remain consistency in different specification.

o Explain how 'Eastern China' is defined.

The eastern region consists of Shanghai, Jiangsu, Zhejiang, Fujian, Shandong, Guangdong, which is reported in footnote 6.

- It is not clear what is being done in Table 8, explain the specifications in more detail and be more precise in labelling the columns. In particular, it is not clear to me what we learn from the columns labelled import competition.

Answer: Yes, we have labeled the columns more clearly in table 8.

- The elasticities estimated in Table 10 are lower compared to the baseline results. Any explanation for this?

Answer: the possible explanation to this maybe the contingency. Anyway, the main results remain unchanged.

- Finally it would be interesting to see how much entry and exit matter in the aggregate.

Answer: that is a sensational idea; one of my future work will link exchange rate movements, aggregate export dynamics (sector –level) and productivity growth.

References

Fitzgerald, D. & Haller, S. (2014), Exporters and Shocks: Dissecting the International Elasticity Puzzle, NBER Working Papers 19968, National Bureau of Economic Research.