Reply to referee 3

1. Concepts. The paper is about the dynamics of exporters’ aggregate productivity. However the meaning of the concept of “aggregate productivity of exporters” is not clear to me. The estimation of an exporter productivity is based on its global value added (including both the value added originated from its domestic sales and the value added originated from its export sales). Also, when an exporter stops exporting, its productivity record is no more considered even if the firm continues to serve the domestic market. Inversely, when a firm start exporting, its productivity record enters in the decomposition based on the share of its domestic and export value added. So basically, I am skeptical with the meaning of Exporters Aggregate Productivity. This makes me even more skeptical when the authors derive policy implications from their findings (see below). Indeed, China should be concerned by its Aggregate Productivity (as a policy objective) not by exporters’ aggregate productivity per se.

Answer:
First, productivity of exporters is computed as the value-added-weighted aggregate productivity of all exporters( \( \Phi = \sum s_{rt} \phi_{rt} \)).

Second, As our identification approach of exporting firm dynamics excludes firms who stop exporting even they continue to survive in the domestic market, which conceives a concern that the contribution of domestic operation to the aggregate productivity of exporters isn’t captured in our identification, we try to address this concern by using the ratio of exports over sales as weights to measure the aggregate productivity.

Third, in fact, exports is a main driver of economic development in China. the productivity of exporters is of great importance to China’s sustainable development. Nevertheless, we also find that the policies we have drawn from our empirical results are too strong, so we delete the policy implication.

2. Econometrics. In section 5.2, the authors present the results of their productivity decomposition for different sub-samples of exporting firms depending on their ownership, location, and main industry. The differences are interesting but I would recommend to use an econometric framework to test the statistical significance of the differences. For instance is a reallocation effect of 58% found for the Agricultural and Sideline food processing industry statistically different from a reallocation effect of 55% found for the Food Manufacturing industry (Table 9)? Also, in Table 7, 8, 9, it is not clear whether the reported values are average values of yearly productivity decompositions or the values of a single decomposition exercise performed over the whole five years period (2005 to 2009)?

Answer:
First, we accept the suggestion to test the statistical significance of the differences. We find the differences of reallocation effects across subgroups are significant.

Second: in Table 7, 8, 9, the reported values are average values of yearly productivity decompositions.
3. The authors claim that their paper is the first one to investigate firm dynamics on foreign markets. However, there is an established literature which investigate the determinants of firm survival on export market and/or the determinant of occasional exports. The key role of Demand-side factors is emphasized in this literature. Those factors are totally absent from the present study.

**Answer:**
We are also aware of the fact that there is an established literature which investigate the determinants of firm survival on export market and/or the determinant of occasional exports. It is very interesting to exam how some institutional factors affect the firm dynamics, which is what we are doing in other papers. But in the current paper, we don’t investigate this topic.

The description of the data is not comprehensive enough. What is an exit? For instance what happens when a firm passes below the threshold of 600000$ of sales?

**Answer:**
Yes, I have done in the revised paper.

Table 1 is not commented. The authors should at least say a few words on the declining trend in the export participation rates over the 2005-2009 period.

**Answer:**
Yes, I have done in the revised paper.

Table 2 is unclear. Is it about survival in the database or survival on export market?

**Answer:**
It is about survival in the database.

Figure 1 is unclear. How should we read the figure 48% in the last column? Is it the rate of survival in the database for all firms after 4 years? If this is the case, this rate is not easily comparable to the rate 34% which is defined as the rate of survival on export markets after 4 years for exporting firms.

**Answer:**
48% is the rate of survival in the database for all firms after 4 years. And 34% is also the rate of survival in the database for exporters.

In the paragraph which comments Figure 1, the authors make the claim than “exporting firms are on average larger than domestic firms in all respect” but there is no evidence to support this claim. It would be worthwhile to give some statistics as this basic claim has been challenged in the literature on Chinese exporters (Lu, 2010, Dai and Maitra and Yu 2012)

**Answer:**
We rewrite it instead of “we find that the indicators of exporting firms are higher than all firms”.

In the description of decomposition methodologies, one important issue is not discussed: what difference does it make to take employees shares instead of value added shares to weight the firm productivity?

**Answer:**
Actually, there is no difference to take employees shares instead of value added shares to weight the firm productivity in decomposition methodologies.

Table 8. There is a mistake in the cell “Entry Effect/Western Region” should be “– 4%” and not “4%”

**Answer:**
Yes, we correct it in the revised paper.

In the conclusion, and more generally everywhere in the paper, the authors have to make clear whether they are dealing with “the surviving ability of exporters” or with “the surviving ability of exporters on export markets”. Considering that there are a lot of shifters and occasional exporters it is very important to distinguish both.

**Answer:**
Yes, we clarify it in the revised paper.

4. Finally I have concerns with the policy implications. The authors derive very strong policy implications from their study: First, they recommend that the government substitutes R&D subsidies to export subsidies for low-end products and that it cuts tax rebates for low-end exporters. Second, they recommend that the Government pick up “promising exporting firms” and discriminate their finance, tax, R&D and trade policy in for of those selected firms. Third, they recommend that the government reduces protections to state-owned firms. Finally, they recommend that underdeveloped regions receive special support from the government. I think that nothing in the paper allows to derive any of these recommendations. I would discard them from the current version of the paper.

**Answer:**
We also think the policies we derive in the paper are too strong, so we drop them.