Review: The Granular Nature of the Great Export Collapse in German Manufacturing Industries, 2008/2009

Summary:

The study documents that large exporting firms played a prominent role during the 2008/2009 recession in Germany. The main contributions are the following: First, the German manufacturing export industry has a "granular" nature. That is, the export share is not evenly distributed. Second, firm-level shocks play an important role in explaining the export collapse. Moreover, the analysis reveals that the slump of exports is due to a reduction at the intensive margin, whereas the biggest share of the decline is traceable to very large firms.

General remarks:

The strength of the paper lies in the representativeness of the dataset. It uses high quality data collected by the federal statistical office. The paper is well structured. However, the aim of the paper remains somewhat vague to me and, hence, the contribution of the paper is not so obvious. Finally, I don't concur with some of the conclusions.

Major points:

1.) I am not fully convinced by the way the author motivates the use of micro-data to explain the export collapse. Why does the author choose the GFC to show that the German export sector is granular? In my view it should be made clearer what the benefits from the micro data approach are. Maybe using micro-data helps to understand some stylized facts or puzzles that have been documented during the GFC. What do the results imply for theoretical modeling strategies?

2.) In section 2, there is a description of the dataset used. Admittedly, calculating real volumes on the firm-level is a challenging task. However, one might wonder whether the price index for aggregate exports is appropriate here because the same price index is associated with all firms. The author should rather consider the price index at the industry level (4-digit) to approximate prices at the firm level.

3.) The third and the fourth section seem to answer different questions (in particular as the definition of "firm size" seems to change). I would suggest shortening the analysis considerably and drop section 3. Instead, the tables 1 and 2 can be integrated into the section "Data", whereas table 3 provides a motivation for the analysis in section 4 and,

hence, should show up there. The distinction with respect to number of employees in tables 1 and 2 can be easily dropped.

4.) The paper states that the manufacturing export sector has a granular nature. From this finding the author deduces that firm-specific shocks are a major driving force behind the decline in exports during 2008/2009. I am not sure whether the avenue followed here allows for an identification of firm-specific export shocks. Here, the mean growth rate is used to control for aggregate movements and enables the author to identify the firm-specific part. The author should at least discuss the problems associated with such an approach.

Moreover, the paper lacks an economic interpretation of the firm-specific export shocks. While in the case of TFP Gabaix (2011) gives a nice interpretation of firm-specific productivity shocks, a firm-specific shock that adversely affects exports seems to be hard to justify. Hence, it is not clear what this shock represents, and it remains unclear what the author identifies in the empirical analysis.

Finally, it might be the case that large firms are more exposed to global demand shocks and, hence, the impact of the demand shock is firm-specific (i.e. the beta coefficient in Gabaix (2011) equation (30) is firm-specific). How does the analysis ensure that this is not driving the results here? These points need to be addressed / discussed in the paper.

Further remarks:

1.) In the motivation the main purpose of the paper is somewhat hidden in the penultimate paragraph. I would suggest motivating the paper in the second paragraph and tell the reader right away why he should be interested in the paper.

3.) The paper motivates the distinction between West and East Germany hidden in footnote 10. The reader would want to read about this more prominently. Moreover the reader might also want to know why dividing the dataset is beneficial.

4.) The author uses the number of employees to measure size in section 3 and exports in section 4. Why does the definition of size change between section 3 and 4?

5.) Considering the 10 largest firms in section 4 appears somewhat arbitrary. Are the results robust to the choice of this number (particularly as Gabaix (2011) considers the top 100 firms)? What about the largest quartile or the largest decile?

6.) The author concludes that "...idiosyncratic shocks in the largest firms are important for an understanding of aggregate volatility..."This statement does not follow from the previous analysis. It is hard to believe that the export collapse in the follow-up of the GFC is due to shocks originating from individual exporting firms. It is not so clear what the granular residual represents (see comment 4 above).

7.) The conclusion in the penultimate paragraph of section 5 is not justified. The paper does not conduct a welfare analysis to deduce the optimal policy. Moreover, it should be welfare optimal to have many small (marginal) firms.