Comment on Chin Hee Hahn's paper

"Exporting and Performance of Plants: Evidence on Korea"

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Using plant-level data, the author examines links between productivity and exporting and found evidence for the existence of both a self-selection mechanism (relatively productive firms tend to become exporters later.) and learning-by-exporting effects. Compared with a preceding study on this issue by Aw, Chung, and Roberts (2000) which used data for 1983, 1988, and 1993 and, incidentally, did not find any significant evidence for self-selection or learning-by-exporting, this paper takes greater account of the dynamic aspects of the export-productivity nexus by using annual data for 1990-98. The empirical analysis is carefully conducted and I found the paper very instructive.

I have six comments.

My first comment concerns the measurement of TFP. The paper contains no explanation of how plant level TFP is calculated. Since TFP plays a key role in the paper, I would like to ask the author to explain this in detail.

My second comment relates to the drawbacks of using plant level data for this type of analysis. It is true that, generally, TFP calculations at the plant-level are more reliable than those at the firm-level. For example, since firms usually produce a broad range of products, it is difficult to find an appropriate price index to deflate their nominal output. However, in the case of productivity comparisons between exporters and non-exporters, plant-level data is problematic. The reason is that exporting firms may have to incur fixed costs to penetrate foreign markets – a major part of which is probably incurred at the firm-level rather than the plant-level. For instance, a firm's sales activities abroad are likely to be paid for by the head-office

Suppose that, because of this fixed cost, the domestic price of a certain product is lower than the export price. Then the TFP level of exporting plants will be estimated to be higher than that of non-exporting plants even when their actual productivity is identical. Probably one solution to this problem is to add firm dummies to the explanatory variables in the regression.

My third comment is on the effects of trade protection. Some of Korea's manufacturing industries are protected by tariff-barriers. We will observe relatively high tariff rates and domestic prices for industries which are not competitive and do not export. Therefore, the estimated TFP of non-exporting plants might be biased upward. If we use industry dummies at the disaggregated industry level, this bias will be small. So I would like to know more about the industry dummies used in the econometric analysis.

My fourth comment concerns the effects of the export boom of 1997 and 1998. As the author points out in the paper, the Korean currency substantially depreciated and exporters enjoyed windfall profits during those years. The result of the estimation of equation (4), which is one of the most important results of the paper, might be biased. I would like to see the results from the same estimation based on data of 1990-1996.

My fifth comment is on sample size. At the end of section 3, the author compares TFP of two groups of plants. The first group consists of plants that started exporting in 1994 and continuously exported thereafter, while the second group consists of plants that never exported during the sample

period. Using this comparison, the author finds a significant ex-ante TFP premium in 1990 for future exporters. This result is very interesting. But I am afraid that by defining new exporters and non-exporters in a very rigorous way like this, the sample size might become very small. I would like to know how many observations the author has in the first group (new exporters).

My final comment is that a brief overview of Korean trade and TFP growth would have been helpful. In the paper, the descriptive analysis is relatively limited, leaving questions such as: in what industries are import tariffs high? What industries show a revealed comparative advantage? How does the Korean government subsidize private investments that are related to exporting activities (this policy is referred to in page 4)? In what industries has TFP growth been high? If the author provided overviews of these issues, non-Korean readers would be better able to understand the results of the paper.