Comment on "Trade and the Global Recession" by Jonathan Eaton, Sam Kortum, Brent Neiman, and John Romalis

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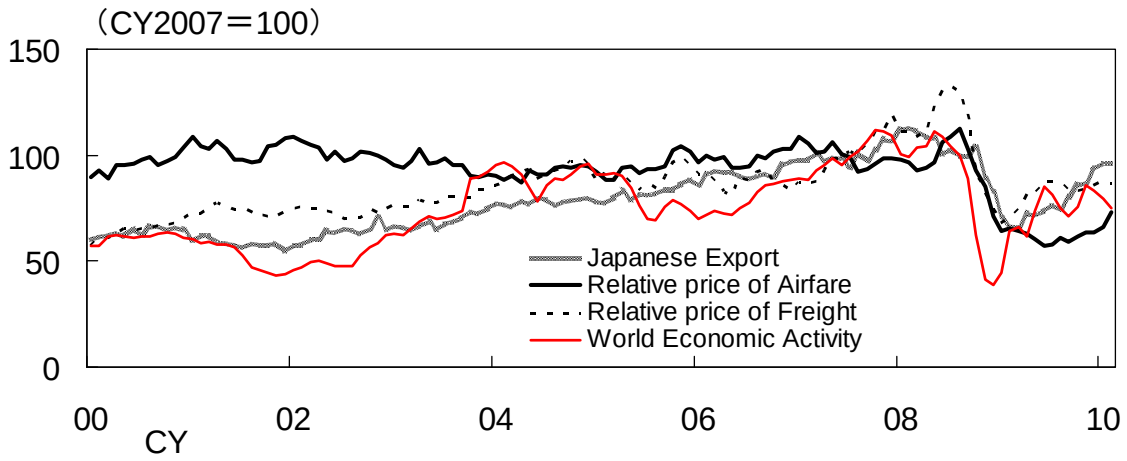
Abstract

I would like to show my gratitude for the opportunity to discuss this wonderful paper. This paper answers to the important question, a cause of trade collapse during the current crisis, based on the detailed setting for the production function that incorporates both the sectoral linkages and international linkages through the international input-output matrix.

I have three comments on this.

First, while authors' finding that demand shock, particularly for durables, account for 70% of trade collapse and that trade friction shocks explain 15% of trade volume reduction is already interesting, I think there is one other important question that can be addressed by the current model. Namely, the role of input-output matrix. One possible reason of the trade collapse may be because there is an adverse shock to a specific industry in a specific country that has disproportionately large impact in international and sectoral input-output linkage. The other possible reason may be that there are common shocks to every industries in every countries that lead to the trade collapse. If the first view is correct, then it indicates the input-output matrix plays the important transmission mechanism. The importance of the matrix can be measured by calculating multipliers for each shock across industry and country. Useful reference for the role of input-output matrix in closed economy may be Hornstein (1997), Dupor (1999) and Horvath (2000).

Second, while this paper distills the trade friction shocks based on the quantity data, it may be useful to construct the shocks using the price data whenever available, and compare the sign and size of the two shocks. As an example, I construct the relative price of non-domestic shipping cost based on Corporate Service Price Index (CSPI), released from the Bank of Japan (the figure below).



Note that relative price of Airfare (Freight) denotes non-domestic shipping cost relative to domestic shipping cost. Although it is reported in the paper that the trade friction causes the trade collapse in Japan, these relative prices rather fall during the crisis than rise. Admittedly, as discussed in the conference, the trade friction shocks contain a number of different type of fundamental shocks including not only the actual trading expenses but also preference shocks related to the home bias. Comparisons between shocks obtained from quantity data and those obtained from price data may help illustrate the type of trade friction shocks that are dominant during the crisis.

Third, it may be fruitful to explicitly model the durability of goods in the analysis. In the current paper, $\Delta\alpha_i^D$ and $\Delta\alpha_i^N$ are treated as exogenous shocks. In contrast, some DSGE models deliver endogenous movements of $\Delta\alpha_i^D$ and $\Delta\alpha_i^N$ as a consequence of agents' optimal choice in response to an income or relative price change, based on the utility function such as

$$U = \frac{\left(\left(D_{stock}^{\phi_d}\right)\left(N^{\phi_S}\right)\right)^{1-\sigma}}{1-\sigma}.$$

For instance, Bils and Klenow (1999), discussing the relationship between the income shock and durability, point out that household's relative demand for goods is positively related to durability of goods in the boom. In addition, Barsky, House, and Kimball (2009), studying the relationship between the relative price shock and durability, point out that durable demand can drop even during the boom if its relative price is sufficiently high. These insights may be also used for the current analysis where output declines associated with demand shocks and relative price change associated with trade friction is considered.

References

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