Measurement of Trade in Value-Added: using Chinese input-output tables capturing processing trade

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Total value of trade is the major measurement in traditional trade statistics, however, along with the deepening of global integration, international fragmentation has changed the production patterns of world economy. Exported products of a certain country/region are usually produced by more than one country/region. Traditional trade statistics generates repeated computation to different contents, particularly for the countries like China, Mexico, Indonesia etc. with a high share of processing trade, the repeated computation becomes more serious. Trade in value-added (TiVA) can be a better measurement of world trade, thus how to investigate the value added induced by trade has become an extremely important topic, especially for processing trade since it has very different input structure as well as value added ratio compared with other production types. This paper will introduce the model capturing processing trade in an input-occupancy-output framework based on China’s case. In the model, China’s domestic production is divided into three categories, production for domestic use (D), production for processing exports (P) and production for non-processing exports (N), abbreviated as DPN model. We then employ this model to make an empirical analysis on value-added by China’s export in 2010 & 2011, on the other hand value-added by imports from China’s major trading partners, based on which re-examine China’s trade imbalances.

Keywords: International Trade, Processing trade, Input-output Tables, China

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