Comments

Comments by Shigeyuki Abe, on Global Value Chains and East Asian Trade in Value-Added

Shigeyuki Abe: This paper empirically analyzes global value chains (GVCs) in East Asia since the mid 1990s using the World Input Output Database. Estimations are carried out to identify the determinants of East Asian trade in value-added, incorporating the Heckscher-Ohlin model, the Ricardian model, and the gravity model. The empirical result reveals that world trade patterns can be better explained over time by capital–labor ratios and productivities. In the case of East Asia, high-skilled labor productivity has not contributed to the trade in value-added since the mid 2000s; instead, the importance of the distance variable has been rising significantly. East Asia has not been a technological innovator, meaning it has not fully benefitted from GVCs. Policy implications for Asian countries to follow include improving labor productivity, putting less importance on developing free trade agreements (FTAs), lowering tariffs further because of the acceleration of cross-border trade in intermediate goods promoted by GVCs, and keeping sufficient inventory to minimize the market risks.

I have five major comments on this paper.

First, a number of papers have emerged related to value-added trade since the OECD released a detailed data set. This paper does not use the OECD data set; rather, it develops its own. Therefore, it is necessary to describe how it is different from the OECD data set. Because the author tries to investigate what causes value-added trade by constructing a new model, we do not know whether the model or the data is the reason for reaching different results.

Second, the author bases his model on two pioneering works in this field. One is Romalis (2004), the other Chor (2010). These authors carefully develop theoretical grounds and estimate the Heckscher-Ohlin and Ricardian models in the case of Romalis (2004), and geographic elements in the case of Chor (2010). In this paper, when the author presents his equation, which included three theories, he simply adds the variables needed. In other words, he uses all the explanatory variables of Romalis (2004) and Chor (2010) without presenting theories and derivations. In addition, transport costs include the sum of partner countries’ GDPs, which is not included in Chor (2010) and most gravity models. Why is the sum of partner countries’ real GDPs represented in the trade
cost? If one wishes to investigate bilateral trade, surely it should be the partner country’s real GDP, rather than the sum of all the partner countries.

Third, in the analysis of value-added trade in East Asia, the author includes two calculated values of GVCs. These are the same indices presented in De Backer and Miroudot (2013). Again, the author needs to show the differences between his calculation and theirs. Table 6 shows the regression results. It is difficult to understand why the author includes two indices of NAFTA, the EU, and the rest of the world (ROW). This is because most East Asian value-added trade uses East Asia value chains, not those of NAFTA, the EU, and ROW. By including all these as explanatory variables, the regression results show higher coefficients for NAFTA, the EU, and ROW than the coefficients for East Asia. This implies that the impact of deepening GVCs in other regions increases intermediate value-added trade in East Asia. Fundamentally, the calculated values of GVCs use intermediate trade data; thus, regressing GVCs on East Asian intermediate trade is tautological.

Fourth, the policy implications and suggestions are too strong given the regression results, and not well explained in general. The second conclusion, in particular, says that the effect of FTAs on East Asia trade in value-added turns out to be statistically insignificant even in recent years. It is well known that FTAs’ rules of origin are under-utilized because, first of all, they are cumbersome, and second, the tariff rates for intermediate products are already low due to provisions given by host countries to attract FDI firms in East Asia.

Finally, GVCs discussed in terms of 35 aggregated industries cannot detect the real picture of GVCs of individual goods such as hard disk drives, digital cameras, PCs, TVs, automobiles, and so on. The most developed GVCs are found in only two or three out of 35 industries, and within those two or three industries, GVCs of a complex nature exist. The horizontal division of labor aspect needs to be explored more deeply to obtain more concrete policy implications.

References


