The Success and Future Potential of East Asian Regional Trade

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Recent studies on intra-industry trade (IIT) have brought to light rapid increases in vertical IIT, i.e. intra-industry trade where goods are differentiated by quality. Fukao, Ishido and Ito (2003) review vertical and horizontal IIT in East Asia and compare it with trade patterns in other regions, particularly the European Union. In this note I would like to review our results and discuss the future potential of East Asian regional trade.

Trade patterns can be divided into one-way trade (OWT), horizontal intra-industry trade (HIIT), and vertical intra-industry trade (VIIT). Figures 1 and 2 show the patterns in intra-EU and intra-East Asian trade for each commodity category. The shares of each type of trade in the total trade in a particular commodity are expressed as one point in the diagram: the share of OWT is depicted as the distance between this point and the horizontal line HIIT-VIIT; similarly, the share of HIIT is shown as the distance to OWT-VIIT, and the share of VIIT as the distance to OWT-HIIT. The starting point of each arrow corresponds to the values for the year 1996 and the end of the arrow corresponds to the values for 2000. Although the figures for East Asia are located towards the upper right in comparison with those for the EU, there is a similar pattern in terms of the differences between commodity groups. In both the regions, OWT dominates the trade in agricultural and mining products. The share of VIIT is relatively high in the trade in machinery.

There also exist some differences between trade in the EU and in East Asia. In East Asia, the share of VIIT is exceptionally high in the trade in electrical machinery and general and precision machinery. We should note that in East Asia, export oriented FDI is concentrated in these sectors. In the EU, the shares of VIIT and HIIT are very high not only in the trade in this type of machinery but also in the trade in many other manufacturing products, such as chemical products, transportation machinery, and wood and paper products.

It is important to note that – as shown in Figures 3 and 4 – the commodity composition of intra-East Asian trade is very different from that of intra-EU trade. In East Asian trade, the shares of electrical machinery and general and precision machinery are very high (30.5% and 19.2% respectively versus 10.7% and 18.1% for the EU), while the shares of transportation machinery and chemical products are very low in comparison with the EU (2.3% and 9.0% versus 16.0% and 15.5%).These differences and the fact that the IIT shares are very high in the EU trade in

transportation machinery and chemical products seem to imply that IIT has contributed to the increase in trade volumes in both regions. IIT has been a crucial factor underlying the overall increase in trade.

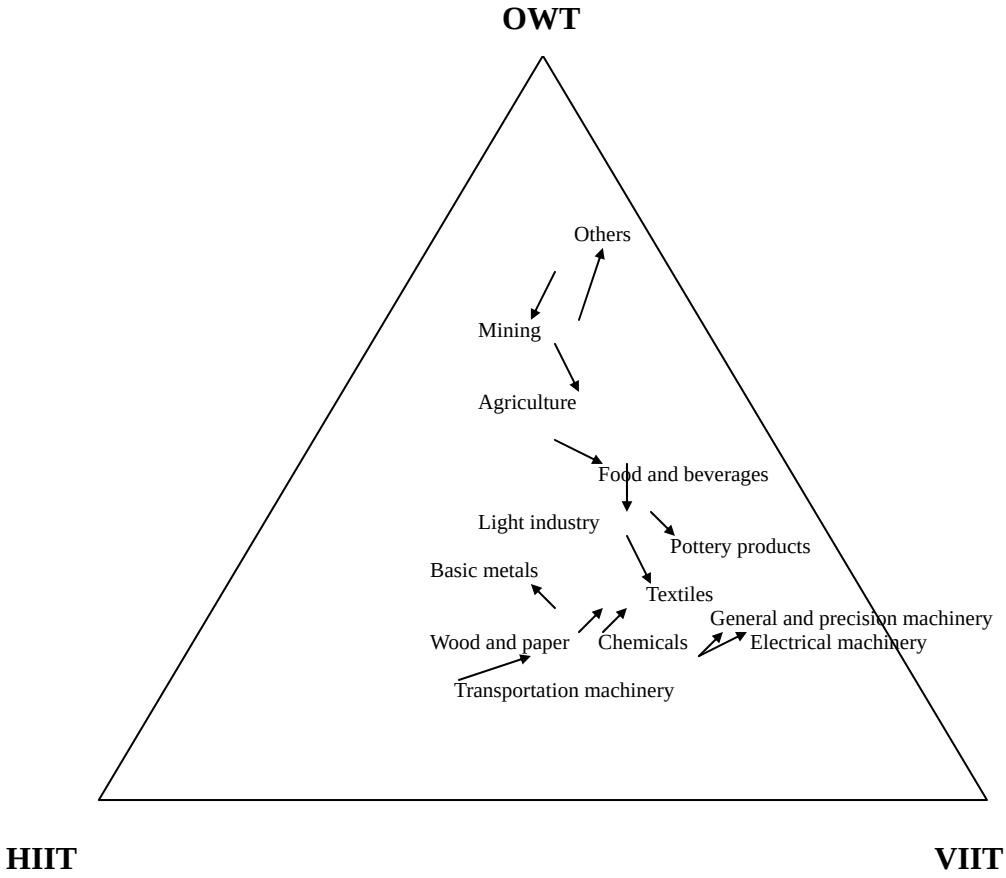
Overall, the results imply that East Asia has succeeded in increasing regional intra-industry trade with a vertical division of labor in electrical machinery and general and precision machinery. As Fukao, Ishido and Ito (2003) have shown, in this region foreign direct investment (FDI) played a significant role in the rapid increase in vertical IIT in these industries. It seems that the scale and allocation realized by the vertical division of labor, as well as technology transfer through FDI enhance the competitiveness and rapid growth of the electrical machinery and general and precision machinery industries in the region. Today, East Asia is a major supplier of IT products not only for the regional market, but for world markets.

On the other hand East Asia substantially lags behind in the regional division of labor in other industries, such as transportation machinery, chemicals, light industry, and food and beverages. This implies that there is a huge potential for the expansion of regional trade and the improvement of efficiency in these industries. In order to realize this potential, we need to achieve greater trade liberalization within the region.

Reference

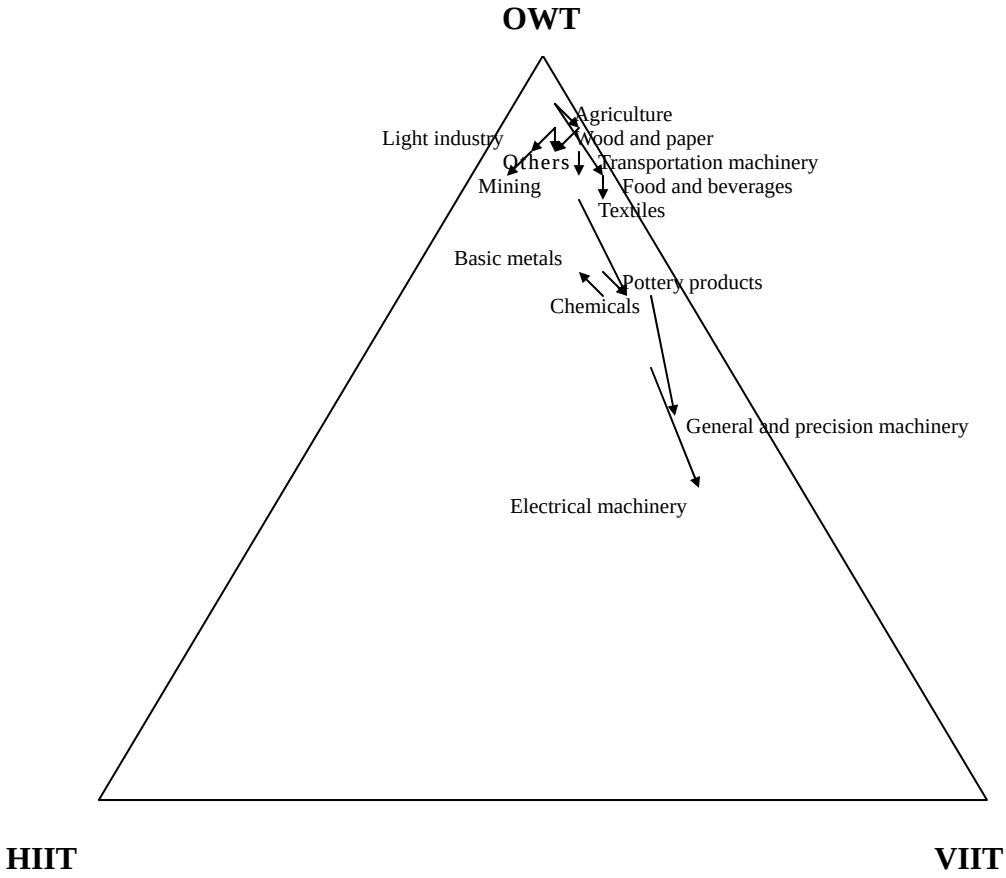
Fukao, Kyoji, Hikari Ishido, and Keiko Ito (2003) “Vertical Intra-Industry Trade and Foreign Direct Investment in East Asia,” *Journal of the Japanese and International Economies*, vol.17, no. 4, pp. 468-506.

Figure 1 The Share of the Three Trade Types in Intra-EU Trade: by Industry, 1996 and 2000



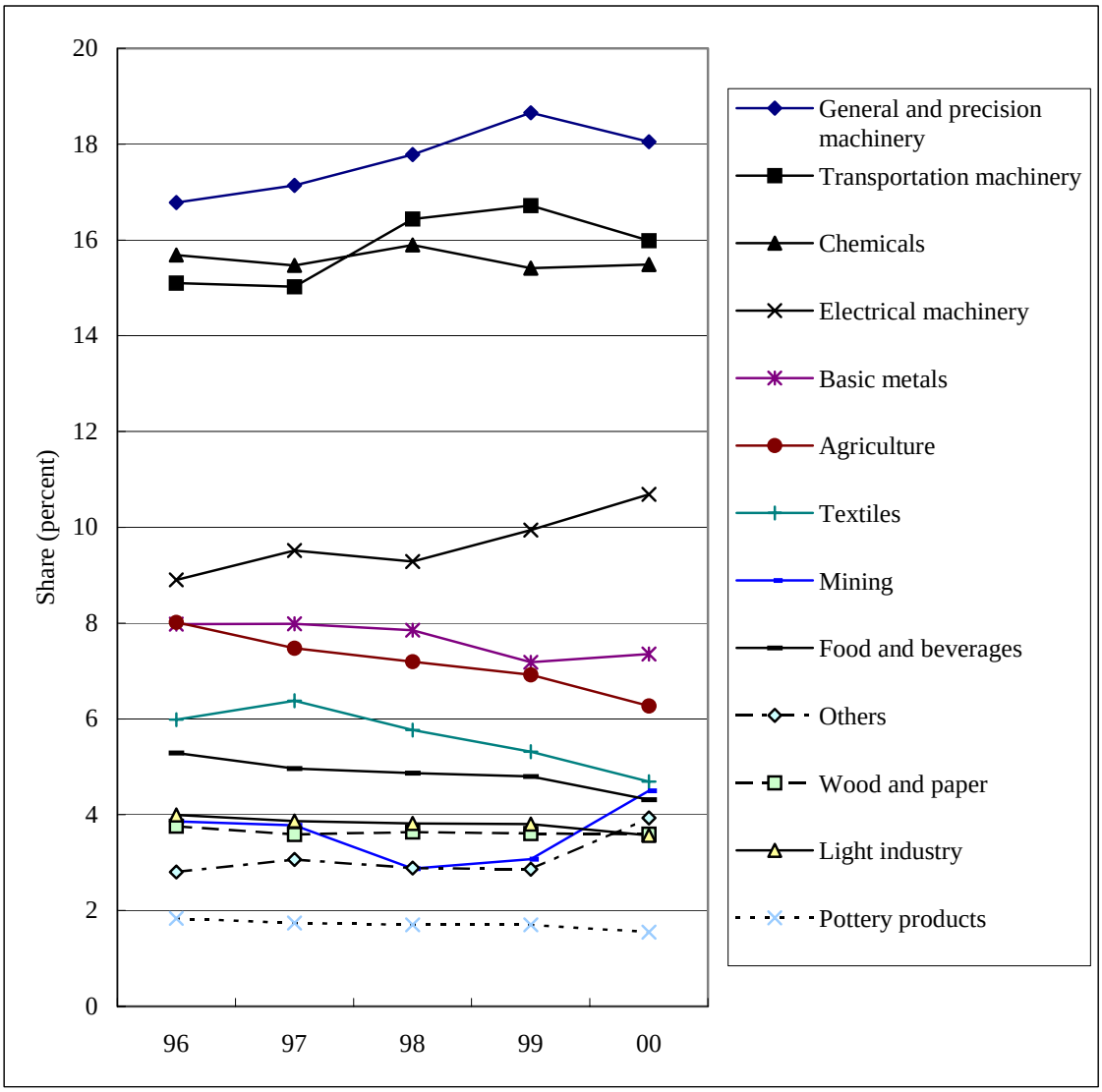
Source: Fukao, Ishido and Ito (2003). Original data is taken from PC-TAS.

Figure 2 The Share of the Three Trade Types in Intra-East Asian Trade: by Industry, 1996 and 2000



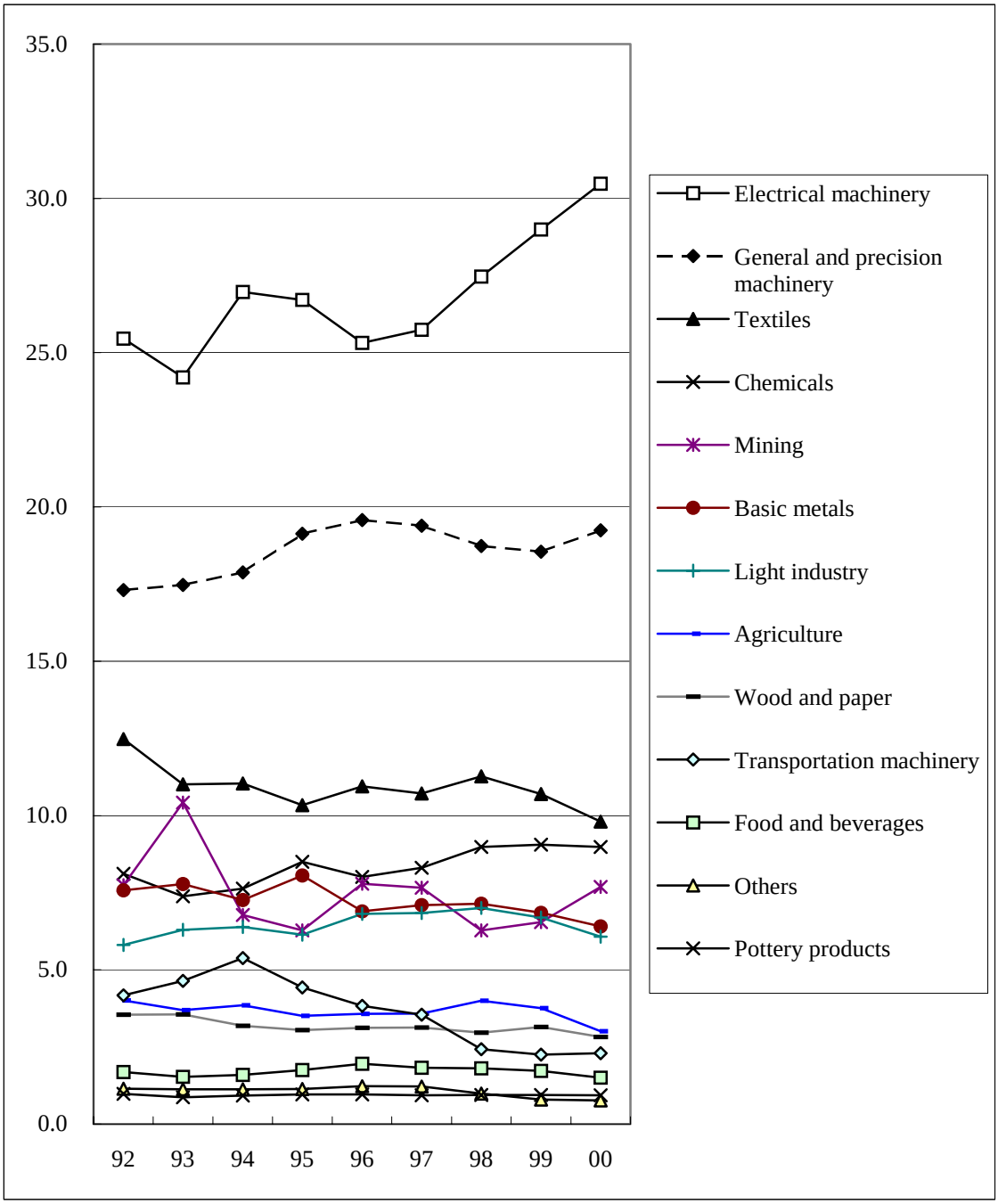
Source: Fukao, Ishido and Ito (2003). Original data is taken from PC-TAS.

Figure 3 The Commodity Composition of Intra-EU trade, 1996-2000



Source: Fukao, Ishido and Ito (2003). Original data is taken from PC-TAS.

Figure 4 The Commodity Composition of Intra-East Asian trade, 1992-2000



Note: Since the industry classification used for 1992-1995 (based on SITC-R3) is different from that used for 1996-2000 (based on HS88), each industry's figures for 1992-1995 have been multiplied by a ratio which make the two sets of figures for 1996 (the one based on SITC-R3 and the other based on HS88) equal.

Source: Fukao, Ishido and Ito (2003). Original data is taken from PC-TAS.