

The Value-Added in Trilateral Trade among Mainland China, Taiwan and the United States: A Global Value Chain Approach

Topic: Issue in modelling international trade

Author: LIN HSING-CHUN

Co-Authors: Ching-Cheng Chang, Shih-Hsun Hsu

The issue of trade imbalance between Taiwan, the U.S. and China, which are concerned by all walks of life today, is based on the results of traditional trade statistics. However, the traditional trade statistics method is "gross" statistics, which is different from the "net amount" of GDP statistics. As a result, the increase in the amount of foreign trade in a country does not necessarily mean that GDP has risen, causing an overestimation of the contribution of exports to GDP, and distorting a country's presentation of external competitiveness. This article will clarify the true situation of the trade between Taiwan, the United States, and China from the perspective of the added value trade and trade in value-added. Although the results obtained by the two methods of estimation are different, the results of both countries tend to be consistent when one country agglomerates all its trade counterparties and industrial sectors. Just as in the taxation theory, the economic end-result (metaphor for value-added trade) and the legal end-result (for example, trade in added value) are summed together and equal to the total tax.

The value-added of Taiwan's additional value is far less than the current total amount of statistical exports, among which the value of Taiwan's value added to U.S. exports as a percentage of Taiwan's GDP shows a declining trend and represents a decline in Taiwan's economic dependence on the United States. On the other hand, the value of Taiwan's added value to China as a percentage of Taiwan's GDP is on the rise, reflecting the increasing dependence of Taiwan's economy on China. However, Taiwan's added value to the United States is slightly higher than that of traditional trade statistics. Taiwan has surpassed the United States. Taiwan's added value to China is far lower than traditional Taiwan's surpassing China. There are different trends. It is mainly Taiwan's exports to China, many of which are assembled and processed and then exported to the United States. Finally, the United States "adsorbs" the added value created by Taiwan. As a result, Taiwan's added value to the United States exceeds that of traditional statistics, which is an added value outperformed the traditional low.

The results indicate that Taiwan's exports are mainly for foreign OEMs, and key original components rely on imports, resulting in a higher share of foreign acquisitions. A closer look at the source of the domestic value-added of Taiwan's exports is mainly due to the export of middle goods, and the proportion is increasing. On the contrary, the proportion of the final goods exports has gradually declined. Among them, the export to the United States was mainly from the final goods exports before 2004, and it was transformed to mainly middle goods exports after 2005. As for Taiwan's exports to China, the proportion of exports from middle goods has been higher in the past 15 years. This shows that Taiwan's industry is participating in global value chain activities and moving to the upper and middle streams. Comparison of Taiwan to the United States and Taiwan to China's VAX and DVA, Taiwan's actual added value earned from the United States is greater than the apparent the United States paid. This is because the United States has absorbed the US's bilateral trade exchanges from Taiwan and the United States. Also, VAX is larger than DVA because the added value created by Taiwan is invisible in other countries' exports to the United States, and the United States also indirectly absorbs the added value created by Taiwan through other countries. Secondly, the added value that Taiwan earns from China is less than China has apparently paid to for Taiwan. The main reason is that part of the added value that China has paid to Taiwan is passed on to other countries, and the United States is the main absorbing country. This shows that China is an important processing and transfer station for Taiwan's exports to the United States.