

## Trade Patterns and Determinants of International Specialization Structure between ASEAN and China

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Jaewan Cheong Senior Researcher, Southeast Asia and Oceania Team, Department of Asia-Pacific  
(jwcheong@kiep.go.kr)

Ho-Kyung Bang Senior Researcher, Cooperation Policy Team, Department of International Cooperation Policy  
(bassgu@kiep.go.kr)

### 1. The Structure and Characteristics of Trade between ASEAN and China

Both China and ASEAN are recognized as the important markets in the world, and they have emerged as global factories and parts production bases. Furthermore, trade between China and ASEAN is also rapidly expanding. China has been ASEAN's largest trading partner since 2007, and the trade volume between the two regions exceeded USD 400 billion in 2012. ASEAN has also become as one of China's three major trading partners.

In trade between China and ASEAN member countries from 2002 until 2012, Malaysia, Thailand, Singapore, Indonesia, and Vietnam show the most conspicuous performances. Malaysia has the largest volume of trade with China while Vietnam has increased its volume of trade with China at the fastest pace. China has been actively investing in ASEAN since the 2000s. Singapore is the largest investment destination in the region, followed by Myanmar, Cambodia, and Indonesia. Meanwhile, ASEAN's investment in China began much earlier, and the corresponding volume of investment is 3.8 times larger than that of China's investments in the ASEAN region.

To identify the trade patterns between China and ASEAN, the authors looked into the production process based on the data from UN Comtrade (Broad Economic Categories: BEC). During the studied period from 2002 until 2012, China's exports to ASEAN were characterized as i) a constant increase in the share of final goods centered on capital goods, and in the share of intermediate goods consisting of mainly semi-finished goods, and ii) a rapid decrease in the share of intermediate goods consisting of parts and components. In the case of China's imports, however, the share of primary goods is rebounded while the share of intermediate goods - including semi-finished goods and parts and components - is shrinking. This indicates that i) Chinese final goods are gradually expanding their market share in ASEAN and ii) China's policy to foster the domestic intermediate goods industry has succeeded and it has induced import substitution. In addition, it predicts future changes in the supply chain within East Asia as well as between China and ASEAN.

A review of the structure of trade between China and major ASEAN countries by industry reveals that diverse products (such as machinery; textiles and textile articles; base metals and articles of base metal; vegetable products; processed food products; mineral products; products of the chemical or allied industries; etc.) have borne the highest share in China's exports to each of the ASEAN countries in the early 1990s, but recently, the highest share in exports have been made by limited items, such as electric and electronic products, machinery, textiles and textile articles, etc.<sup>1</sup> China's imports have

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<sup>1</sup> The export and import structure by industry between China and major ASEAN countries have been analyzed after all the industries were classified into 22 sections using the two-digit HS codes (chapters) data. Firstly, the industries were grouped into 21 sections, and among them, Section 16 was

been marked by a relative specialization in one or two lines of business. This means that ASEAN's export competitiveness of major industries has gradually weakened compared to China's.

## 2. International Specialization Structure between ASEAN and China

The study finds a rapid increase in intra-industry trade where differentiated products are traded within the same industries between China and ASEAN countries over the last 20 years. Intra-industry trade has sharply increased between China and Indonesia, Malaysia, Thailand, and Vietnam, respectively, among ASEAN countries. In particular, such changes have resulted from the deepening structure of vertical international specialization between China and each of its trading partners.

The study also examined the structural change of industrial specialization between China and ASEAN countries. The result shows that intra-industry trade of electronic products has expanded rapidly. Aside from this sector, the analysis shows that textiles and textile articles account for a higher share of intra-industry trade in Chinese trade with Indonesia and Vietnam, respectively, while the machinery industry takes up a higher share in Chinese trade with Malaysia, Singapore, and Thailand.

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divided again into Chapter 84 (Machinery) and Chapter 85 (Electronic Products). In addition, in order to review changes in such structure in the early 1990s and during recent years, a comparison was made between the average cost during the initial five years (1992-1996) and the recent five years (2008-2012).

### 3. Determinants of the International Specialization Structure between ASEAN and China

Through an empirical analysis on determinants of the international specialization structure between China and ASEAN countries, the study finds that the deepening structure of vertical international specialization between the two regions over the past 20 years has been directly influenced by variables representing national characteristics, such as distance (trading cost), common language, the size of the national economy and income gap as well as intra-regional foreign direct investment.

The negative sign appearing in variables representing the relationships between vertical intra-industry trade and income gap is deemed to be the characteristics of trade in the East Asia region. So to speak, trade between China and ASEAN countries is based on trading intermediate goods for the export of finished goods to offshore markets rather than consumption. In particular, foreign direct investment was not statistically significant to horizontal intra-industry trade between China and ASEAN countries, while it showed a significant positive correlation with vertical intra-industry trade. In other words, this analysis shows that vertical intra-industry trade between China and ASEAN countries has been positively influenced by intra-regional foreign direct investment over the last 20 years.

### 4. Conclusion and Implications

The expanding trade and deepening international specialization between China and ASEAN countries have the following implications for the world:

First, if China's growing exports to ASEAN countries result from the increasing investment of Chinese enterprises in ASEAN, the share of intermediate and capital goods in China's exports to the region is expected to increase further in the future.

Second, the fact that ASEAN's exports to China are sharply increasing in consumption goods such as electrical and electronics products and machinery suggests that ASEAN is being increasingly considered as a hub of multilateral production networks. Recently, many multinational corporations are using Vietnam and Indonesia as a specialized production base in order to avoid the growing China risk and to utilize ASEAN. A typical example is the northern region of Vietnam, which is emerging as a production base of the global electric and electronics industry.

Finally, various types of international specialization structure which connect China and ASEAN is likely to emerge since many bilateral and multilateral free trade agreements (FTAs) in the East Asia are being pursued. It is well known that FTAs reduce trading costs between the parties to the agreement, and in turn, lower trading costs will help further deepen the intra-regional specialization structure. **KIEP**