The Pattern of Intra-ASEAN Trade in the Priority Goods Sectors

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EXECUTIVE SUMMARY

The ASEAN has taken a serious step to deepen economic integration when it resolved to move towards an ASEAN Economic Community by 2020. Deepening economic integration implies that markets of member economies are fully integrated as a result of the liberalized flow of goods, services and factors of production, producing unrestricted competition and convergence of prices across national borders. As an initial step towards the goal, the Leaders, during their Summit in 2003, endorsed the acceleration of integration of eight priority goods sectors and three services sectors. The goods sectors include agro-based products, fisheries, healthcare products, rubber-based products, wood-based products, textiles and garments, electronics and information and communication technology (ICT), and automotive. The services sectors include e-ASEAN, healthcare, air travel and tourism.

However, before proceeding to accelerate the integration of the above sectors, there is a need to establish the degree of integration already achieved in the sectors. After all, the ASEAN, since 1992, has been implementing a number of initiatives to achieve economic integration in the region. Information on the degree of existing integration in the sectors will assist the ASEAN in determining how its resources (financial, manpower, time, etc.) be used for accelerating the integration of the priority sectors.

The primary goal of this study is to determine the degree of integration within each priority goods sector. This is accomplished by first examining the factors and forces driving economic integration in the region; and then measuring the degree of integration of the sectors and products using the intra-industry trade index.

Factors Driving Economic Integration

Three factors drive economic integration in the ASEAN. The first factor is a market-led process through the international production sharing of multinational companies (MNCs), made possible by the unilateral and multilateral reduction of barriers to trade and investment, and the rapid development of transportation, and information and communication technology. Under the production scheme, different stages of production are spread to locations that offer significant advantages in production costs and access to export markets. The labor-intensive segment of the production chain is usually located in developing countries where wages are low. International production sharing is commonly applied more intensively in trade in electronics and semiconductors, automotive, and textiles and garments.

To a large extent, the integration of the ASEAN into the production network was the result of the industrial restructuring of the newly industrializing economies (NIEs), who were themselves the initial hosts of the offshore production of Japanese and American MNCs. When wage rates in the NIEs began to rise in the 1990s, these economies lost their comparative advantage in the labor-intensive segment of the production chain, causing them to move their production offshore to ASEAN, China and other developing countries in South Asia. The outcome of this integration process was the significant improvement of economic performance in East Asia and the intensification of economic linkages among economies in the region.

The domestic policies of the ASEAN play a crucial role in shaping their capacity to take part in the global production chain. In general, the unilateral trade and investment liberalization policies of the member economies fostered domestic efficiency and produced competitive industries. The integration of the priority sectors, however, is strongly determined by the members' sectoral policies. The domestic policies vary across the priority goods sectors. There is greater openness and liberalization in the electronics and ICT sectors. In particular, the liberal investment policies facilitated immensely the expansion of the global operations of MNCs and the consequent FDI. Because of the liberal environment, the development of production networks across the region is largely market-determined. The result is a regionally integrated sector, as will be discussed later.

In contrast, there is protectionism in the textiles and garments industry, given the relatively high tariffs in the sector. This led to competition among the members and a highly fragmented industry. On the other hand, the production networks in the automotive industry are largely policy-determined, with the ASEAN-5 promoting their respective national car programs. The restrictive tariffs and regulations that supported the program have limited the development of a regionally integrated automobile industry. The other priority sectors (agro-based, fisheries, rubber-based and wood-based) are still relatively highly protected.

The second factor driving economic integration is institution-led, through the free trade and investment agreements and functional cooperation arrangements. Barriers to intra-regional trade were gradually reduced because of the ASEAN Free Trade Area (AFTA). AFTA was just the right policy for attracting the FDI-driven production networks. By reducing the barriers to trade across the region, AFTA created an environment where MNCs are freer to choose their cross-border bases and conduct their economic activities; thus allowing them to exploit factor price differences within the region.

Intra-ASEAN investment is promoted through the ASEAN Investment Area (AIA), where barriers to investment are gradually eliminated and rules and policies on investment are liberalized. On the other hand, intra-regional restrictions on trade in services are also gradually liberalized under the ASEAN Framework Agreement on Services (AFAS). While much still needs to be done in both areas, the AIA and AFAS reinforce the marker-led integration process going in the region and strengthen production linkages. The ASEAN also implements a number of regional cooperation programs, particularly in industrial cooperation and harmonization of policies and institutions, to make the region more attractive to FDI.

The third factor driving economic integration is a private sector-led process through sub-regional economic zones (SREZs) in contiguous areas of two or more economies in the region. The aim of SREZs is to enhance the attractiveness of investment in the contiguous areas by combining their competitive advantages, and exploit economic complementarities and economies of scale. The SREZs help strengthen integration in the region.

Pattern of Intra-ASEAN Trade and Investment in the Priority Goods Sectors

Trade. The share of the ASEAN in the world export market of the priority sectors ranged from an average of less than 1 percent per year for automotive to 18 percent per year for ICT for the period 1997-2001. Given the role of the ASEAN in the global production network of ICT and electronics, these sectors registered the highest shares in world exports, i.e. 16-18 percent per year. Fisheries and rubber-based products came next, with the ASEAN accounting for about 12-15 percent of total world exports. The rest of the priority sectors accounted for less than 10 percent of world exports.

The ASEAN also accounted for less than 6 percent per annum of the total world imports in the priority sectors over the same period, except for ICT which accounted for a share of about 15 percent. Again, the role of the region in the global production network of ICT reflects the high share of the region in the world imports of the sector.

A general trend can be observed in the overall export performance of the priority sectors. Except for healthcare products, ICT and automotive, ASEAN's exports of the sectors suffered a decline in 1997, probably because of the crisis. While there was a gradual increase since 1999, exports in 2001 were still below the pre-crisis performance. The region's share in the world market also registered a decline. This implies that the sectors have not recovered yet from the crisis performance, despite the substantial depreciation of the currencies in the region. The declining trend and/or slow recovery from the crisis need to be addressed if an integrated ASEAN region is envisioned to increase its share in the world market.

In terms of the performance of the priority sectors relative to the total intra-ASEAN exports and imports, the priority sectors accounted for a combined share of 44 percent and 46 percent per year of the region's total intra-ASEAN exports and imports, respectively, over the period 1997-2001. The large percentage shares signify the importance that these sectors play in intra-ASEAN trade.

The importance of the priority sectors to the ASEAN is also shown by the shares of the sectors in the individual member's total intra-ASEAN exports. For the ASEAN-5, the total share of the priority sectors in a member's total intra-ASEAN exports ranged from an average of 36 percent per year (Indonesia) to 55 percent per year (Thailand) over the period 1997-2001. ICT accounted for the largest share in total intra-ASEAN exports of these economies. This due primarily to the role that these economies play in the regional production network of MNCs.

On the other hand, for the CLMV, the total share of the priority sectors in a member's total intra-ASEAN exports ranged from an average of 42 percent (Vietnam) to 76 percent (Laos) over the same period. This was much higher than the shares registered by the ASEAN-5. This shows that the region is a significant market for the exports of the CLMV. In contrast to the ASEAN-5, however, agro-based and wood-based products accounted for the largest share in total intra-ASEAN exports of these economies.

To a large extent, the domestic policies shaped the pattern of intra-ASEAN trade and the model of integration that each sector took. For example, the findings of the study show that intra-ASEAN trade in the electronics and ICT sectors is highly concentrated to a few products, as shown by the large percentage shares of the top three exports and imports of each member economy. The high concentration implies specialization in production. Furthermore, the ASEAN-5 are exporting and importing the same products, and they are exporting to and importing from the same economy or economies. This implies that each economy is specializing on a particular segment of the production chain. This pattern of trade was the result of the liberal policy environment in the sectors. The market-determined environment enabled the MNCs to spread their operations across the region.

On the other hand, the pattern of intra-ASEAN trade in healthcare products differs from the ICT and electronics. The pattern of trade shows that each economy differs in their product niches; and that each economy's export niche differs from its import niche. The pattern shows that each economy serves as the regional production center for a particular healthcare product, which is ultimately distributed and exported to the rest of the region.

A different pattern of trade also characterized the automotive industry. Production strategies of MNCs in the region are largely dictated by their headquarters located in developed economies. Production is basically for the regional market. And because the individual markets of member economies are small, the pattern of trade shows that production of specific automotive parts and products is centralized in a particular economy to achieve economies of scale; but are geared for distribution and exports to the rest of the region.

For the textiles and garments sector, there was no product specialization as each economy produces a wide range of products, as shown by small percentage share of the top three (or five) export and import products of each economy. The same pattern holds true for agro-based products and fisheries.

For rubber-based products, the intra-ASEAN trade pattern shows that the less developed members (Indonesia, Myanmar, Philippines, Thailand and Vietnam) exported natural rubber to the more developed member (Malaysia and Singapore), who in turn supplies them with rubber-based products. On the other hand, the intra-ASEAN pattern of trade for wood-based products divides the members into two groups. One group, composed of Laos Myanmar and Malaysia, exported products of lower value added; while another group, composed of Indonesia, Philippines, Singapore and Thailand, export products of higher value added.

Investment. The priority sectors together accounted for a combined share of 45 percent per year of the total FDI in the region over the period 1995-2001. The share of the sectors to total FDI in the region shows an increasing trend from 26 percent in 1995 to 61 percent in 2001. Even during the crisis period in 1997-1999, despite the dramatic drop in FDI by more than 50 percent, the sectors managed to increase their combined share from 37 percent in 1997 to 49 percent in 1999. This implies a growing attractiveness of the sector to FDI.

Among the sectors, electronics and ICT were the largest recipient of FDI for most of the ASEAN-5. The FDI inflows are consistent with the increasing extent to which MNCs in these sectors have located parts of their operations in these economies. On the other hand, automotive received the least FDI and this is true for every member economy. The small FDI could be attributed to the protection accorded the industry through the members' national car program and the restrictive tariffs and regulations that supported it.

On average, there was strong dependence on FDI from outside of the region, as shown by the small share of intra-ASEAN FDI to the total FDI in the sectors. The shares ranged from an average of 6 to 26 percent per year during the period 1995-2001. However, the CLMV were strongly dependent on the region for their source of FDI, particularly in agro-based, rubber-based and wood-based products.

Intra-Industry Trade and Integration in the Priority Goods Sector

The above pattern of intra-ASEAN trade is also supported by the degree of integration in each sector as measured by the intra-industry trade index (IIT). The index is used to measure intra-industry trade, defined as the export and import of products belonging to the same industry. However, the index is also used as a measure of deepening integration since they reflect an increase in the division of labor. The sectors and products are classified according to their degree of integration based on the values of the IIT index.

The findings of the study show that the overall level of intra-industry trade and integration at the sectoral level was relatively high only for a few sectors, and only for some specific member economies. Singapore is the most integrated in the region. The economy had the most number of products that registered strong and moderately strong intra-industry trade. Among the sectors, intra-industry trade and integration was relatively strong in the ICT and electronics sectors for most of the ASEAN-5 members. Integration is moderately strong in healthcare products in Malaysia, fisheries in the Philippines, rubber-based products in Singapore, and automotive in Malaysia and Indonesia.

For the CLMV, either no trade or integration exists in Brunei and Laos; and weak but improving integration in Vietnam and Myanmar.

For the other sectors, particularly agro-based, fisheries, wood-based and rubber-based, integration was at most mild for the ASEAN-5, and weak or no integration for the CLMV. In other words, trade in these sectors is basically inter-industry rather than intra-industry trade. But this is not surprising considering the nature of their production. These sectors are basically agricultural and consist of relatively simple transformation of raw materials with which the member economies are endowed; and that such transformations are not suited to division across the economies in the region.

Nonetheless, while intra-industry trade for most of the priority sectors is still below the moderately strong classification, the findings show a large increase in intra-industry trade between 1997 and 2001. The increase indicates increasing and deepening integration.

At the product level, the findings on intra-industry trade are mixed. Apart from the products of ICT and electronics, products belonging to the other priority sectors, particularly healthcare and automotive, also registered strong intra-industry trade and integration. Nonetheless, integration in most of the products of the priority sectors is still weak.

Policy Measures to Achieve Economic Integration

The above findings pose a big challenge to the ASEAN on how to achieve economic integration in all the priority sectors. Given the significant role of FDI and production sharing of MNCs in the integration of the region, the key strategy is for the ASEAN-5 to remain competitive in the international production chain and for Brunei and the CLMV to be integrated in the same. This calls for policies that go beyond trade and investment liberalization. The key is to enhance the locational advantages of the region by lowering the costs of cross-border transactions in order to make the entire set of ASEAN membership more attractive as investment destination and export markets. Among others, this requires industrial upgrading, acceleration of trade and investment liberalization in the priority sectors, elimination of non-tariff barriers, trade and investment facilitation, enhancement of the mobility of labor across national borders, improvement of infrastructure and logistics, and adoption of a common framework for bilateralism and regionalism by the member economies.

The ASEAN should give priority to strengthening its efforts at deepening integration in ICT, electronics, automotive and healthcare products as these were the sectors that show great potential for economic integration.

Industrial upgrading is most critical to ICT, electronics, and garments and textiles, as the region is losing its comparative advantage in the labor-intensive segment of the global production chain. The ASEAN-5 needs to upgrade to the high-value and skill-intensive segment of the production chain in order to increase its competitiveness vis-à-vis China and to give Brunei and the CLMV the room to be integrated in the labor-intensive segment of the value chain. This requires the development of local supplier industries that can provide the intermediate inputs. As the local suppliers in the region are few and still immature, a package of technical assistance and specialized training to develop the skills of local suppliers must be implemented.

For the automotive sector, a more openly competitive trade and investment environment is crucial to achieving an economically integrated automobile industry. This will require the removal of the policy on local content requirement and the full implementation of CEPT on the sector by all members.

For healthcare products, since each member economy is aiming to be a regional production and distribution center for a particular healthcare product, harmonization of standards and regulations is crucial for the smooth flow of healthcare products across the region. MRAs for healthcare products should be developed.

Finally, for agro-based, fisheries, rubber-based and wood-based products, integration can be achieved if the value-added of these sectors will be increased through further industrial processing. Each economy can specialize in the production of a particular manufacturing product for exports to the rest of the region. Specialization will be driven by each economy’s comparative advantage in these sectors.