Chapter II.4

ERIA Perspective on the WTO Ministerial and Asian Integration: A View from Japan

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II.4 ERIA Perspectives on the WTO Ministerial and Asian Integration: a View from Japan

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1. The new reality of global trade

One of the prominent features of global trade is the rapid growth of intermediate trade. Roughly speaking, two things have shaped the current growth in global trade. *First*, firms are globalizing. Firms generally prefer multi-plant production to a single production plant. There are several reasons for this, two of which appear worth of emphasis in the context of global supply chains. One is the desire of firms to locate their production facilities near to their markets, which decreases the production risk for the firm and the transportation costs incurred by a customer, as well as enabling it to respond more quickly to complaints about a defective product. The other is the wish to escape from congestion, such as increases in wage rates and land prices, and traffic jams, by seeking a more reasonable production location. Indeed, Japanese automobile makers have a total of 169 plants overseas: 97 are located in Asia, 19 in Europe and 19 in North America.

Second, firms are specializing. Global competition has forced firms to achieve economies of scale by specializing in a few production processes, and outsourcing others according to location advantages. Keeping 'headquarter services' such as R&D, design, marketing, financing, and selection of first tier-suppliers in their home countries, multinational enterprises have located assembly facilities where labor is abundant. Due to specialization and outsourcing, production fragmentation has progressed not only at the final production stage, but also in other sequential production stages. Jones and Kierzkowski (1990) argue that if the service link costs of linking separated production blocks within a country and across countries fall, this will encourage production fragmentation.

The combined result of firms globalizing and outsourcing has shaped a new reality of

global trade characterized by the emergence of global supply chains, operated by a final assembler and multi-tiered suppliers, based on either intra-firm or arm's length trade. In particular, due to specialization and outsourcing, a large number of arm's length suppliers participate in global supply chains. Furthermore, global competition has provided great opportunities to indigenous suppliers to participate indirectly in global supply chains. Therefore, the labor and capital of many countries are directly and indirectly employed in producing final export products. Now, global trade is not only a trade issue but also an issue of location of firms and industry.

2. A misleading conventional view

Conventional customs based trade data cannot adequately account for today's global trade conducted by assemblers and multi-tier suppliers, and in which the labor and capital of many countries are engaged.

First, the same product can be both an input and a final good. However, customs data cannot classify a particular product used as an input or a final good. An example of such a good is car tires: they are purchased both by firms, as an input into car production, and by final consumers who fit tires to their cars.

Second, and more importantly, in global supply chains, customs data counts the value of the same product each time it crosses a border for further processing. As a result, the value of a final export product increases, which has led to the misunderstanding in an importing country that jobs are lost by an exporting country. The new trade reality is that labor and capital of many countries are employed either as inputs of goods or inputs of services, although the tasks of labor vary from economy to economy according to the stage of industrialization: the tasks of the US include 'headquarter services'; R&D, design, marketing (financing, global production planning, including allocation of production by economy and region, and selection of first-tier suppliers), while one of China's tasks is final assembly., One of ASEAN's

tasks is providing inputs, while that of Japan is to provide materials.

Discussions based on conventional customs based trade data might mislead trade and industrial policy-makers. We need a new measurement to allow us to see a real picture of global trade and to discuss trade and industrial policies in the context of global supply chains.

3. Policy implications of TiVA for developing economies

Trade in value-added (TiVA) data, which can be obtained by the application of the Leontief inverse matrix to international input–output (I–O) tables, make it possible to calculate the direct and indirect value-added generated by country's exports.

The Institute of Developing Economies–Japan External Trade Organization (IDE–JETRO) and WTO (2011) estimated TiVA by using the Asian International Input-Output Tables developed by IDE-JETRO. The above study by observed a fundamental change 'from trade in goods to trade in tasks' that has been taking place in the structure of international trade. This fundamental change suggests that the conventional way of thinking about imports and exports, based on customs data is increasingly outmoded.

The second release of the OECD–WTO TiVA data in May 2013 covers 57 economies, including China, Chinese Taipei, India, Indonesia, Malaysia, the Philippines, Singapore, Thailand, and Vietnam. Noteworthy findings on Europe and Asia include the following:

- Imports are inputs of exports. The foreign content of exports in Europe and Asia increased from 1995 to 2009. Thirty-three percent of all Chinese exports in 2009 embedded foreign content, up significantly from 12% in 1995. The figures for

Singapore, Malaysia, and Thailand in 2009 were 50%, 38%, and 35% respectively.

- Many economies are engaged directly or indirectly in producing a final exported product.
- Services are inputs of exports. The service sector contributes over 50% of total exports of the US, France, Germany, and Italy, and nearly one-third of China's exports, are provided by both domestic and foreign service providers.

The above facts suggest that, in order to build a resilient economy or an export platform, imports and services are essential ingredients. What then are the policy implications of TiVA for developing economies? In the earlier age of international production, a large economy was an advantage for industrialization. But in these days of global supply chains and production fragmentation, it is a different story. Even a small economy can invite a few production processes to start industrialization by improving connectivity. Multinational enterprises are continually assessing the location advantage of each city and economy. Indeed, in 2003, there was no modern manufacturer in Lao PDR or Cambodia. But now there are many. Nikon operates in Laos, and Minebea, a world market leader in the manufacturing of ball bearings, does so in Cambodia. Both ASEAN Member countries are today industrializing rapidly.

4. Theories of firm location in globalization

Considering how the globalizing and outsourcing strategies of firms is shaping current global trade patterns via global supply chains, a critical matter for trade increasingly concerns the issue of firm location. Not surprisingly, the theory of firm location in the age of globalization has been undergoing rapid change.

Krugman (1991) argued that, in order to realize economies of scale while minimizing transportation costs, manufacturing firms tended to locate in regions with large

markets. Therefore a country can be differentiated into an industrialized core region and an agricultural periphery region. This theoretical argument on the geographical concentration of manufacturing based on the interaction of economies of scale with transportation costs concludes that in a high transportation cost economy, a small share of manufacturing tends to result in the presence of weak economies of scale. *A contrario*, with low transportation costs, a higher manufacturing share and strong economies of scale arise, such that circular causation sets in, and manufacturing will concentrate in whichever region gets a head start.

The concentration of manufacturing, however, will tend to cause congestion, as mentioned above, and such congestion will increase not only production but also transportation costs. What will happen next as a consequence of the increase in total costs of firms? Congestion in a country's industrialized core will generate dispersion forces to move manufacturing elsewhere. But where?

Krugman and Venables (1995) provided an answer to this question by arguing that if transportation costs between two countries fall enough to offset the disadvantage of being further away from the market and suppliers, manufacturing will move out of a core industrialized region to another location. The international dispersion of manufacturing is more likely than dispersion from a core region to a peripheral region within the same country, because differences in wage rates between countries are larger than those within a country. Firms thus tend to explore new locations in foreign countries.

The term 'service link costs' used by Jones and Kierzkowski (1990) is equivalent to the term 'transportation costs' used by Krugman (1991) and Krugman and Venables (1995), although the former focuses on trade, while the latter pertains to geographical location.

To sum up, policies to decrease transportation costs, or 'service link costs', within a country lead to industrialization with concentration of manufacturing in a core city and thereby encourage production fragmentation. The above developments on a new reality of global trade and the location of firms provide insights that could be useful with respect to the Bali Ministerial meeting.

The Bali Ministerial meeting should share a common understanding that current global trade proceeds along global supply chains in which a large number of countries are directly and indirectly engaged in producing final products. In other words, the labor and capital of many countries are employed, although tasks are different according to the location advantage and/or development stage of host countries. WTO Members can use the Bali Ministerial meeting to discuss issues beyond trade policy so that developing countries can better attract global production and insert themselves more meaningfully into global supply chains.

Trade facilitation measures should be pursued by ASEAN and East Asia at the Bali Ministerial meeting. In order to reduce transportation costs, or 'service link costs', trade facilitation measures are the most effective. In particular, if a single-window system of export and import custom clearance procedures is launched at each border, this would improve the connectivity of periphery regions, accelerate economic activities, and eventually reduce development gaps not only between but also within countries.

Agreement on the expansion of the Information technology agreement (ITA) should also be reached at the Bali Ministerial meeting. This would contribute to further develop global supply chains and strengthen 'Asia's World Factory'.

In order to build a resilient economy and a strong export platform, connectivity between countries is critical. The WTO can contribute to changing the mindset from a

‘conventional view’ to a ‘new reality of trade’, that imports and services are necessary inputs for exports. The agglomeration of industry in China is a property of Asia that allows the region to increase its presence in world production: Asia accounts for more than 50% of the world’s automobile production, 62% of liquid display screens, 86% of smartphones and 100% of digital cameras.

In global supply chains, services are vital inputs for exports. One of the major pillars of the ASEAN Economic Community is the liberalization of trade in services, but it is not as ambitious as compared to the AEC’s tariff elimination program under which tariffs will be eliminated (i.e. 0%) for almost all products. The liberalization of trade in services beyond 2015 will be necessary to realize the ASEAN Economic Community. Multilateral advances in the liberalization of services trade in the WTO will inspire further service liberalization by ASEAN.

Currently, the AEC has achieved a high-level PTA among the ASEAN-6 members and the new members will reach a similar level by 2015. However, in pursuing economies of scale, the relevant markets of Asian firms is expanding from China and several ASEAN countries to the whole of East Asia, including Cambodia, Lao PDR, Myanmar, and India. RCEP will be a new trade arrangement to facilitate such expansion and foster the emergence of leading regional and global firms. For this, RCEP should be a high-level PTA with cumulative rules of origin and common concession tariff schemes for goods and services liberalization, in particular, for Mode 3 (commercial presence). Therefore, the earlier RCEP is completed, the earlier and bigger the benefits to member economies.

The on-going TPP negotiations have led to a discussion on global trade governance. Two mega PTAs (TPP and RCEP) are on-going alongside the US-EU TTIP. New international trade rules and market opening commitments have been developing outside the WTO. Several Asian countries are negotiating RCEP and the TPP. If

these two mega-PTAs feature divergent trade and investment disciplines, this would increase transaction costs and generate a confusing situation in business arising from overlapping and competing rules of the game. The harmonization of trade rules and negotiations among mega-PTAs will be a necessary step towards advancing such multinational trade arrangements. However, if such harmonization were to proceed as between the TPP and TTIP, ii would likely be rejected by developing countries as an attempt on the part of the US and the EU to impose their standards on the rest of the world. RCEP will play a very important role in providing a template for a PTA involving a large number of economies at different stages of development.

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