China's Accession to the WTO and its Impact on the Asian Economy

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Introduction

After fifteen years of tough negotiation, China is poised to join the World Trade Organization (WTO). The reduction in barriers restraining trade and investment following WTO accession should facilitate further integration of China into the world economy -- a process that started in the late 1970s when China adopted a reform-driven open-door policy. Consistent with its comparative advantage, export expansion will continue to be led by labor-intensive products, with China using the proceeds to import more and more capital- and technology-intensive products needed to upgrade its industry.

China's WTO accession is an event that will have major implications not only for China itself but also for neighboring Asian countries. Some countries may gain more than others, while some may actually be hurt. On one hand, higher-income countries with trade structures complementary to that of China are likely to find it promising as an export market and a destination for foreign direct investment. Hong Kong and Taiwan, which have already established strong economic ties with China, will be the greatest beneficiaries. On the other hand, lower-income countries such as members of ASEAN would have to compete with China in both trade and foreign investment.

Division of Labor According to Comparative Advantage

The reduction in import tariffs accompanying WTO accession should induce a shift of resources from the importable (capital-intensive) goods sector to the exportable (labor-intensive) goods sector. The resulting increases in the supply of labor-intensive goods and demand for capital-intensive goods in the global market should lead to a deterioration in China's terms of trade, which in turn implies an improvement in the terms of trade for the rest of the world. Other economies are able to benefit from China's WTO accession through this change in relative prices. For China itself, however, the deterioration in the terms of trade implies a decline in real income, partly offsetting the gains from exchange and from specialization.

Among countries in the rest of the world a distinction should be made between winners and losers. Countries with trade structures complementary to that of China should be winners because their import prices should fall relative to their export prices as China's terms of trade deteriorate. On the other hand, the reverse is true for countries with trade structures competing with that of China.

In order to identify which Asian economies compete with China in the area of trade and which have complementary relations with it, we propose a simple, two-step way to compare their trade structures.

First, calculate the specialization indexes of major categories of manufactured goods for China and other Asian countries (Table 1). To focus on the manufacturing sector, we limit ourselves to the following four categories of goods: chemicals and related products (SITC Section 5), manufactured goods classified chiefly by material (SITC Section 6), machinery and transport equipment (SITC Section 7), and miscellaneous manufactured articles (SITC Section 8). The trade structure of each country can then be represented by a vector consisting of these specialization indexes. In the case of China, the vector of specialization indexes shows that the country is competitive in miscellaneous manufactured articles but not in chemicals and related products, with manufactured goods classified chiefly by material and machinery and transport equipment lying somewhere in between.

Second, compare the trade structure of each Asian country with that of China by calculating the correlation coefficient between their respective vectors. The correlation coefficient so derived is high (close to plus one) for countries competing with China and low (close to minus one) for countries with trade structures complementary to that of China. Since the trade structure of a country is broadly in line with its level of economic development, our results confirm that China tends to have competitive relations with the ASEAN countries and complementary relations with the Asian NIEs and Japan (Figure 1). For example, the correlation coefficient between Thailand and China is very high (0.98) while that between Japan and China is actually negative (-0.63).

Most Asian countries have increased their dependence on China as an export market, reflecting the growing size of the Chinese market and the formation of international production networks involving China. This is particularly true for Japan and the Asian NIEs, which have trade structures complementary to that of China.

Diversion of Foreign Direct Investment from ASEAN to China

WTO accession will provide another boost to the inflow of foreign direct investment into China. As in the case of repercussions through trade, the distinction between complementary and competitive relations with China again helps to separate winners from losers.

China is now the developing nation that receives the largest amount of foreign direct investment. The annual inflow, which exceeded $10 billion for the first time in 1992, has been above $40 billion since 1996. On a cumulative basis, total inflow of foreign direct investment has exceeded $300 billion. Foreign companies, which are heavily dependent on imported capital goods and intermediate goods on one hand and on overseas markets on the other, account for about half of China's international trade (45.5% of exports and 51.8% of imports in 1999).

The emergence of China as an attractive destination for investment has altered the flow of foreign direct investment in Asia, and WTO accession will aggravate this trend. Higher-income countries rich in funds and technology are likely to benefit, while lower-income countries that compete with China for foreign capital are likely to suffer. Thus, Japan and the Asian NIEs can get high returns by investing in China, while the ASEAN countries may suffer a diversion of investment funds to China.

Companies from Hong Kong and Taiwan account for about 50% of the annual inflow of foreign direct investment into China. They have strengthened their competitiveness in international markets by taking advantage of much lower costs of labor and land in the mainland.

Investment by Hong Kong into the mainland has reached $150 billion on a cumulative basis (according to Chinese statistics). Assuming a rate of return of 10% a year (a somewhat conservative guess given a prime rate of 9%), the income on this investment should amount to $15 billion, equivalent to 10% of Hong Kong's GDP. Hong Kong's strengthening ties with China have brought major changes to its economic structure. The number of workers in Hong Kong's manufacturing sector has contracted from a peak of about 900,000 in the mid-1980s to 230,000 now. At the same time, the manufacturing sector's share of GDP has dropped from 25% to 6%.

Following Hong Kong's footsteps, Taiwanese manufacturers have also been expanding their investment in China, although Taiwan's government has maintained tight controls on trade and investment across the Straits, including the requirement that trade needs to go through third countries. Until now, investment in China's high-tech sector, infrastructure, and projects exceeding $50 million has been prohibited, while imports from China were restricted to intermediate goods essential for enhancing the competitiveness of Taiwanese products. With Taiwan expected to join the WTO immediately after China, however, it will have to relax these regulations, as they are inconsistent with the provision of most-favored-nation treatment. This will give Taiwanese companies new business opportunities in trade and investment.

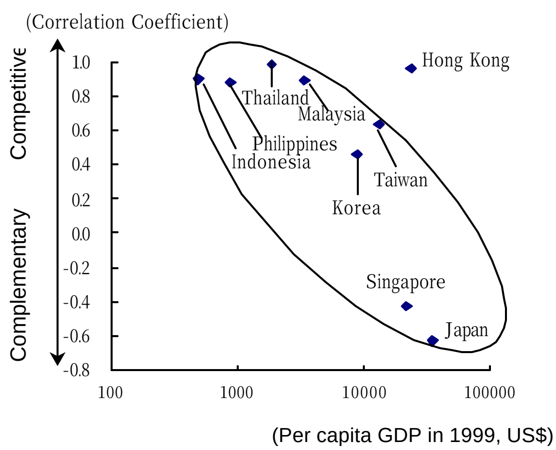
In contrast to higher-income countries that benefit from investing in China, lower-income Asian countries that are highly dependent on foreign investment to support economic development may be adversely affected as investment funds from third countries are diverted to China. Indeed, China has received more foreign direct investment than the ASEAN countries together since 1993, and the gap has widened further since the 1997-98 Asian crisis **(**Figure 2**)**. The expected further shift of investment to China following its entry into the WTO has caused anxiety within ASEAN over the adverse effects on regional economic development. To enhance their attractiveness to foreign investors, the ASEAN countries are taking steps to deregulate industries and redress domestic structural problems. At the same time, they have decided to establish an ASEAN Free Trade Area (AFTA) by 2002. By liberalizing trade in the region, AFTA should make it more attractive for multinationals to build production networks across national borders within ASEAN.

Table 1 Specialization Indexes for Major Categories of Manufactured Goods (1999)

	Chemicals and Related Products	Manufactured Goods Chiefly Classified by Material	Machinery and Transportation Equipment	Miscellaneous Manufactured Articles
China	-0.40	-0.02	-0.08	0.76
Korea	-0.03	0.30	0.28	0.23
Taiwan	-0.28	0.31	0.11	0.22
Hong Kong	-0.11	-0.10	-0.07	0.17
Singapore	0.15	-0.28	0.06	-0.09
Indonesia	-0.31	0.52	-0.04	0.84
Thailand	-0.36	-0.08	0.05	0.69
Malaysia	-0.29	-0.09	0.13	0.34
Philippines	-0.80	-0.54	-0.06	0.33
Japan	0.15	0.19	0.54	-0.13

Source: Compiled by Nomura Research Institute based on ADB,
Key Indicators of Developing Asian and Pacific Countries, 2000.

Figure 1 Competitive Relations between China and Other Asian Countries (1999)



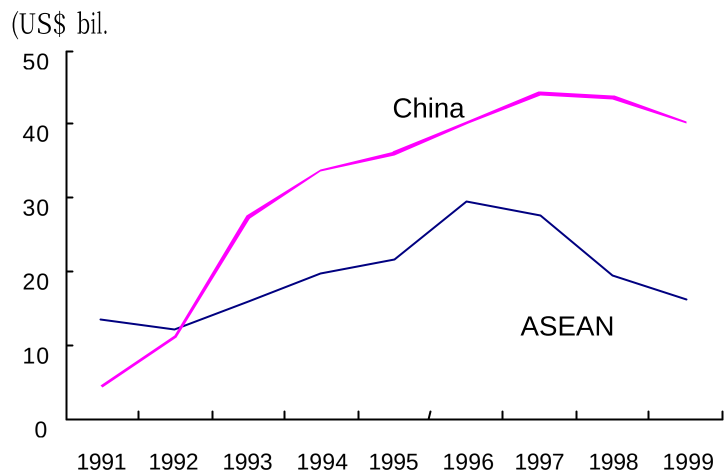
Notes

1) The degree of competition between an Asian country and China is calculated as the correlation coefficient between their respective vectors showing the specialization indexes ([exports - imports]/[exports + imports]) of major categories of manufactured good. To focus on competition in the manufacturing sector, a four-category classification comprising chemicals and related products (SITC Section 5), manufactured goods classified chiefly by material (SITC Section 6), machinery and transport equipment (SITC Section 7), and miscellaneous manufactured articles (SITC Section 8) is used.

2) The specialization indexes for Hong Kong, and thus its degree of competition with China, have been distorted by the presence of re-export trade.

Sources: Compiled by Nomura Research Institute based on ADB, *Key Indicators of Developing Asia and Pacific Countries,* supplemented by trade statistics of individual countries.

Figure 2 Shift of Foreign Direct Investment from ASEAN to China



Source: UNCTAD, *World Investment Report*