

The Rise of China as an Economic Power

– Challenges and Opportunities for Japan –

By *Chi Hung Kwan*

From Unfounded Pessimism to Unwarranted Optimism

Not too long ago, the whole world was concerned about the future of China. Political risks aside, people asked if China would be forced to devalue its currency amid financial turmoil in neighboring countries; if it would default its external debt; if its banking sector would collapse on the weight of its mountain of bad debt; and who would feed China?

This pessimism has suddenly turned into unreserved optimism. Now the international media abound with speculation that China is leapfrogging into the new economy without going through the cumbersome process of industrialization, and that China will soon overtake Japan as Asia's number one economic power, if not the United States as the global hegemon. Some people even suggest that China should allow its currency to revalue to help Japan out of its recession.

In the absence of any significant improvement in China's economic fundamentals lately, it remains a mystery why this shift of sentiment has taken place. The relative strength of the Chinese economy amid a global recession, and China's World Trade Organization (WTO) accession and hosting of the 2008 Olympics in Beijing have certainly contributed to the euphoria. But let us not forget that the Chinese economy is slowing down on the back of weaker export growth; that WTO accession involves expensive costs in terms of rising bankruptcy and unemployment (at least in the short term) and lower investment in industries that can no longer be protected by high tariffs; and that hosting the Olympic Games in Beijing would divert investment funds from the national project of developing the Western part of the country.

An Objective Evaluation of the Chinese Economy

Thus until a year ago, most people tended to underestimate China's economic power, but now the pendulum has swung to the other extreme. Any objective evaluation of China's economic strength should take into consideration the following factors.

First, economic strength depends on the size of the Chinese economy, not its rate of growth. Although China has been growing at an annual rate of almost 10% over the last 20 years, its gross domestic product (GDP) is still only a quarter that of Japan. Taking into consideration the fact that China's population is 10 times that of Japan, its per capita GDP, at less than \$1,000, is only one-fortieth (that is, 2.5%) that of Japan. Although adjusting for the purchasing power of the Chinese currency multiplies China's GDP by four times, it does not change the fact that China is still a very poor country, with its global ranking in terms of per capita GDP improving only marginally from 140 to 128 by shifting to the PPP (purchasing power parity) measure, according to the World Bank.

Second, China is heavily dependent on foreign investment, technology, and key parts and components. Half of China's exports are composed of products made by foreign companies that bring in funds and technology. Even for local firms that involve no foreign ownership, a large percentage of their exports take the form of outward processing with foreign partners providing the funds, technology, product designs, key parts and components, and marketing channels. Thus, for a \$1,000 laptop computer "made in China," the "value added" (mostly labor cost) that is truly indigenous Chinese would be a fraction of its price after discounting for the costs of imported parts and components (such as the Intel-made Central Processing

Unit), as well as the interest, dividends and licensing fees paid to foreigners.

Third, the booming coastal region represents only a fraction of the Chinese economy. Shanghai has a per capita GDP of over \$3,000, which is about 10 times as high as that of the inland province of Guizhou. It will take a long time for coastal China to catch up with the industrialized countries and an even longer time for the rest of China to do the same.

Major development indicators at the national level show that China still lags behind Japan by about 40 years. At present, China's life expectancy at birth, infant mortality rate, primary sector as a percentage of GDP, Engel's coefficient and per capita electricity consumption are similar to those of Japan at around 1960.

The Flying Geese Model of Asian Economic Development

The spreading of the wave of industrialization from Japan to the Asian Newly Industrializing Economies (NIEs) and then further to the Association of Southeast Asian Nations (ASEAN) and China during the post-war period has been characterized by the "flying geese model." Countries specialize in the exports of products in which they enjoy comparative advantage commensurate with their levels of development, and at the same time they seek to upgrade their industrial structures through augmenting their capital stock and technology. Foreign direct investment from the more advanced countries to the less developed ones, through relocating industries from the former to the latter, plays a dominant role in sustaining this process.

With the onset of the Asian crisis, and contrasting growth performance between Japan and China in recent years, it has become fashionable to advocate that, the rise of China, sup-

ported by the IT revolution, has rendered the flying geese model irrelevant in describing the division of labor among Asian countries. A closer look at the evolution of the trade structure of Asian countries over time, however, shows that the geese are still flying in an orderly manner.

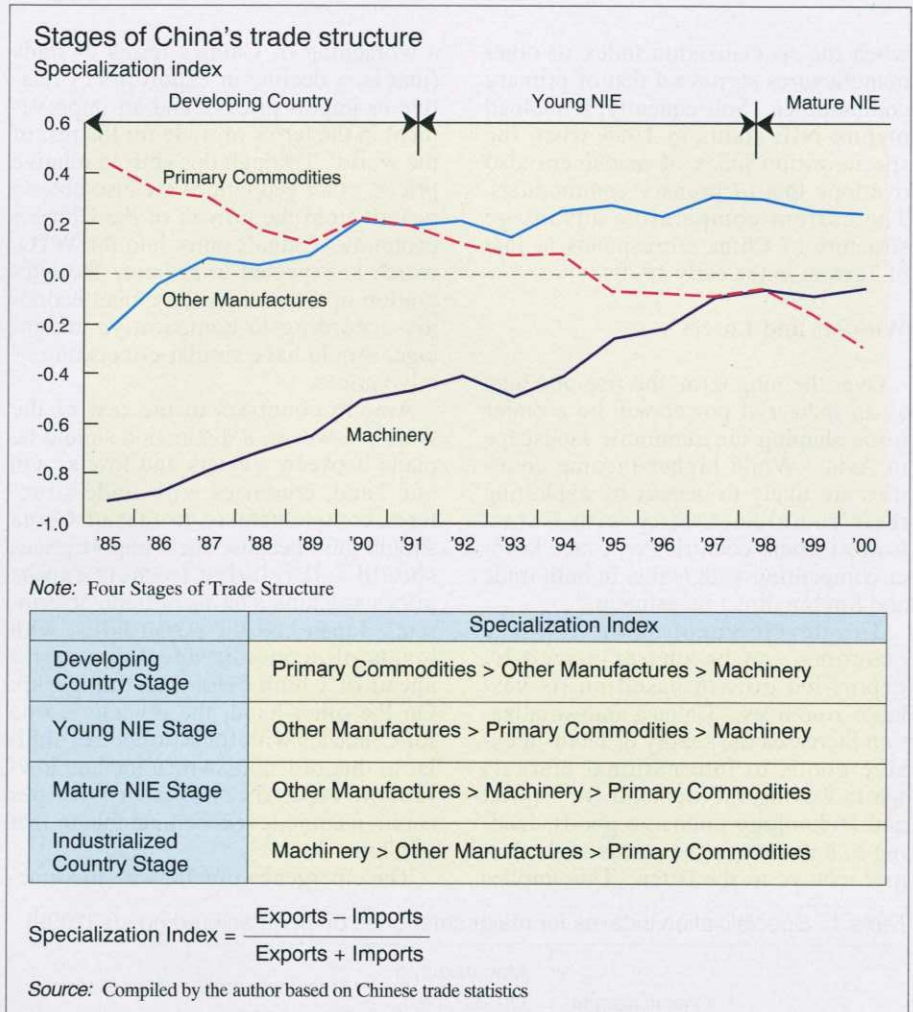
It is certainly true that much progress has been made in China's industrialization over the last 20 years; manufactured goods now account for 90% of total exports, up from 50% in 1980. Still, China's competitiveness in international markets is mainly based on the abundant supply of cheap labor, broadly in line with its level of economic development. Chinese exports are dominated by labor-intensive products, such as textiles, and in product categories that are considered high-tech, China's main role is still in labor-intensive processes, such as assembling. Despite a gradually shrinking gap between the forerunners and latecomers in the process of economic development, Japan continues to lead other Asian economies in terms of income level as well as competitiveness in high-tech industries, with the Asian NIEs, the ASEAN countries and China (in this "traditional" order) catching up from behind.

China as a Newly Industrializing Country

In line with the "flying-geese pattern of economic development," a country's comparative advantage usually shifts from the production of primary commodities to labor-intensive manufactured goods and later on to capital and technology-intensive products. These shifts are reflected in its trade structure, which progresses from that of a developing country to that of a newly industrializing country and finally to that of an industrialized country.

A country's comparative advantage structure (as revealed by its trade structure) can be classified into one of four categories based on the relative magnitude of the specialization indexes of the country's primary commodities (United Nations Standard International Trade Classification [SITC] Sections 0-4),

Figure 1



machinery (SITC Section 7, a proxy for capital and technology-intensive products), and other manufactures (SITC Sections 5, 6, 8, 9, a proxy for labor-intensive products).¹ A country typically passes from one category to another in the following sequence:

- 1) the *developing country stage*, with primary commodities more competitive than other manufactures and machinery,
- 2) the *young NIE stage*, with other manufactures becoming more competitive than primary commodities, which maintains its lead over machinery,
- 3) the *mature NIE stage*, with machinery overtaking primary commodities

while other manufactures maintain their overall lead,

- 4) the *industrialized country stage* with machinery overtaking other manufactures, which maintain their lead over primary commodities.

Most Asian countries have followed these stages in the course of economic development, with some moving faster than others.

Applying the present framework to China confirms that the country's comparative advantage structure has undergone a process of rapid transformation since it started its ambitious reform program in the late 1970s. (Figure 1) Starting as a typical developing country, China became a young NIE in 1992

when the specialization index of other manufactures surpassed that of primary commodities. Subsequently, it attained mature NIE status in 1999 when the specialization index of machinery also overtook that of primary commodities. The current comparative advantage structure of China corresponds to that of Taiwan in the early 1970s.

Winners and Losers

Over the long term, the rise of China as an industrial power will be a major force shaping the economic landscape in Asia. While higher-income countries are likely to benefit by exploiting their complementarity with China, lower-income countries will face keener competition with China in both trade and foreign direct investment.

The development of the Chinese economy can be characterized by export-led growth based on its vast labor resources. China's industrialization increases the supply of labor-intensive goods to international markets while raising the demand for capital and technology-intensive goods, leading to a decline in the prices of the former relative to the latter. This implies

a worsening of China's terms of trade (that is, a decline in export prices relative to import prices), and an improvement in the terms of trade for the rest of the world. Through this shift in relative prices, other economies are also able to benefit from the growth of the Chinese economy. China's entry into the WTO, which is expected to promote the integration of China into the global economy according to comparative advantage, should have similar effects on relative prices.

Among countries in the rest of the world, however, a distinction should be made between winners and losers. On one hand, countries with trade structures complementary to that of China should gain because their import prices should fall relative to their export prices as China's terms of trade deteriorate. Japan and the Asian NIEs, with levels of economic development far ahead of China belong to this group. On the other hand, the reverse is true for countries with trade structures similar to that of China, which include low-income ASEAN countries with per capita income levels comparable to that of China.

The emergence of China as an attrac-

tive destination for investment has also altered the flow of foreign direct investment in Asia. Again, the distinction between countries competing with China and those complementary to it holds the key to separating winners from losers. 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.

Complementarity between Japan and China

Led by Japanese companies and industries seeking safeguard measures to curb the influx of Chinese products and politicians lobbying for a sharp reduction of official development assistance (ODA) to China, more and more Japanese now look at China as a threat rather than as a business opportunity.

This view, however, has been based on the wrong presumptions that China is already a developed country and that it has competitive trade relations with Japan. In fact, the income gap between the two countries is still immense and the relations between the two countries are complementary to each other. There is a clear division of labor between the two countries, with China specializing in labor-intensive products (and processes) while Japan is concentrating in high-tech products. In fact, the composition of China's exports looks like that of Japan's imports and vice versa. Sure, the two countries do compete in certain sectors, but they make up a very small portion of their total exports. As a rule, competition occurs in Japan's sunset industries, which Japan should discard without hesitation. It is also in the same industries that the demand for trade protection is the strongest.

In order to confirm that Japan has strong complementarity with China, we compare the specialization indexes of major categories of manufactured goods for Japan and China. (Table 1) To focus on the manufacturing sector,

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 the author based on Asian Development Bank, *Key Indicators of Developing Asian and Pacific Countries, 2000*

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). In terms of the specialization indexes, China 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. Since the corresponding specialization indexes of Japan all carry signs that are opposite of China's, the trade relations between the two countries can be characterized as complementary. This contrasts sharply with the trade relations between China and Thailand, for example, where their specialization indexes are similar for all major categories of manufactured goods.

Competition with China and Japan's Deflation

With no economic recovery in sight, more and more people blame Japan's prolonged recession on growing competition with China. There is no doubt that rising imports of cheap products from China are putting downward pressure on Japan's price level, but this is not necessarily bad for Japan. Here we need to distinguish between good deflation and bad deflation. The former results from the expansion of cheaper imports that reduce the costs of production (and thus increase the profitability) of Japanese manufacturers, and is accompanied by an expansion of Japanese output. The latter reflects a diversion of demand from Japanese products to Chinese products in both the Japanese market and international markets, which reduces Japan's domestic production. The complementary relations between the two countries guarantee that the positive effect overrides the negative effect.

By the same logic, an appreciation of the Chinese currency, as demanded by some business sectors in Tokyo, would

not help to solve Japan's economic woes. On one hand, the positive impact of a stronger yuan on Japan's global exports is minimal because the product mixes of the two countries' exports are so different. On the other hand, should a stronger yuan lead to a slowdown in the Chinese economy, Japanese exports of machinery and key parts and components to China would suffer. Taken together, the total effect on output on the demand side is likely to be negative. Furthermore, on the supply side, the rising costs of production resulting from a stronger yuan should also reduce output.

The Rise of China and Japan's Hollowing-Out Problem

The rise of China is posing both challenges and opportunities for Japan. For many Japanese companies, China is a potential market and destination for investment. For others, increasing imports from China have given rise to the need for industrial restructuring at home. In sectors that compete with China, this may take the form of more bankruptcies and higher unemployment. This situation has led to growing fears of a "hollowing out" of domestic industries and escalating trade friction between Japan and China.

Japan should not respond to these challenges through the use of protectionist policies to safeguard domestic industries that have lost export competitiveness. The establishment of barriers to limit imports and to prevent declining industries from being transferred overseas is like treating the symptoms instead of the disease. Declining industries in Japan are unlikely to recover their competitiveness as a result of government protection. Such policies merely delay the improvement of the industrial structure in both Japan and China.

Rather, Japan should seek a division of labor with China according to comparative advantage. This means promoting new growth areas through deregulation and investing in research and development at home, while, at the same time, relocating declining industries to, and expanding imports from,

China. This strategy should not only help promote China's economic development but also free up resources for emerging industries in Japan. By increasing imports from China, Japanese producers and consumers should realize gains in real income by lowering the nation's costs of production and imports.

The ultimate goal of the flying-geese model of economic development is the convergence of all nations in the region to the living standards enjoyed by the industrialized countries and the development of a horizontal division of labor among Asian nations. The per capita GDP of the NIEs has already reached the standard of the Organization for Economic Cooperation and Development (OECD) member countries, and the era of Japan being the only industrialized country in Asia has ended. But a lower relative position for Japan's economy does not necessarily mean an absolute decline in the living standards of its citizens. Trade and direct investment are by no means zero-sum games, and it is possible for all the economies in the region to benefit by enlarging the size of the pie. Indeed, the latest financial crisis in Asia vividly illustrated that it is in Japan's own national interest to be surrounded by affluent and peaceful countries rather than by poor and unstable ones. JTI

Note

1 For a particular industry, the specialization index is defined as its trade balance divided by the volume of two-way trade (that is $[\text{exports} - \text{imports}] / [\text{exports} + \text{imports}]$). By definition, the value of the specialization index ranges from -1 to $+1$, with a higher value implying stronger international competitiveness for the industry concerned.

Chi Hung Kwan is a Senior Fellow at the Research Institute of Economy, Trade and Industry. He specializes in such fields as China's economic reform, regional integration in Asia and the yen bloc.