

Chapter I Why a Long-Term Economic Forecast for East Asia

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Chapter I

Why a Long-Term Economic Forecast for East Asia Now?

Since the collapse of the Cold War regime, the global economy has entered an era of intense competition toward the 21st century, and industrialized nations and developing nations alike face rapid globalization both in terms of production and demand. For Japan, the economy of the Asia Pacific Economic Cooperation (APEC) region will figure prominently as it accounts for about half of the world's gross domestic product (GDP) and trade. The newly industrializing economies of South Korea, Taiwan, Hong Kong and Singapore (NIES), the four Association of South East Asian Nations members of Malaysia, Thailand, Indonesia and the Philippines (ASEAN4) and China, especially, have achieved high average growth of 8.5 percent per year over the last 10 years and built close economic relations with Japan through trade and investment. Referring to these nine economies of the NIES, ASEAN4 and China as East Asia¹⁾, how will the economic relations between Japan and East Asia develop in the future amid this era of globalization and intense competition?

East Asia has already contributed immensely to the globalization of the Japanese economy by serving as a base for the overseas production of Japanese enterprises, especially in the area of consumer products. Japan and East Asia are likely to further enhance this relationship in the future in such areas as electronics and transportation equipment. In terms of demand, East Asia promises to continue its expansion in the future as a market for Japanese products, especially for capital goods and intermediary goods.

In an era of intense competition, Japanese enterprises must of course reduce their domestic costs and put the brakes on the hollowing out of industry through restructuring and other domestically available cost-reducing measures. At the same time, however, they must try to strengthen their international competitiveness by obtaining a stable, low-cost supply of labor-intensive intermediary goods from East Asia.

As explained above, there is a strong possibility that East Asia will become a base for the further globalization of the Japanese economy and the strengthening of the competitiveness of Japanese

products, in terms of both production and demand. By examining the long-term trends of the East Asian economy over the next 10 years from various angles, ascertaining the future of the East Asian economy is important in and of itself, but is also essential in determining the long-term outlook of the Japanese economy amid increasing globalization.

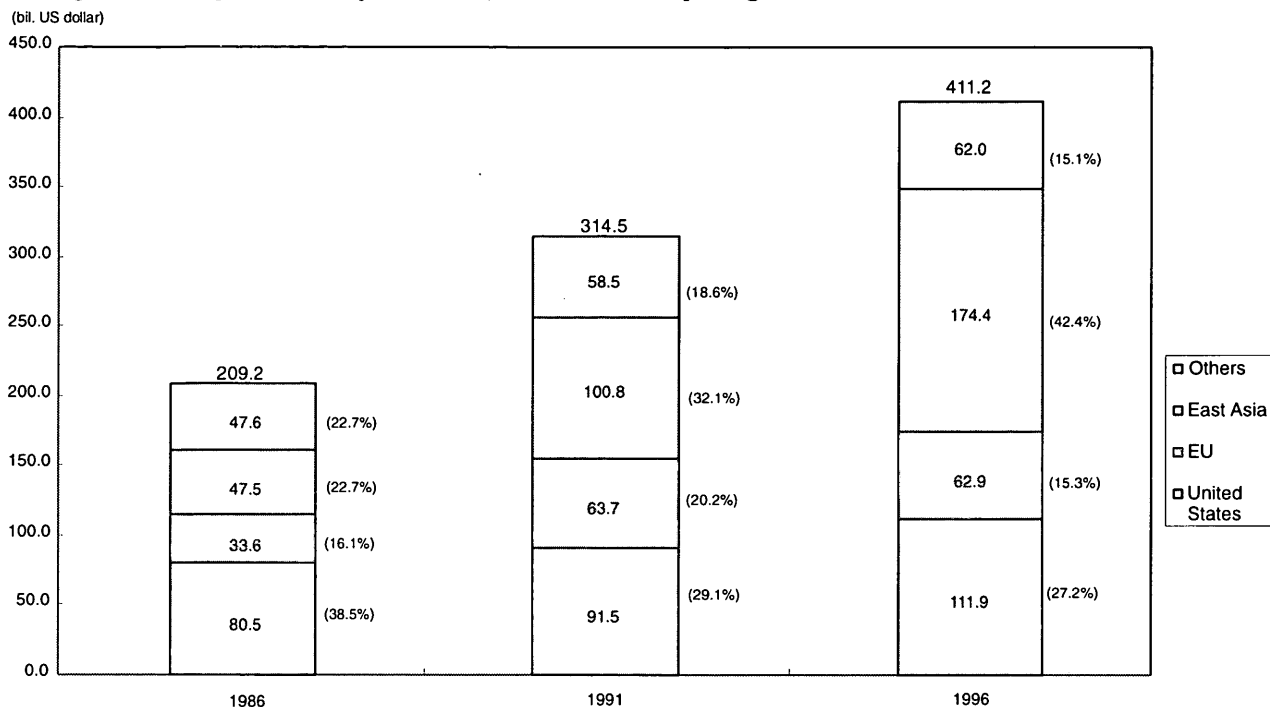
1. Tightening Relations between Japan and East Asia

This section aims to grasp the economic relations between Japan and East Asia based on statistical data. First, the heightening importance of East Asia as an export destination of Japan (demand for Japanese products) is confirmed. Then, the increasing contribution of East Asia as a supply base for Japan, i.e. import destination of Japan, is examined.

(1) East Asia as an Export Destination of Japan

Japan has long been called a trading nation. Even today, with the depreciation of the yen-dollar rate, it is said that Japan's exports to the West may trigger trade friction. The Japanese economy's dependence on commodity exports (commodity exports/GDP), however, fell under double-digit levels after recording a 10.5 percent dependency in 1986. Since the dependence on commodity exports fell to 9.6 percent in 1987, it has remained in the single-digit range through 1996, when it stood at 8.9 percent.

Figure 1 shows the total commodity exports of Japan as well as the regional (United States, EU, East Asia, Other) commodity exports of Japan on a nominal dollar base for 1986, 1991 and 1996. As indicated, the exports to the EU and the United States accounted for a combined share of 55 percent of all Japanese exports in 1986. This share, however, decreased to 49 percent in 1991 and 43 percent in 1996. East Asia as an export destination of Japan accounted for 23 percent of total exports

Figure 1. Japanese Exports of Commodities by Region 1986, 1991 and 1996

Source: The Summary Report on Trade of Japan, Japan Tariff Association, Japan. International Financial Statistics, IMF. Monthly Statistical Materials of Hong Kong and Taiwan.

in 1986, surpassing exports to the EU at this point but still only reaching about half of exports to the EU and United States combined. In 1991, however, exports to East Asia reached a 32 percent share of total exports, outstripping exports to the United States (29 percent). In 1996, this share soared to 42 percent, reaching roughly the same level as exports to the EU and United States combined (43 percent). Over the past 10 years, the East Asian share of Japanese exports rose 7.0 points and now absorbs 40 percent of Japanese exports, revealing the importance of East Asia as a “region absorbing Japanese products.”

(2) East Asia as an Import Destination of Japan

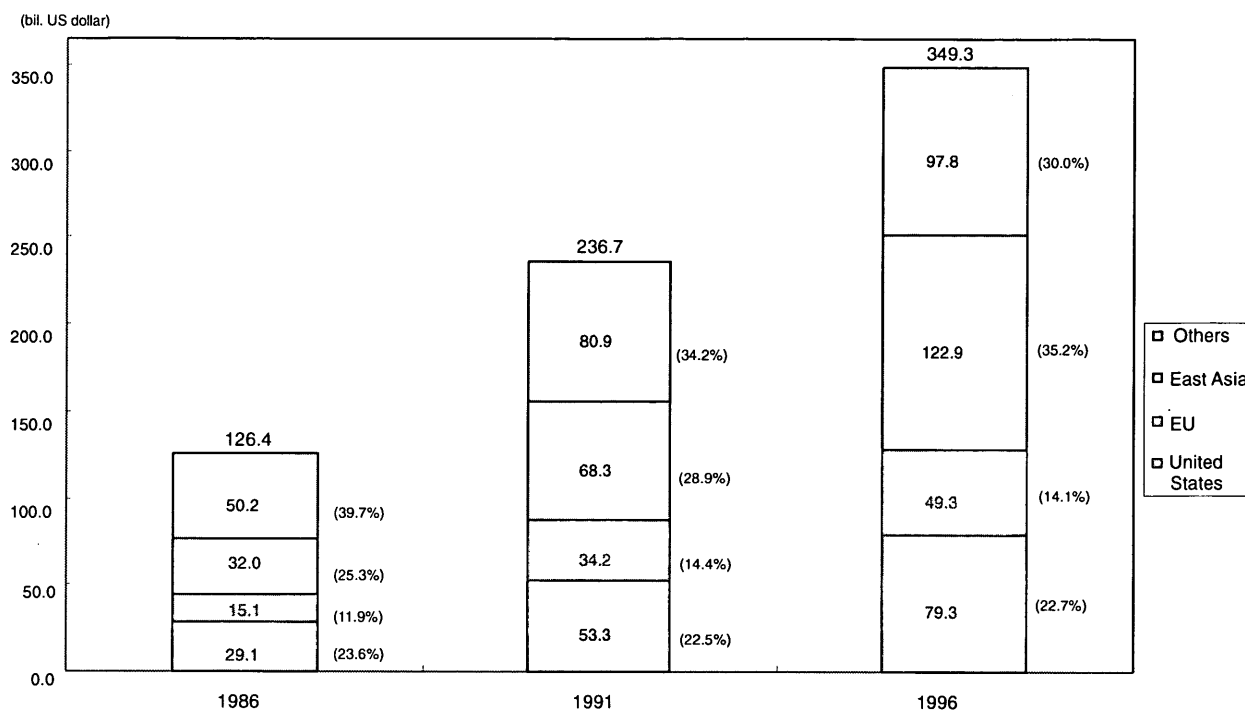
The share of Japanese imports from East Asia reached 25 percent in 1986, surpassing those from the United States at 23 percent (see Figure 2). At this point, crude oil, rubber, tin and other primary products accounted for the majority of imports from the ASEAN4, while the principle import from China was crude oil.

From 1986 to 1988, Japanese foreign direct investment was channeled mainly to the NIEs. During this period, imports from NIEs soared and the “NICs (before they came to be known as NIEs) product boom” emerged. From 1988, as wages increased in the NIEs and Japanese enterprises began to further promote an international division of labor within their organizations, Japanese foreign direct investment shifted to the ASEAN4 and China. Commodity imports from these foreign investment destinations increased to the extent that they began to be called “reverse imports.”

In this context, the East Asian share of all Japanese imports rose to 29 percent in 1991, then to 35 percent in 1996, reaching roughly the same level as the share of imports from the EU and United States combined (37 percent).

Rapidly Increasing Commodity Imports from East Asia

In the first half of 1996, manufactured goods as a share of imports from East Asia was 79 percent for NIEs, 77 percent for China and 52 percent for

Figure 2. Japanese Imports of Commodities by Region 1986, 1991 and 1996

Source: Same as Figure 1.

ASEAN4. This marked the first time manufactured goods as a share of imports from ASEAN4 exceeded 50 percent.²⁾

Thus, East Asia's share of total imports rose 10 points over the past 10 years, and the product share of manufactured goods in those imports rose to over 50 percent, as industrialization in the region rapidly advanced with direct investment from Japan and other nations.

2. Slowdown in the East Asian Economy in 1996 — Cyclical or Structural?

The East Asian economy recorded high growth of over 8 percent each year from 1991 through 1995 (see Table 1). After achieving economic growth of 8.6 percent in 1995, however, the region lowered its growth a full point compared with the previous year to 7.6 percent in 1996.³⁾ Notable were the economic growth decreases of roughly two points in South Korea (from 9.0 per-

cent in 1995 to 7.1 percent), Singapore (from 8.8 percent to 7.0 percent) and Thailand (from 8.8 percent to 6.2 percent).

How this slowdown in growth is viewed is crucial in establishing a framework and preconditions in making a long-term economic forecast for East Asia over the next 10 years.

Economic growth in South Korea and Singapore in 1995 was pushed up by the appreciation of the yen-dollar rate (1995 average: 94 yen to the dollar) and a personal computer boom led by sales of Windows95. In 1996, however, the yen lost steam (1996 average: 109 to the dollar) and computer demand leveled off. The slowdown in exports this entailed is the main factor triggering the growth slowdown in South Korea and Singapore in 1996.

The South Korean and Singaporean experiences in 1995 and 1996 show how, in economies like the NIEs where income levels have risen, changes in international competitiveness due to fluctuations in the yen-dollar rate and other factors come to exert a greater impact on exports of each country and region. One can also see that East Asia becomes more sensitive and directly susceptible to

Table 1. Economic Growth Rates (GDP) of East Asian Economies, 1986-1996 (%)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ⁽¹⁾
South Korea	11.6	11.5	11.3	6.4	9.5	9.1	5.1	5.8	8.6	9.0	7.1
Taiwan	11.6	12.7	7.8	8.2	5.4	7.6	6.8	6.3	6.5	6.0	5.7
Hong Kong	10.8	13.0	8.0	2.6	3.4	5.1	6.3	6.1	5.3	4.7	4.7
Singapore	2.3	9.7	11.6	9.6	9.0	7.3	6.2	10.4	10.5	8.8	7.0
NIEs	10.6	12.0	9.7	6.5	7.2	7.8	5.9	6.4	7.6	7.5	6.3
Malaysia	1.2	5.4	8.9	9.2	9.6	8.6	7.8	8.3	9.2	9.5	8.2
Thailand	5.5	9.5	13.3	12.2	11.2	8.6	8.2	8.5	8.9	8.8	6.2
Indonesia	7.2	6.6	7.0	9.1	9.0	8.9	7.2	7.3	7.5	8.2	7.8
Philippines	3.4	4.8	6.3	5.9	2.8	-0.7	0.9	2.1	4.4	4.8	5.5
ASEAN4	5.0	6.8	8.9	9.4	8.5	7.0	6.5	7.0	7.7	8.1	7.0
China	8.9	11.6	11.3	4.1	3.8	9.2	14.2	13.5	12.7	10.5	9.7
East Asia	8.6	10.5	10.0	6.5	6.6	8.0	8.4	8.7	9.3	8.6	7.6

- Notes: (1) Except for Thailand and the Philippines, the figures for 1996 are actual ones or government estimates. The 1996 figures for Thailand and the Philippines are estimated by the PIAR (Projections for Asian Industrializing Region) project team of the IDE (Institute of Developing Economies), Tokyo, Japan.
- (2) GDP of groups such as NIEs are obtained firstly by transforming GDP of each country and region to 1996 fixed US dollars and secondly by taking sum of these figures appropriately.
- (3) East Asia is defined to consist of NIEs, ASEAN4 and China.

the influence of global (or more precisely, a specific industry's) cycles as its industries rise up the value-added ladder and become more high-tech oriented.

The growth slowdown of Thailand in 1996 was due to a slight decrease in exports as its industries moved up the value-added ladder in response to rising wages. Thailand recorded high average growth of 9.4 percent per year over the last 10 years, resulting in per capita income of 3,000 dollars in 1996. With the rise in wages, exports of labor intensive goods plummeted 21 percent for apparel, 40 percent for shoes and 51 percent for plastic products. Exports of high value-added goods, however, were buoyant (e.g. computer-related products, which became the top export item in 1995, grew another 31 percent in 1996) and basically canceled out the export drops in labor-intensive goods. In the end, the nominal export drop in Thailand was only 0.2 percent.

3. *Long-Term Economic Forecasts for East Asia Using an Econometric Model*

"Emerging Asia: Changes and Challenges," published by ADB in May, forecasts the economic development rate (per capita GDP growth rate) of Asian countries and regions through 2025. While the ADB economic development rate estimates and forecasts are extremely bold, they are qualitatively similar to those in this volume in its optimistic outlook for the future of the East Asian economy.

In estimating the economic development rate, ADB supposes that over 25 year period from 1965 to 1990 both industrialized nations and developing nations (cross-section data for a total of 78 countries and regions) developed their economies under the same structure, represented by coefficients of explanatory variables. Under this assumption, a simple equation is estimated to determine the annual average economic development rate for each country and region over the last 25 years, using as explanatory variables: deviation from the level of economic development (per capita GDP) of the United States as the reference country in 1965; geological conditions (e.g. amount of natural resource endowments); policy status (e.g. level of openness to the outside world); and population factors (e.g. size of labor force). Using this estimated simple equation, ADB forecasts the annual average

economic development rate over the 30 year period from 1995 to 2025 for Asian countries and regions.

According to the results of ADB forecasts (Asian Development Bank (1997), p. 122), while NIEs will continue to develop, the economic development rate over the next 30 years will average 2.8 percent a year, down from the 6.6 percent of the past 30 years. ASEAN4 and China, which achieved annual economic development rates of 3.9 percent and 5.6 percent, respectively, over the past 30 years, are expected to see these rates rise to 4.5 percent and 6.0 percent, respectively, over the next 30 years.

ADB cites the transformation of NIEs into industrialized economies as the main reason for the large decrease in their future economic development rates. However, using the United States as the reference country for economic development probably underestimates the future economic development rates of "city-states" such as Singapore and Hong Kong.

The ADB forecasting method, as ADB admits itself (Asian Development Bank (1997), pp. 121, 323), does not aim at a detailed forecast of economic development rates for each country and region; rather, it forecasted the development potential of Asia as a whole or each group.

The economic forecasts for East Asia in this volume (IDE forecast), by contrast, consider the characteristics of each country and region using an ordinary simultaneous macro econometric model for each country and region (the number of equations varies for each model, but ranges between 8 and 24). This is one major difference from the ADB forecasting method.

For Singapore and Malaysia, a supply oriented model is constructed to enable an examination of the interrelationship among labor, capital and production while forecasting economic growth, in consideration of the fact that these countries are increasing their dependence not only on foreign capital, but also foreign labor. This was constructed in response to the criticism by Krugman (1994) that the high growth of East Asia amounted to nothing more than an increase in labor and capital inputs. Making it possible to examine whether the increasing rate of labor demand forecast matched to the predicted economic growth rate is plausible when it is compared to historical increasing rate of employment.

The econometric model adopted for other East Asian countries and regions is a demand ori-

ented model in consideration of the contribution to growth of exports and investment. In the models for the ASEAN4 (excluding Malaysia) and China, foreign direct investment is introduced separately from domestic capital investment in consideration of its importance.

Another characteristic of the econometric models used in the IDE long-term forecast is that it is a small model. ASEAN4 and China promise to undergo continued industrialization. Industrialization itself is a change in the industrial structure from an economy centered on primary industries to an economy centered on secondary industries. The move up the value-added ladder within secondary industry, as described in the previous section in relation to Thailand, will also probably be included in this industrialization. Considering industrialization in this way, estimations or forecasts under a large model that segments industries would be inappropriate as a long-term economic forecast for East Asia.

A final remark should be made on one more issue, i.e. whether or not long-term forecasts for the next 10 years based on econometric models can be trusted. Rule of experience says that forecasts made for a period half as long as the period from which the data are drawn are highly reliable. Economic data from East Asian countries and regions are basically available from the first half of the 1970s. The long-term economic forecasts for East Asia according to econometric models in this volume are 10-year forecasts based on data for a period of approximately 25 years. Thus, there should be no problem in terms of precision.

4. *Structure of This Volume*

This chapter surveyed the East Asian economy and described the characteristics of the econometric models used for forecasting. The remainder of the volume is organized as follows.

Section 1 of Chapter 2 surveys the stages of economic development in East Asian countries and regions based on per capita GDP (in dollars). This

per capita GDP (in dollars) can be seen as proportional to labor costs in dollars. From this perspective, it is possible to determine the international competitiveness of products, especially labor-intensive goods, of East Asian countries and regions from per capita GDP (in dollars) for each country and region.

Section 2 of Chapter 2 grasps the supply strength (exports) and demand absorbability (imports) of East Asia, touted as the world's growth center, in comparison with Japan.

Chapter 3 analyzes the "miracle" 10-year period of high growth in the East Asian economy with a focus on three external factors.

Section 1 of Chapter 4 offers assumptions on the main external factors in making a long-term economic forecast for East Asia. The impact on the East Asian economy of Hong Kong's reversion in July 1997 and the economic policy of post-Deng China are briefly examined in Section 2 of Chapter 4.

East Asian countries and regions are divided into three groups according to level of economic development: NIEs, ASEAN4 and China. Long-term economic forecasts through 2005 are presented in Chapter 5 for NIEs, Chapter 6 for ASEAN4 and Chapter 7 for China. The long-term economic outlook for East Asia is addressed in Chapter 8.

Notes:

1. Hong Kong and Taiwan are officially treated as "regions" of East Asia. Bearing in mind the wordiness, this volume uses the expressions "East Asian countries and regions" and "countries and regions."
2. From Japan External Trade Organization (1996).
3. East Asia also saw growth of under 8 percent in 1989 (6.5 percent) and 1990 (6.6 percent). The main reason for this two-year slowdown was the economic stagnation of China following the Tiananmen Square incident in June 1989. Another factor behind the growth slowdown of East Asia in 1989 was that South Korea halved its double digit growth of 1986-1988 in the context of an appreciating Korean won.