

Chapter I Globalization, the changing face of the East Asian economy, and prospects for Japan

Section 1 The advance of globalization and East Asian economic development

【 Key points 】

1. Expansion and convergence of disparities in economic standards

The advance of globalization over the last two centuries has been accompanied by growing disparity among national economic standards, but those states which have participated in the globalization process have conversely demonstrated convergence. This trend can be viewed as the formation and expansion of a “convergence club”, as it were. History reveals that as the United Kingdom, the United States and the rest of the developed world have observed other countries begin to catch up in the convergence process, they have instituted various reforms aimed at sustained growth, consequently maintaining their own growth and shifting into a new stage of development. Amid ongoing globalization, it will be vital that Japan keeps pace with other “convergence club” members in pursuing reform toward sustained growth.

2. Advance of and background to globalization

Over the century between 1820 and the outbreak of World War I in 1914, the world experienced its first globalization boom. Globalization was powered at the time by plummeting transport costs and the lower tariff barriers brought about as the UK and other countries established and maintained free trading systems.

Globalization receded over the two world wars, including the interim between them, with various barriers erected to constrain immigration and the movement of goods and capital as the international community split into economic blocks.

The postwar period has marked the second boom in globalization, driven this time by dramatic advances in means of transportation and communications, the development of today’s multilateral trading system, and systemic advances opening the way for various types of economic partnership. Advances in air and sea transport, the creation of rail and communications networks which are stretching to the very corners of the earth, and leaps ahead in information technology (IT) are diversifying means of transport and pushing down communications costs. Moreover, recognizing that the protectionism and creation of economic blocs over the wartime period were the result of defects in the international trading and economic systems, the international community has since worked to create sounder systems. Trade in goods and services and foreign direct investment have consequently boomed in this third stage.

3. Convergence and deepening relations in East Asia

For the past few decades, the economic levels of Japan and other East Asian nations have basically continued to rise and converge. This can be seen not only in per capita GDP, but also in the growing sophistication of economic structures. One cause of this convergence has been the deepening of regional economic relations in terms of both trade and investment. Closer trade relations and growing investment have promoted increasingly advanced economic structures and horizontal regional specialization in East Asia, contributing to regional convergence and sophistication.

Behind these deepening economic ties lies the steady growth of East Asia's share of world GDP since the historical turning point which occurred around 1950. Japan needs to follow the example of the United States and Europe in advancing economic structural reform and transformation of the nation as a means of growing together with the rest of East Asia.

1. Expansion and convergence of disparities in economic standards

(1) International economic disparities

The advance of globalization¹ over the last two centuries has been accompanied by growing disparity among national economic standards. Figure 1.1.1 indicates trends in per capita GDP dispersion, revealing an overall rise accompanied by growing economic disparity worldwide.

However, economic standards have continued to rise and converge over the years for those states which have participated in the globalization process. More specifically, economic standards have converged among the post-war OECD countries, as well as East Asia and other nations in the same economic bracket (Fig. 1.1.1). Other observable features emerging in the process of convergence with developed countries include rising productivity, the swift dissemination of advanced technology, and increasingly sophisticated economic structures².

The countries falling within the above category could be described collectively as a kind of "convergence club"³, with the rise and convergence of economic standards perceived as the establishment and expansion of this club. Historically, many countries have participated in the

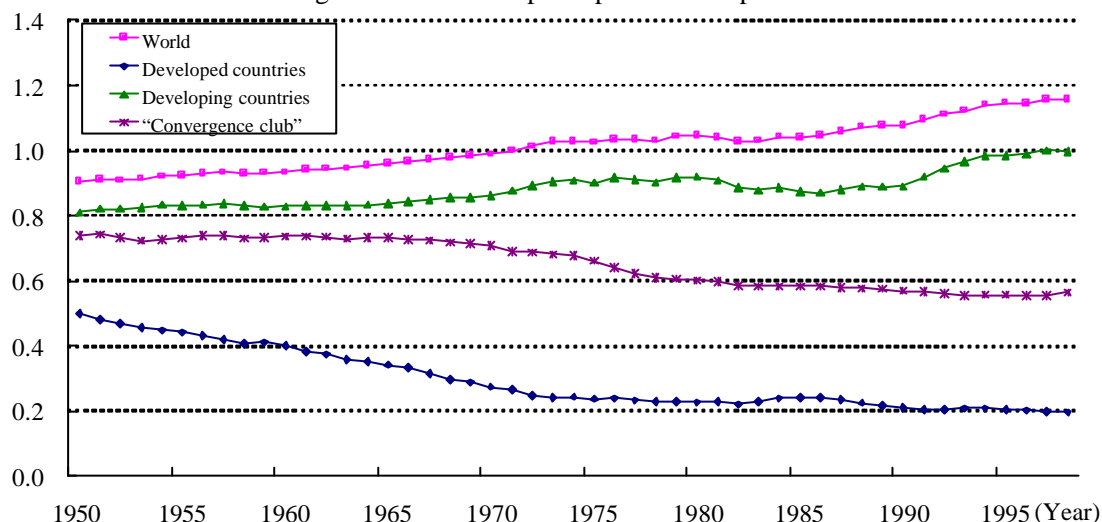
¹ The 2002 White Paper defines globalization as (1) the change in the cost of economic interaction between physically distant regions and the impact of this on changes in the geographical distribution of economic activities; and (2) stimulation of the movement of goods, money and people. It also refers to the issues of growth, divergence and agglomeration which have emerged as a result.

² Dowrick and DeLong (2001).

³ Two criteria pertain in determining "convergence club" membership: (1) whether per capita GDP has reached the North Atlantic level (the center of industry); and (2) whether industrial development and social reform can be seen (Dowrick and DeLong, 2001).

convergence club. Interestingly enough, once a country has become a member of the convergence club, the usual pattern is to achieve high-level economic growth, reach the same economic standards as other “member” nations, and maintain economic growth over subsequent years. The emergence and development of the convergence club can be broadly divided into four phases: Phase I, 1820-1870; Phase II, 1870-1913; Phase III, 1913-1950; and Phase IV, 1950-2000 (Fig. 1.1.2).

Fig. 1.1.1 Trends in per capita GDP dispersion



Notes

1. This graph shows the standard deviation of the natural logarithm for per capita GDP in respective countries (Geary Khamis (1990); expressed in dollars).
2. “Developed countries” refer to OECD Development Assistance Committee members. “Developing countries” are those countries other than developed countries.
3. The “Convergence Club” refers to those countries within the Stage IV category of Fig. 1.1.2. The former Communist countries are excluded.
4. The analysis was conducted in regard to the 127 countries for which national data is presented in Maddison (2001). Data for the communist countries up to 1989 was taken from Maddison (1995). Because no data was given for Rumania in 1951-54 and 1956-59, while the figure for 1995 was extremely low compared to previous and subsequent years, this period was excluded from calculations.

Sources: The World Economy—A Millennial Perspective (Angus Maddison; 2001); Monitoring the World Economy 1820-1992 (Angus Maddison; 1995); Japan’s Official Development Assistance 2000 (Economic Cooperation Bureau, Ministry of Foreign Affairs, Japan; published by Association for Promotion of International Cooperation).

Phase I began in the United Kingdom in the wake of the Industrial Revolution. Changes in the domestic economic structure and industrial development accelerated, while the relevant technologies were communicated to continental Europe and North America.

In Phase II, the scope of the convergence club broadened. New members included continental Europe, Canada, western America, Australia, New Zealand, Argentina, Chile, Uruguay and South Africa. By adopting advanced technologies and industrialized themselves, these countries grew swiftly to join the ranks of the developed countries. The convergence club stretched as far as the economies of European colonies during this period, which corresponded with the first age of globalization discussed later.

Figure 1.1.2 Entry to and exit from "Convergence Club"

Period	Member countries and regions	Exiting countries
· 1820-1870	England,Belgium,Northeast America	
· 1870-1914	Canada,Western America,Australia,New Zealand, Argentina, Chile, Uruguay, South Africa, Netherlands, France, Germany, Switzerland, Spain, Italy, Austria, Hungary, Czechoslovakia, Denmark, Norway, Sweden, Finland	
· 1914-1950	Japan, ROK, Taiwan, Venezuela, Peru, Brazil, Southern America, Soviet Union	
· 1950-2000	Hong Kong, Singapore, Thailand, Malaysia, Indonesia(since 1965), China(since 1978), Yugoslavia, Rumania, Bulgaria, Greece, Portugal, Turkey, Israel, Egypt, Colombia, Mexico	Venezuela, Peru, Argentina, Chile, Uruguay, South Africa, Soviet Union

Notes:

The above table summarizes entry into and exit from "convergence club" as noted in the following paper. This was determined on two criteria: (1) whether per capita GDP had reached North Atlantic levels (the center of industry); and (2) whether industrial development and social reform were evident. Within brackets are those countries which are not clearly stated as having joined the convergence club, but which may have. Where the same countries appear in the exit column, this is on the assumption that they had been club members.

Source: Dowrick and DeLong (2001).

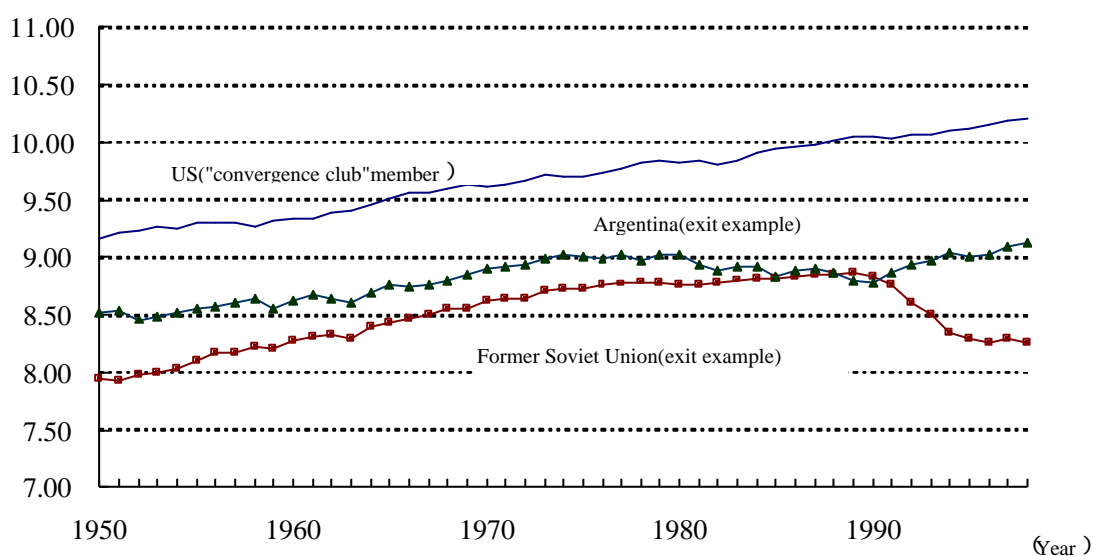
During Phase III, the world reeled under the impact of two world wars and the Great Depression, while disparities in living standards and other areas grew between the United States and Japan. At the same time, from the perspective of the levels of technology applied, changes in industrial structure, and productivity, Japan, the Republic of Korea, Taiwan, the southern US states, and the Soviet Union all drew much closer to the economic standards of developed countries, their "accession" expanding the convergence club still further.

Phase IV saw another influx of members into the convergence club. The entry of Hong Kong, Singapore, Thailand, Malaysia, post-independence Indonesia and China (following the launching of its reform and open-door policies), as well as Yugoslavia in the Balkans, Rumania, Bulgaria, Greece and Portugal, and also Turkey, Israel, Egypt, Colombia, and Mexico also significantly widened the scope of the club.

It was also in this era, however, that countries began to drop out of the convergence club. These included the Soviet Union, Argentina, Venezuela, Uruguay, Chile, Peru and other South

American nations, which had shown signs of catching up with the developed countries in the inter-war period. As is evident in Figure 1.1.3, compared to the United States, for example, which is membership of the convergence club, per capita GDP in the former Soviet Union and Argentina failed to maintain its upward rise, and as of a certain point has instead continued to fall. Factors common to both countries were the defective incentives to boost productivity, and the lack of institutions designed to this end. The former Soviet Union planned a massive accumulation of production factors (capital), and succeeded to some extent with industrialization, but failed to sustain economic development in the absence of a market economy system. In the case of Argentina, one factor obstructing further economic growth was the confusion caused by the clash between the military and the worker-oriented Perónist administration, which meant that any economic policies adopted could not be sustained over the long term. In addition, strict labor laws and strong labor union pressure prevented Argentina from the reduction in production costs necessary to boost international competitiveness.

Figure 1.1.3 Examples of exits from the "convergence club"



Source: The World Economy-A Millennial Perspective (Angus Maddison, 2001).

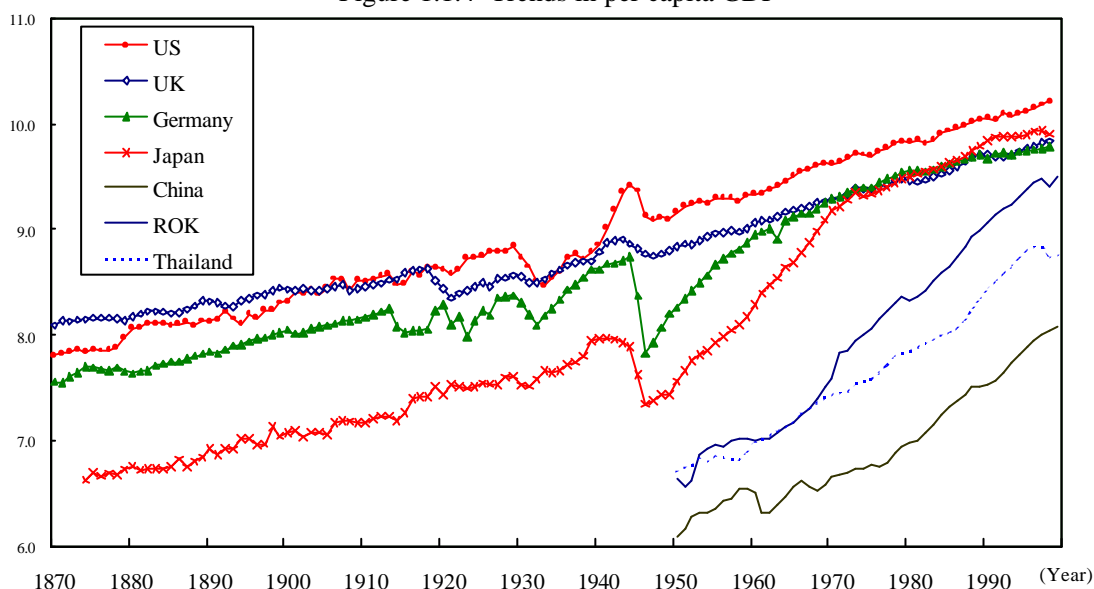
(2) Perception of falling international competitiveness in developed countries and overcoming this

Amid the international convergence of disparate economic standards, developed countries (the US, the UK, Germany) noted other countries beginning to catch up, and concern arose that they were losing some of their international competitiveness. In response to this perception, governments continued to explore possible roads to sustained growth, and also pursued reform programs consisting of (1) measures related to updating existing measures and (2) measures

designed to boost regional economic autonomy⁴. The former included changes to legal and tax systems, deregulation, privatization of state-owned enterprises, the introduction of greater flexibility into the labor market, and improvement of education and job training. The latter comprised a paradigm shift from the idea of all countries introducing the same measures to a new focus on measures utilizing “local power”—in other words, reflecting the nature of the local economy in promoting R&D and forming industrial agglomerations.

Looking at the United States and the United Kingdom as examples of countries which chose this direction, their economic performance (e.g., real GDP growth rates and unemployment rates) slumped in the initial years of reform, and it was a decade later that they were finally able to reap the benefits of reform. In recent years, however, these achievements have set the stage for proceeding to a new stage of development as convergence club members (Fig.1.1.4).

Figure 1.1.4 Trends in per capita GDP



Note: Natural logarithm value of per capita GDP (Gary Keamis, 1990; expressed in dollars).
Sources: Data up to 1949: Monitoring the World Economy 1820-1992 (Angus Maddison, OECD, 1995); Data from 1950: The World Economy—A Millennial Perspective (Angus Maddison, OECD, 2001).

In general, then, developed countries have continued to grow even amidst the catch-up process. Japan too must bear in mind this historical reality and not become overly concerned about a catch-up by its East Asian neighbors, instead pressing forward its own reform program toward the goal of sustained growth as a convergence club member.

⁴ See Section 2, Chapter IV in regard to specific measures taken.

2. Advance of and background to globalization

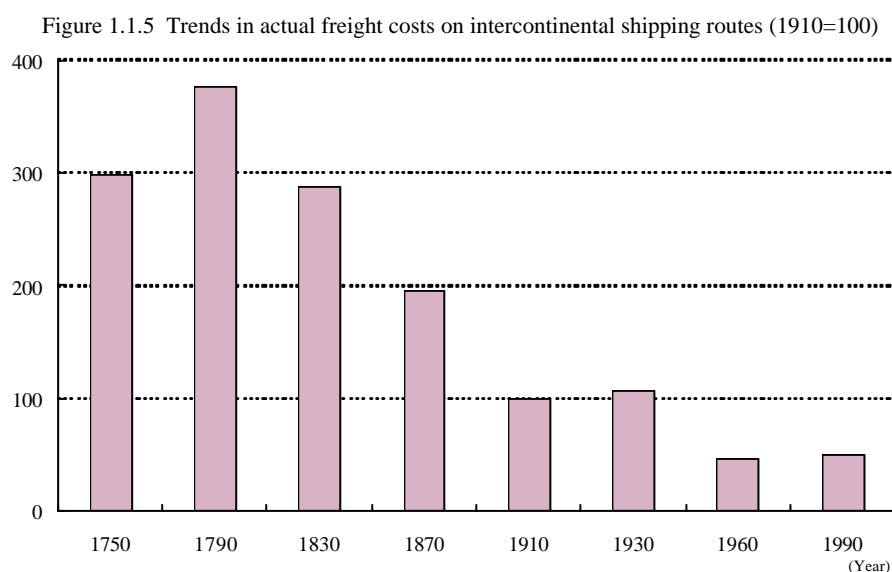
The development of globalization traces back over roughly two centuries, which in a “boom and bust” sense can be divided into three broad phases. The first phase, the first age of globalization, occurred over the century between 1820 and the outbreak of World War I in 1914. The second phase was the retrogression embracing the two world wars. The third phase comprises the post-war years, which ushered in a second age of globalization which has continued through to the present day.

(1) Phase 1: First age of globalization (1820s-1914)

During this phase, globalization was powered by technological innovation and international cooperation in the reduction of tariff barriers. The United Kingdom led the way in instituting and maintaining a free trade system, a stance which it maintained despite protectionist trends emerging in the 1870s in continental Europe and the United States, the latter just a rising nation at the time.

(a) Technological innovations in communications and transportation

Technological innovation in communications and transportation made enormous strides forward in the 19th century. In terms of transportation, this took the form of the emergence of steamships in the early 19th century (the first Atlantic crossing powered by steam alone was made in 1838), opening the way for intercontinental transactions of general goods other than luxury items for the first time in human history. Moreover, transportation costs on intercontinental sea routes were halved between the 1870s and 1910 (Fig. 1.1.5), while communications too saw the commercialization of Morse-based telegraphy and the laying of undersea cables, enabling instantaneous intercontinental communication of information.



Sources: Crafts and Venables (2001).

(b) Establishing and maintaining the free trade system

While the United Kingdom adopted a mercantile system as of the 16th century, the emphasis gradually shifted to the promotion of free trade as a means of enjoying the merits of scale which expanded offshore markets would offer, and it began to pursue unilateral trade liberalization regardless of the degree of liberalization of its trading partners. The establishment of international free trade began with the conclusion of the Anglo-French Commercial Treaty in 1860. Both the United Kingdom and France subsequently formed similar treaties of commerce with all the main European powers, bringing about mutual tariff reduction and spreading a net of free trade across Europe.

This rise of free trade began to stall in the 1870s with the Great Depression, which led continental Europe to instead adopt protectionist policies. Between 1870 and 1890, Austria-Hungary, Germany, Italy and France followed each other in introducing high tariffs. US trade policy during this period demonstrated even greater protectionism, evident from its (1) high tariffs, (2) conditional most-favored-nation treatment, (3) strong emphasis on “fairness”, and (4)

Figure 1.1.6 Comparison of tariff rates

(%)

	Average tariff rate for non-agricultural goods		Average tariff rate for dutiable goods		
	1875	1913	1913	1927	1931
Germany	4-6	13	16.7	20.4	40.7
France	12-15	20	23.6	23.0	38.0
Italy	8-10	18	24.8	27.8	48.3
Belgium	9-10	9	14.2	11.0	17.4
Switzerland	4- 6	9	10.5	16.8	26.4
Austria	15-20	18	22.8	17.5	36.0
Sweden	3- 5	20	27.6	20.0	26.8
Spain	15-20	41	37.0	49.0	68.5
Russia	15-20	84	72.5		
United Kingdom	0	0			
United States		44	40.1	38.8	53.2

Note: Average tariff rate for dutiable goods = tariff revenue/value of dutiable imports

Source: Sasaki (1997).

low dependence on trade (Fig. 1.1.6).

Over this period, industrialization and a high tariff policy in Germany and the United States caused UK exports to decline even as its imports gradually climbed. While some argued the unfairness of engaging in free trade with countries taking a protectionist stance, the United Kingdom maintained its free trade policy through to the end of World War I.

(2) Phase 2: The retreat of globalization (1914-WWII)

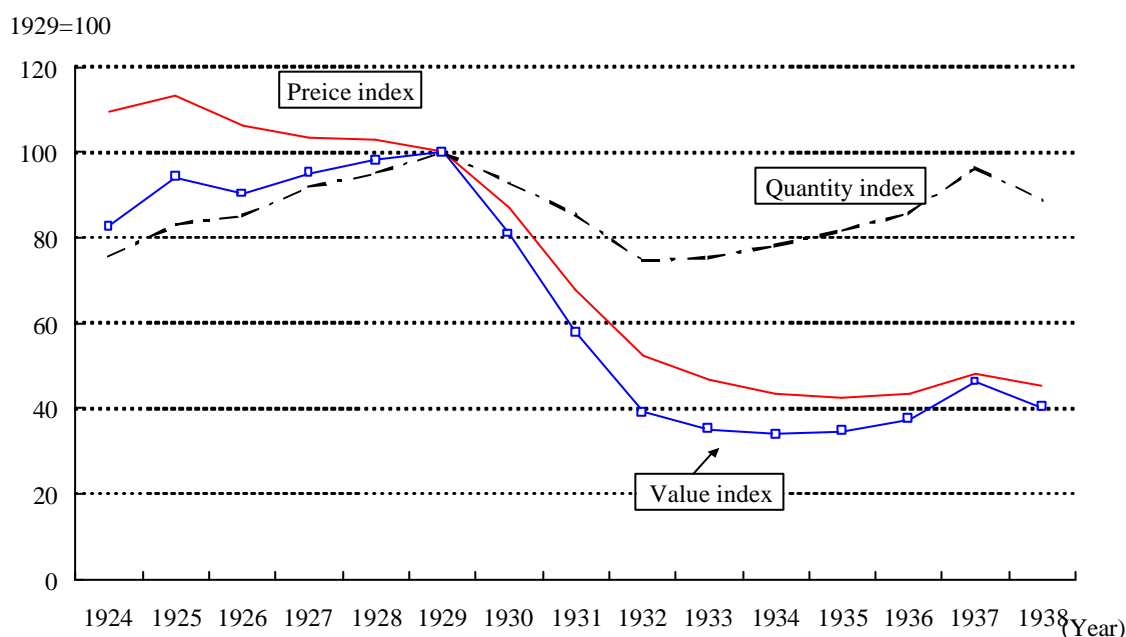
The second phase saw globalization retreat. Over the 30-odd years spanning the two world wars, a variety of barriers were erected and the world broke up into economic blocs (Fig. 1.1.7). The various types of barriers restricting immigration and trade and capital flows virtually stalled the globalization of the West European economies until 1929, and the scale of world trade shrank abruptly (Fig. 1.1.8).

Figure 1.1.7 Trade within economic blocs (ratio of total trade in 1929 and 1938)

	Scope	Imports				Exports			
		1929		1938		1929		1938	
UK	Colonies, self-governing dominions, protectorates	30.2	41.9	44.4	49.9				
France	Colonies, protectorates, mandates	12.0	27.1	18.8	27.5				
Belgium	Belgian Congo	3.9	8.3	2.6	1.9				
Netherlands	Foreign territory	5.5	8.8	9.4	10.7				
Portugal	Foreign territory	7.9	10.2	12.7	12.2				
Italy	Colonies, Ethiopia	0.5	1.8	2.1	23.3				
Japan	Korean Peninsula, Taiwan, Canton, Manchuria	20.2	40.6	24.1	54.7				
Germany	Six southeast European nations, Latin American nations	16.7	27.6	12.8	24.7				

Source: Review of World Trade 1938 (League of Nations).

Figure 1.1.8 Trends in world trade (1924-38)



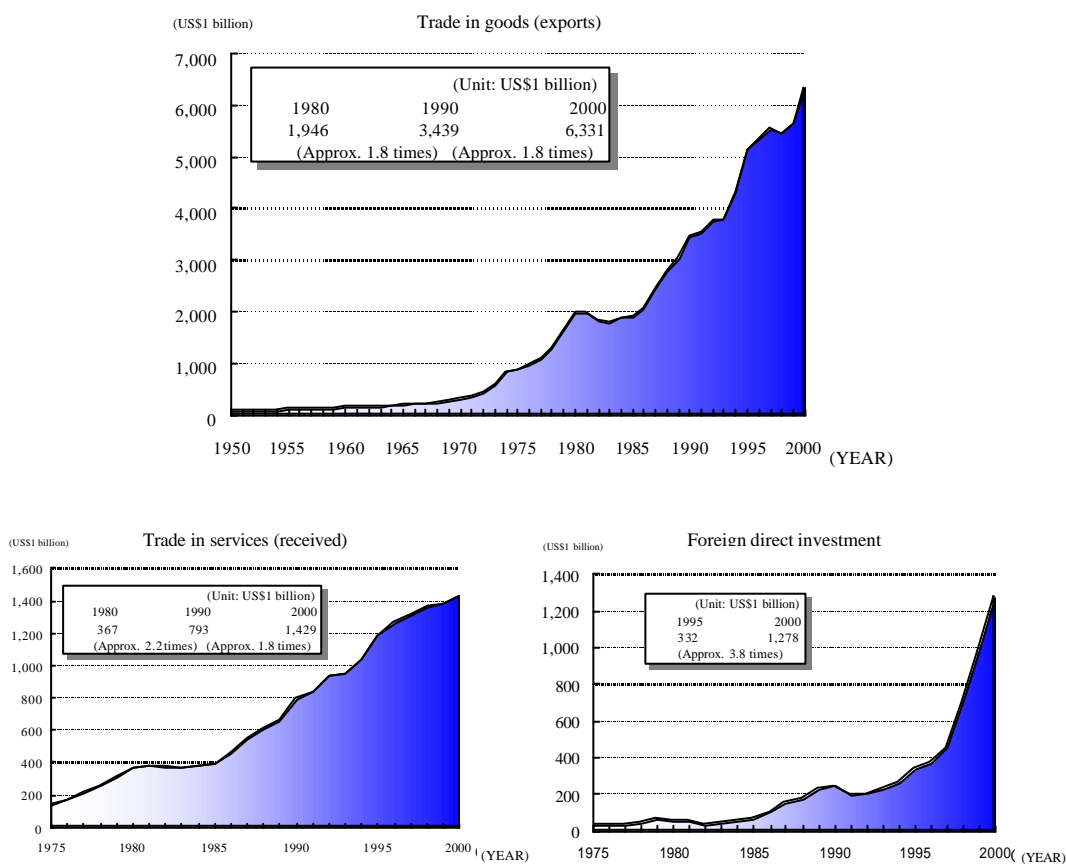
Source: Review of World Trade 1938 (League of Nations).

(3) Phase 3: The second age of globalization (post-WWII)

The second age of globalization was powered by further advances in transportation and communications technology and efforts to eliminate trade barriers. Recognizing where the

protectionism of the 1930s had led, the international community became increasingly aware that maintaining non-discriminatory free trade was crucial for world peace, and worked instead toward the construction of an international trading system under the leadership of the United States. The advances in this system which developed into today's multilateral trading system and moves toward various forms of economic partnership were accompanied by advances in communications and transportation that promoted the rapid expansion of trade in goods and services and foreign direct investment (FDI) during this phase (Fig. 1.1.9).

Figure 1.1.9 Trends in world goods and services trade and direct investment value



Source: *IFS* (IMF).

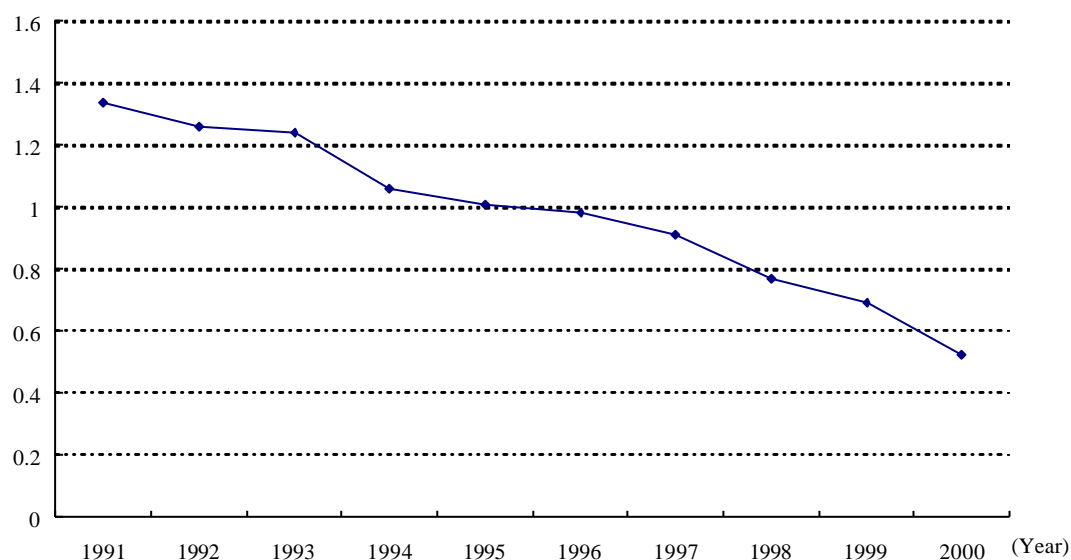
(a) Technological innovations in transportation and communications

Where total world shipping (the main means of intercontinental transportation) was a mere 4.6 million tons in 1913, this grew steadily to reach 12.9 million tons by 1960, then 520 million tons by 1997, a massive expansion in communications capacity. In terms of passenger transport too, the number of passengers traveling by ship between Europe and the United States across the North Atlantic peaked in 1957 at around one million and subsequently maintained a downward trajectory. Air passengers, on the other hand, reached around the million mark in the same year

and continued to grow, doubling to two million a mere four years later in 1961 as air passenger transport made it even easier to travel cross-border. Land transport also flourished as more and more rail was laid, with total world rail mileage growing from 470,000 miles in 1900 to 770,000 miles.

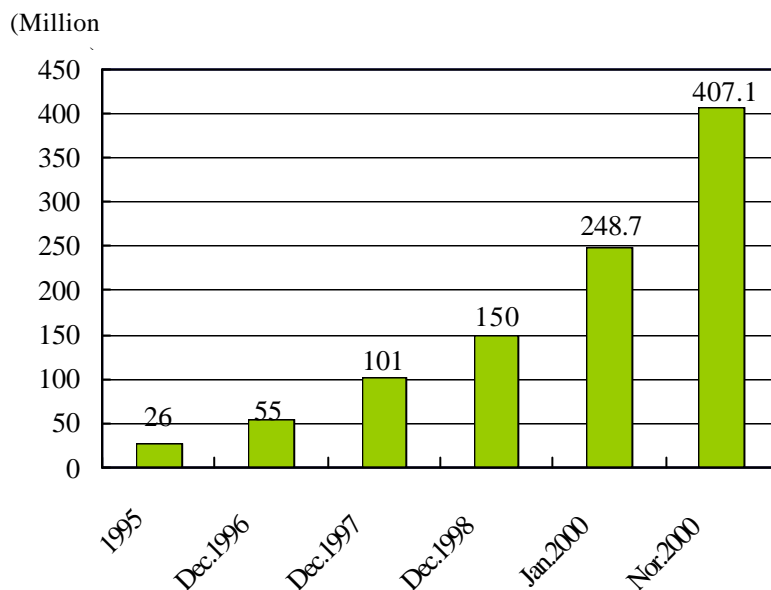
In communications, US-led progress with communications satellites in the 1960s saw the first utility model of a stationary satellite launched in 1963, opening the way for the large-scale transmission of telephone calls and television images. In the late 1980s, the first optical fiber undersea cables were laid in place of the old copper cables, allowing larger quantities of higher-quality information to travel between continents at greater speed. In recent years, tumbling telecommunications costs (Fig. 1.1.10) and the surging popularity of the Internet (Fig. 1.1.11) have been deepening cross-border ties between regions, companies and individuals. High-speed and super-high-speed Internet access is also taking off in developed countries (Fig. 1.1.12), while these huge advances in communication speeds are being accompanied by falling communications costs, dramatically expanding the amount of information transmitted.

Fig. 1.1.10 Trends in average call costs to OECD countries per minute at peak time (US\$)



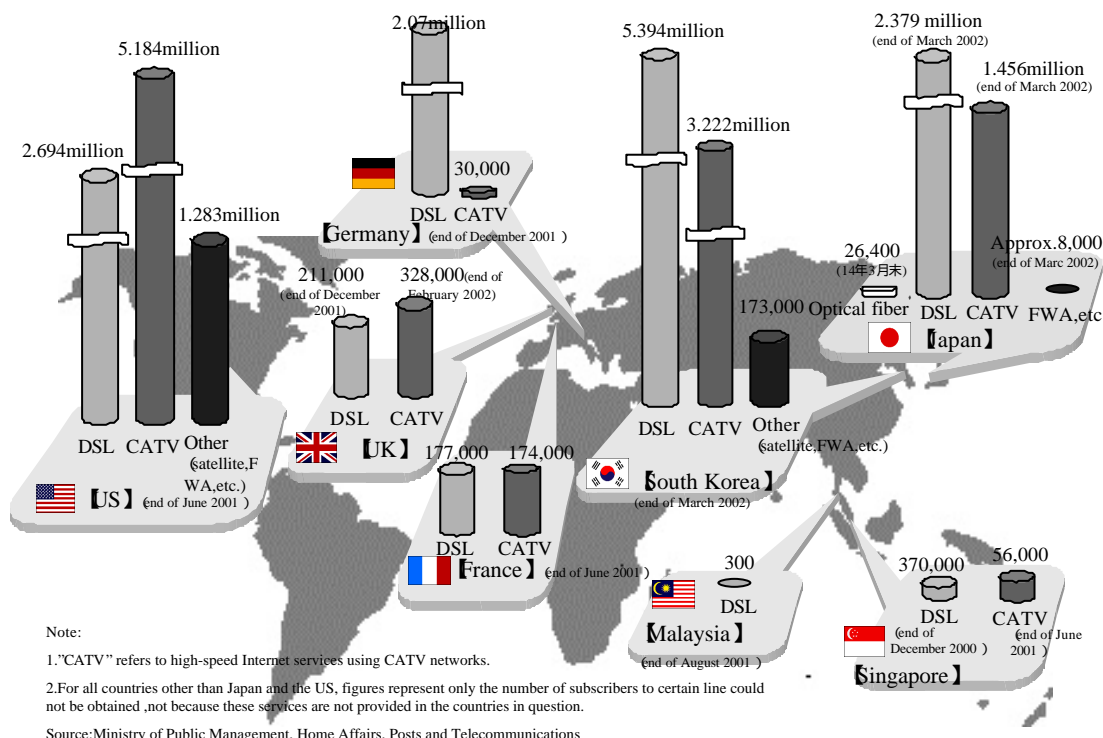
Source: *Telecommunications White Paper* (OECD).

Figure 1.1.11 Number of Internet users worldwide



Source: White Paper on Information and Communications 2000 (Ministry of Public Management, Home Affairs, Posts and Telecommunications).

Figure 1.1.12 Spread of high-speed and super-high-speed Internet use abroad (no. of subscribers)

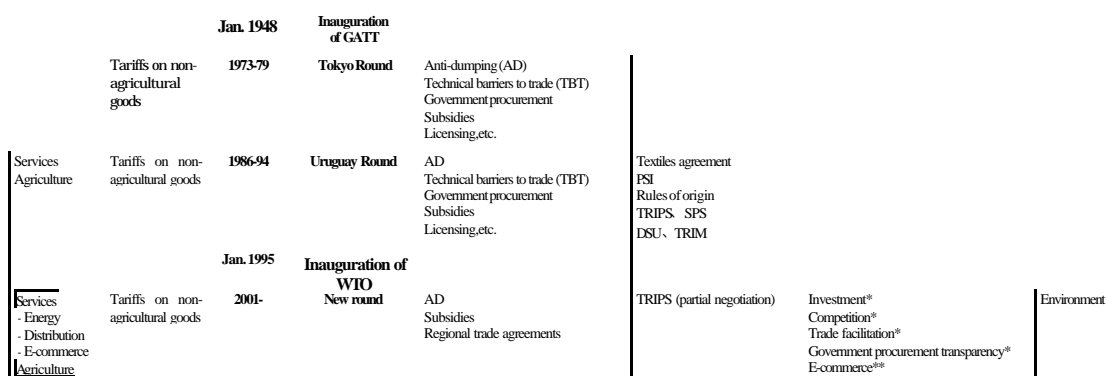


(b) Development of the multilateral trading system

The postwar multilateral trading system began with the 1947 tariff negotiations in an effort to get away from pre-war protectionism and its tragic consequences. Substantial tariff reduction was achieved in the five rounds of negotiations following establishment of the General Agreement on Tariffs and Trade (GATT) system in 1948. The scope of liberalization was later widened from tariffs to non-tariff barriers as of the Tokyo Round (1973-1979), leading to the creation of the Anti-Dumping Agreement, the Agreement on Subsidies and Countervailing Measures, the Government Procurement Agreement and numerous other agreements on non-tariff measures. In the 1980s, economic globalization diversified into trade in services and direct investment, and in the Uruguay Round (1986-1994), the trade in goods covered under the GATT was supplemented by the conclusion of new agreements on trade in services, trade-related investment measures and intellectual property rights. Great progress was also made with the improvement of dispute settlement mechanisms and securing the enforceability of rules, leading to the establishment of the World Trade Organization (WTO) as the driving force behind these multilateral trading systems. Since its foundation, the WTO has played a major role as the only international organization providing multilateral trade rules based on the principles and procedures vital to realizing worldwide free trade.

The multilateral trading system centered around the WTO/GATT mechanisms have made an enormous contribution to the development of the postwar world economy (Fig. 1.1.13). At the same time, the conclusion of free trade agreements and other bilateral and multilateral economic partnerships has begun to snowball in recent years.

Figure 1.1.13 Progress of WTO trade liberalization negotiation



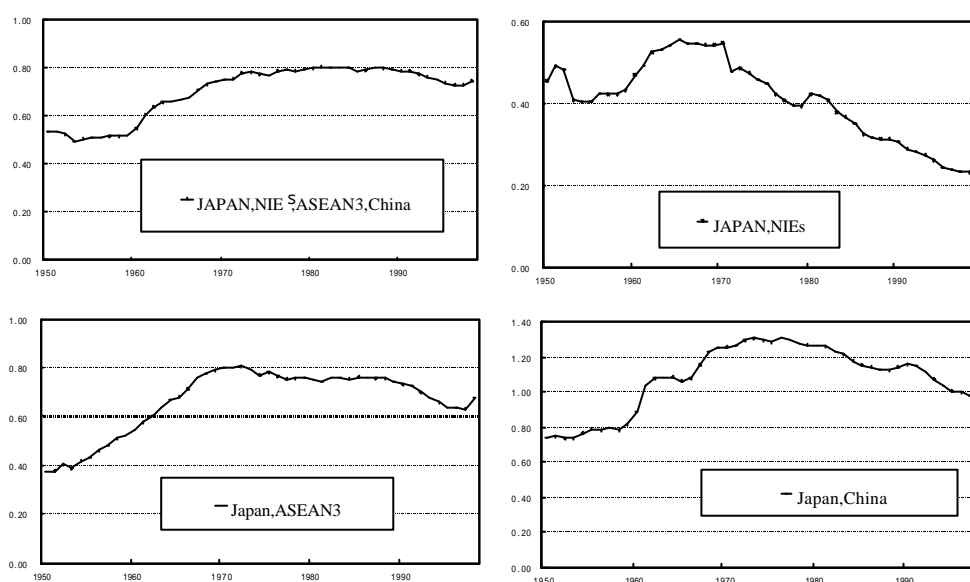
Note: Boxes indicate BIA (built-in agenda) items; single asterisks indicate the initiation of preparatory negotiations; and double asterisks indicate that the treatment of e-commerce under the WTO Agreement is under consideration by a subsidiary body based on the Work Programme.
Source: METI.

3. Convergence and deepening economic linkages between Japan and East Asia

(1) Convergence of economic standards between Japan and East Asia

This process of globalization has also occurred in Japan and East Asia. Trade and investment has increased, and, as noted later in Section 2, passengers and cargo are moving with increasing frequency within the region, part of a significant surge in the movement of goods, money, people and information. Economic standards in the region have also been gradually converging since the 1980s. The per capita GDP disparity (dispersion) across the nine East Asian nations (Japan, the Newly Industrialized Economies (NIEs), the ASEAN 3 (Indonesia, Thailand and Malaysia) and China) began to diminish slowly as of the end of the 1980s, indicating a convergence in per capita GDP within the region (Fig. 1.1.14).

Figure 1.1.14 Trends in per capita GDP dispersion in East Asia



Note: Standard deviation of per capita GDP natural logarithm value (Geary Khamis, 1990; expressed in dollars).

“ASEAN 3” refers to Thailand, Malaysia and Indonesia.

Sources: *The World Economy—A Millennial Perspective* (Angus Maddison. OECD, 2001).

More specifically, the per capita GDP dispersion between Japan and the NIEs plummeted as of the early 1970s and fell more slowly between Japan and the ASEAN 3 as of the mid-1970s, a pattern echoed in the disparity between Japan and China as of the early 1980s. Convergence with Japan, the most advanced country in the region, seems to be occurring in a time sequence, starting from the NIEs and moving on to the ASEAN 3 and then China.

These countries evidence not only rising per capita GDP, but also growing productivity and increasingly sophisticated industrial structures. The World Bank (1994) found East Asian productivity to be head and shoulders above other regions. Figure 1.1.15 shows industrial

structure trends in the region. The share of primary industry fell below 10 percent for Japan in 1970, 1980 in the case of the NIEs. It is also diminishing in the ASEAN 3 and China, which recorded 14.8 percent and 18.0 percent respectively in 1999. The share of secondary industry peaked in 1970 for Japan at 47 percent, in 1985 for the NIEs at 40.7 percent, and has since slid away, while the share of tertiary industry continues to climb. In China and the ASEAN 3 too, the share of primary industry continues to decline while the share of secondary and tertiary industries grows. Albeit with slight deviations, East Asia demonstrates an increasingly sophisticated industrial structure, with the falling share of primary industry and the climb of secondary industry followed by the decline of secondary industry and a growing tertiary industry share.

Figure 1.1.15 Trends in the East Asian industrial structures

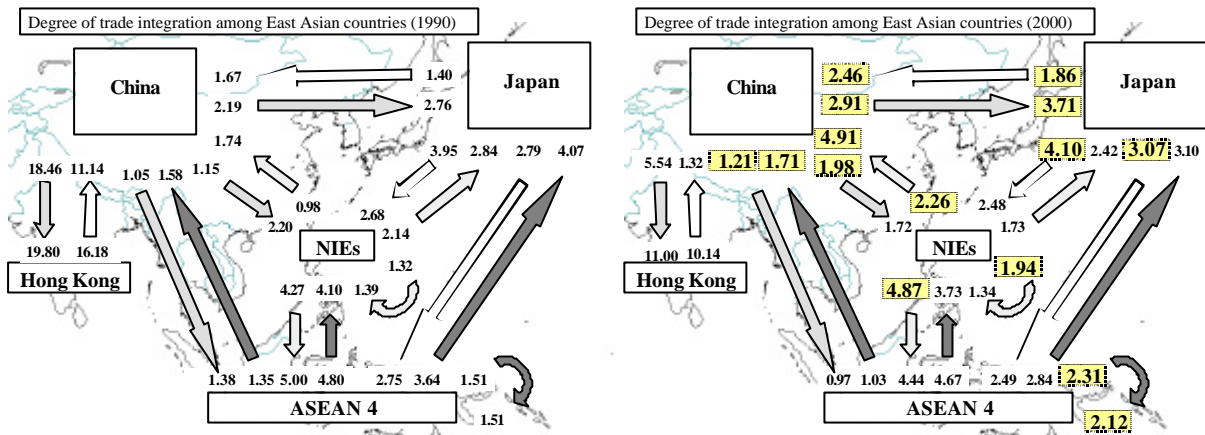
		1960	1980	1990	1999
NIEs	Primary industry	27.0	9.0	5.6	3.0
	Secondary industry	23.0	39.9	39.4	35.0
	Tertiary industry	49.9	51.1	55.0	62.0
ASEAN 3	Primary industry	48.3	23.4	16.0	14.0
	Secondary industry	15.6	38.2	39.2	42.8
	Tertiary industry	36.1	38.4	44.9	43.2
China	Primary industry	47.0	30.0	27.0	18.0
	Secondary industry	33.0	49.0	42.0	49.0
	Tertiary industry	20.0	21.0	31.0	33.0

(2) Deepening economic ties between Japan and East Asia

Behind the convergence and growing sophistication of industrial structures in Japan and East Asia lie increasingly close regional trade and investment ties. One index expressing the degree of closeness of bilateral trade is the degree of trade linkage. Figure 1.1.16 looks at changes in the degree of regional trade linkage in the 1990s, revealing increased linkage between many countries as regional trade interdependence has deepened. Trends in regional FDI are explored in Figure 1.1.17, which shows the growth of intra-regional investment.

The growth of intra-regional investment has in turn promoted trade among the region's industries. For example, Figures 1.1.18 and 1.1.19 indicate that intra-regional trade in general and electric machinery is increasing among all countries. This expansion in trade suggests the deepening of economic ties in the region.

Figure 1.1.16 Changes in degree of trade integration among Japan and East Asia (1990, 2000)

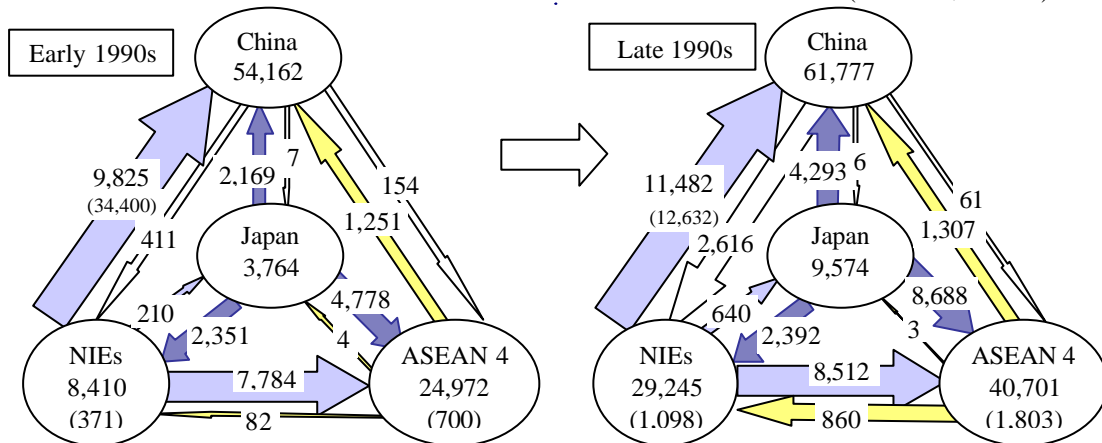


Notes

1. Degree of trade integration in terms of exports with country B from the perspective of country A (value at base of arrow)
 $\text{Export value from A to B} / \text{World import value for B}$
 $\text{World export value from B} / \text{Total world import value}$
 2. Degree of trade integration in terms of exports with country B from the perspective of country A (value at head of arrow)
 $\text{Import value from A to B} / \text{World import value for A}$
 $\text{World import value for B} / \text{Total world export value}$
 3. Degree of trade integration is set at 1, with figures above this indicating close bilateral trade.
 4. Hong Kong is not included in the NIEs category here.
- Source: DOT (IMF).

Figure 1.1.17 Trends in direct investment in Japan and East Asia

(Unit: US\$ million)



Note: Inward direct investment data drawn from national statistics has been used.

The early 1990s figures are the average investment value for 1990-94, the late 1990s figures the same value for 1995-99.

Figures within circles indicate total inward direct investment from around the world.

The NIEs and ASEAN 4 figures within brackets are the amount of investment received from within NIEs and the ASEAN 4 respectively.

The figures for Japan are on a notification basis (100 million yen or more), an execution basis in the case of Hong Kong, a commitment basis in the case of Singapore, and an approvals basis for all other countries.

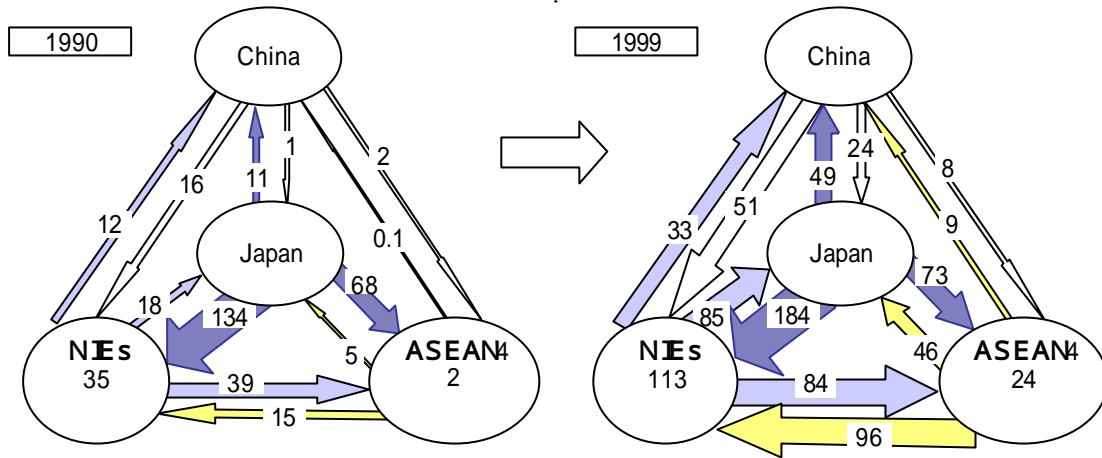
(Investment in Japan and Hong Kong may therefore be underrepresented.)

Hong Kong investment in China is not included in NIEs figures, but rather indicated in brackets on the arrow showing NIEs investment in China.

Source: *Direct Investment Statistics for the World's Major Powers*

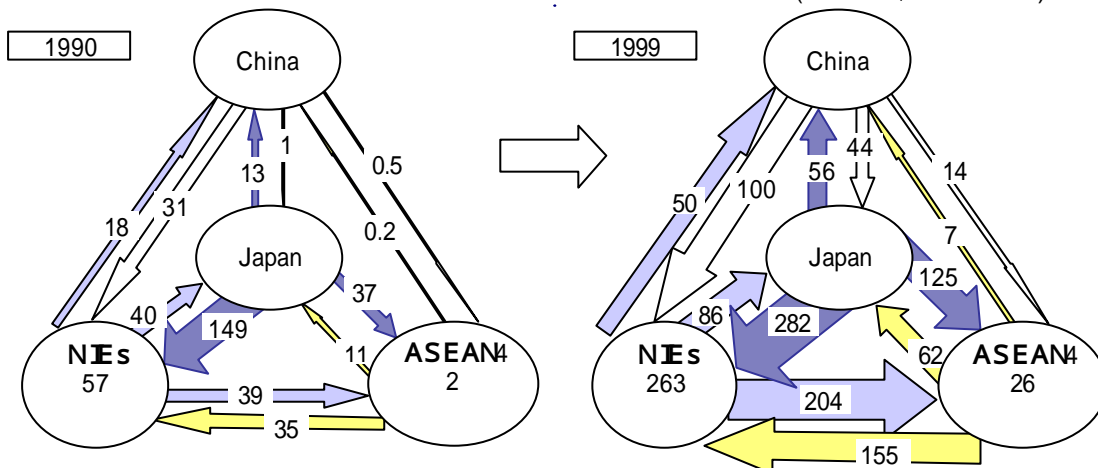
(Research Committee on International Trade and Investment Promotion).

Figure 1.1.18 Trade trends in Japan and East Asia(general machinery)
(Unit:US\$100million)



Note: Figures within circles for ASEAN4 represent exports among the ASEAN4, among the NIEs in the case of the NIEs.
Source: AIDXT(Institute of Developing Economies).

Figure 1.1.19 Trade trends in Japan and East Asia(electrical machinery)
(Unit:US\$100million)



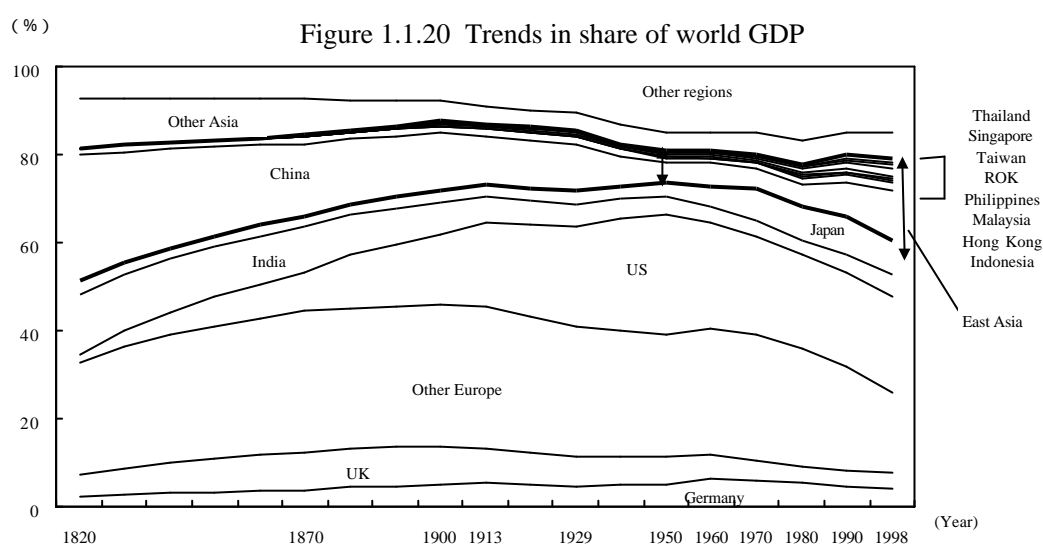
Note: Figures within circles for ASEAN4 represent exports among the ASEAN4, among the NIEs in the case of the NIEs.
Source: AIDXT(Institute of Developing Economies).

(3) East Asian transition to developed country status and challenges facing Japan

Figure 1.1.20 examines trends in shares of world GDP. The US and Europe have seen their share gradually decline since the mid-20th century, a period conversely representing a historical turning-point for East Asia, which has since rapidly expanded its own share.

Figure 1.1.21 assumes that per capita GDP in the countries of East Asia has grown at the average rate of increase for the 10 years leading up to 1980, 1990 and 1999 respectively as a means of determining when these nations will catch up with Japan's per capita GDP level. In the case of the NIEs, the data for 1980, 1990 and 1999 all present the same timing for that catch-up. However, the more recent time data indicates an earlier catch-up date for China and parts of ASEAN, where growth has been particularly swift of late. At the same time, there is no

guarantee that the countries in question will maintain their current rate of growth, and each has its own palette of structural issues to deal with. Accordingly, convergence may not be such a straightforward process. If, however, the East Asian nations do enter the “convergence club” and lock in a development trajectory, we have the example of the United Kingdom and the United States, which have admitted the entry of Japan and many other countries into the “club” while advancing domestic structural reform and transformation in order to sustain their own growth. This experience suggests that Japan too will need to undertake an autonomous program of structural reform and evolution to a new industrial structure, aiming to grow together with its East Asian neighbors.



Note: “GDP” here is expressed in 1990 Gary Keamis dollars. Because the statistics for the various countries and regions refer to different years, for the sake of convenience, those years for which data was universally available (1820, 1870, 1900, 1913, 1929, 1950, 1960, 1970, 1980, 1990, 1998) were plotted on the graph and straight lines drawn between the points.
Sources: Data up to 1949: Monitoring the World Economy 1820-1992 (Angus Maddison, OECD, 1995); Data from 1950: The World Economy—A Millennial Perspective (Angus Maddison, OECD, 2001).

Figure 1.1.21 When will the East Asian countries catch up with Japan?

Country/region	As at 1980	As at 1990	As at 1999
South Korea	2009	2009	2011
Taiwan	2003	2027	2007
Hong Kong	1989	1995	2000
Singapore	1991	2014	1999
Indonesia	Will not Catch up soon	Will not Catch up	Will not Catch up soon
Philippines	Will not Catch up	Will not Catch up	Will not Catch up
Thailand	Will not Catch up soon	2044	2041
Malaysia	2034	Will not Catch up soon	2034
China	Will not Catch up	2096	2040
Average growth rate in Japan	3.29	3.42	1.31

Notes:

1. Assuming that national per capita GDP increased at the average rate of growth for the previous 10 years at the points . 1980,1990,and 1999,the figure calculates the year in which the various East Asian countries will catch up Japan's per capita GDP
2. "Will not catch up" means that because the rate of growth is lower than Japan,the country in question will never catch up.
3. "Will not catch up soon" means that in theory the country will catch up, but not within the 21st century.