CHAPTER 3

Trade, FDI, and Economic Growth

Hideo Ohashi

3.1 Introduction

Economic growth is the combined product of vigorous entrepreneurship, accumulation of human capital, and competitive market mechanism. The liberalization of trade and capital improves economic welfare through the efficiency of resource allocation and the benefits of trade. Although there is sometimes a high evaluation of the government's industrial policy, it basically plays only a complementary role.[1] This is because there are many companies and industries that can grow regardless of industrial policy, and rapid liberalization and excessive government intervention can be an impediment to industrial development.

After the reform and opening-up, the Chinese economy, while promoting market-oriented economic reforms, achieved industrialization through the opening-up to the outside world, leveraging the export promotion and introduction of export-oriented foreign direct investment

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X. Ma and C. Tang (eds.), *Growth Mechanisms and Sustainable Development of the Chinese Economy*,
https://doi.org/10.1007/978-981-19-3858-0_3

(FDI), and got on the track of sustained economic growth. Export-oriented industrialization is a common growth pattern in postwar East Asia, but there are subtle differences in the growth patterns of East Asian countries and regions, ranging from the liberalization of the entire economic system as a precondition to mere export promotion measures.

The purpose of this chapter is to derive the characteristics of China's opening-up to the outside world and to examine its relationship with economic growth through a comparison with Japan's experience as the prototype of high growth through export-oriented industrialization. There have been a number of studies on the impact of the external sector (trade and FDI) on economic growth and industrial development in Japan and China, respectively.[2] However, comparative studies of economic growth and industrial development in Japan and China, which have different economic systems, are extremely rare.[3] Furthermore, comparative studies focusing on trade and FDI are even rarer. This chapter will compare Japan and China from a macroeconomic perspective, focusing on trade and FDI, and review economic growth in both countries.

3.2 Analysis Perspective and Target

In conducting a comparative study of the external economies of Japan and China, we will compare the experiences of the two countries based on the development stages of the balance of payments, which have been inherited by many studies since Crowther (1957). As a framework for analysis, two stages of development, the catch-up stage and the grow-up stage, are set up based on turning to current account surpluses, i.e., clearing the two-gap constraint on savings and foreign currency (Table 3.1).

Before proceeding with the comparative study, it is necessary to briefly review the catch-up stage and the grow-up stage of Japan and China. First, looking at Japan's balance of payments, after the turmoil of the two oil crises in the 1970s, a current account surplus was established in the 1980s. Subsequently, due in part to the strong yen, outward investment by Japanese firms surged and took root, and by the beginning of the 2010s, the Japanese economy had become structurally dependent on investment income (Fig. 3.1). Therefore, Japan's catch-up stage corresponds to the period from the mid-1950s to the end of the 1960s, before the suspension of the convertibility of gold to the U.S. dollar, known

Table 3.1 Development stages of the balance of payments

	I Young debtor	*II Mature debtor*	*III Debt reducer*	*IV Young creditor*	*V Mature creditor*	*VI Asset liquidator*
Current Account	−	−	+	+	+	−
Goods and Service Trade	−	+	+	+	−	−
Direct Investment	−	−	−	+	+	+
Net External Assets	−	−	−	+	+	+

Note China is on the stage of "Debt Reducer" while Japan is in the transition from "Young Creditor" to "Mature Creditor"
Source Author's creation based on Naikakufu (2020, p. 140)

as the Nixon Shock in Japan, in 1971 and the first oil crisis in 1973–1974. This was a period of high growth, when postwar reconstruction was achieved through increased demand generated by the Korean War, and the country enjoyed the *Jimmu*, *Iwato*, Olympic, and *Izanagi* economic booms.[4]

The next stage is the grow-up stage, which corresponds to the period from the 1980s to the early 1990s. During this period, the Japanese economy overcame the recession that followed the oil crises by expanding exports. However, the export expansion led to the escalation of trade friction between Japan and the United States. The Plaza Accord in 1985 induced a strong yen, which calmed the Japan–U.S. trade friction, but a strong yen recession hit the Japanese economy. Monetary easing as a countermeasure led to the bubble economy, and because of the collapse of the bubble economy, the Japanese economy fell into long-term stagnation.

In the mid-1990s, China's balance of payments achieved a turnaround in its current account surplus due to increased exports (Fig. 3.2), and at the beginning of the twenty-first century, China's aggressive efforts to attract export-oriented FDI were successful, resulting in "twin large surpluses" in its current account and capital account. At this time, China's outward direct investment also began to take off, but due to the unexpectedly large outflow of capital, outward investment came to a halt in the late 2010s. Therefore, China's catch-up stage is from the early 1980s

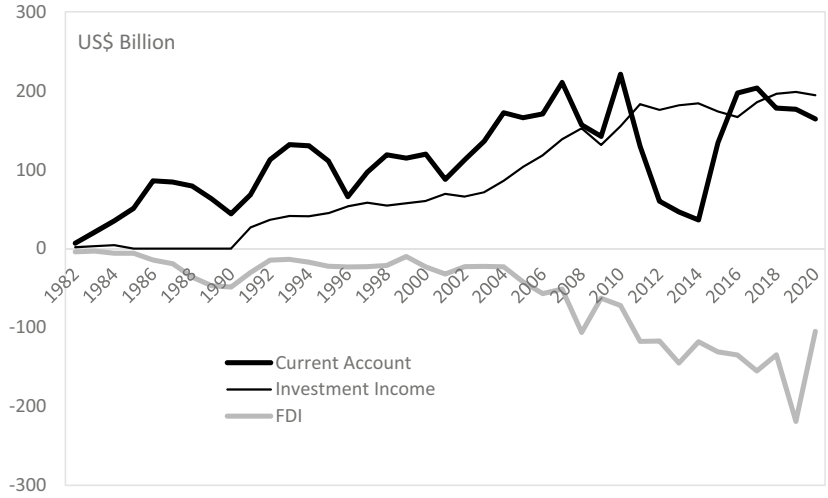

Fig. 3.1 Japan's balance of payments (*Note* Based on IMF Balance of Payments Manual, 5th edition. *Source* Author's creation based on the data from IMF, *Balance of Payment Statistics*)

to the end of the 1990s, when China turned to reform and opening-up and established a socialist market economy by the mid-1990s, or more specifically, until it joined the World Trade Organization (WTO) in 2001.

The growth-up stage, on the other hand, is from the early 2000s to today, that is, after China joined the WTO. Suffering from excess liquidity due to the rapid increase in exports and inward investment, China stepped into *zouchuqu*, or going outward. However, with the intensification of trade frictions between China and the U.S. accompanying the surge in exports to the U.S., and the intensification of competition with the U.S. for technological supremacy, China has been trying to shift its development mode to domestic demand- and consumption-led growth and innovation-driven growth.[5]

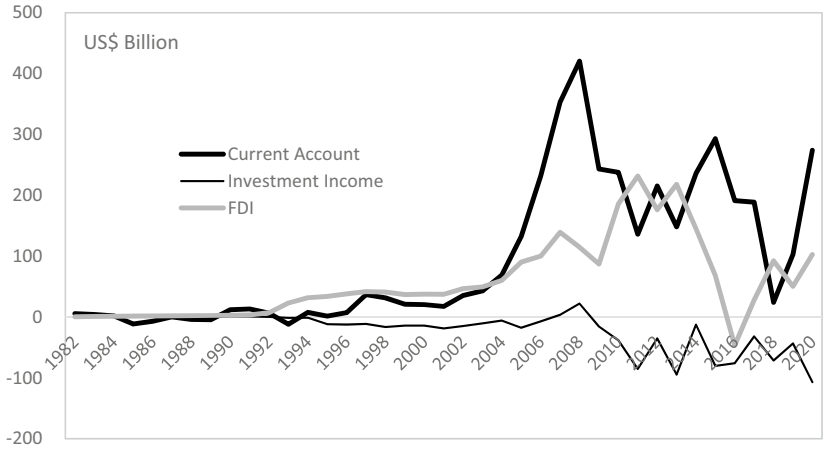

Fig. 3.2 China's balance of payments (*Note* Based on IMF Balance of Payments Manual, 5th edition. *Source* Author's creation based on the data from *China Statistical Yearbook*)

3.3 Catch-Up Stage: Earning Foreign Exchange and Increasing Surplus of Current Account Balance

3.3.1 Japan: Overcoming the Constraint of the Balance of Payments and Utilizing Industrial Heritage in Prewar Period

After World War II, the Japanese economy faced a shortage of foreign currency. Even in the pursuit of higher growth, the shortage of foreign currency became the limit to growth. Overcoming this "balance of payments ceiling" became the immediate goal of economic growth. Therefore, even after joining the IMF in 1952 and the GATT in 1955, foreign currency quotas and import restrictions were implemented in Japan.

The Japanese economy achieved postwar recovery with the increased demand generated by the Korean War, and the *1956 Economic White Paper* declared that it is no longer postwar. As a result of the economic recovery, there was a shared recognition that liberalization of trade and exchange was inevitable in the near future, and as early as June

1960, the Japanese government announced the "Outline of the Trade and Exchange Liberalization Plan" to prepare for the anticipated liberalization of trade and exchange rates. Subsequently, Japan became a GATT Article XI country in February 1963 and an IMF Article VIII country in April 1964,[6] and a balance of payments surplus was firmly established.

At this stage, Japan's foreign currency earning industries were basically dependent on the accumulation and legacy from the prewar period. These included textiles, general merchandise, light machinery (watches, cameras, radios, sewing machines), and steel and shipbuilding, which were also military industries. As for new industries, there was rapid growth in home appliances, and a domestic market for them was formed. As the production capacity of home appliances expanded rapidly, production continued to increase without an increase in imports. However, during this period, the Japanese government adopted a protectionist policy to deal with trade and exchange liberalization. In other words, the gradual liberalization bought the necessary time for capital investment. As a result, liberalization was significantly delayed in some industrial products and industries, such as passenger cars (1965), automobile engines (1971), and computers (1975).

The 1950 Foreign Capital Law took the stance that foreign capital could be introduced into Japan as long as it would help the Japanese economy to become self-reliant, develop soundly, and improve its balance of payments. This law remained in force until the revision of the Foreign Exchange Law in December 1979 and was seen as a symbol of the closed nature of the Japanese market. On the other hand, the introduction of technology was actively encouraged. The introduction of technology started with reverse engineering by Japanese companies, after which the foreign currency earned was used for technology introduction.

Japan's capital liberalization was carried out in stages under "external pressure": after joining the OECD in April 1964, capital liberalization was indeed phased in from the first to the fifth round, 1967–1973. The liberalization of key industries (integrated circuits, pharmaceuticals and agrochemicals, computers, and information processing) took until 1974–1976. Meanwhile, in Japan, joint ventures and cross-shareholdings were promoted in preparation for the intensification of competition and corporate acquisitions that would accompany liberalization.

3.3.2 *China: Opening to the Outside World and Market Transition*

Prior to the reform and opening-up, the role of foreign trade in China was to use limited foreign currency to secure imports of goods that were key to economic construction. Under the economic equilibrium principle, imports were aimed at alleviating bottlenecks caused by domestic supply capacity constraints, while exports were positioned as a means to finance imports. Since the founding of the People's Republic of China (PRC), the foreign trade system has been built on this policy, and by the time the socialist transformation was completed in 1956, a state monopoly on foreign trade had been established.

The reform of the foreign trade system after the reform and opening-up began with the dismantling of this monopoly system.[7] In addition, under the rigid price system, the cost of earning foreign currency for exports, the cost in Renminbi (RMB) of earning one U.S. dollar in exports, was at a level higher than the official exchange rate, and foreign trade companies had huge financial deficits. The reduction of subsidies for this deficit was one of the aims of the reform of the foreign trade system. The deficit in the foreign trade sector is mainly due to exports. Looking at the profit and loss of the export sector in RMB terms, all the sectors except the low-priced input goods sector, i.e., petroleum, coal, and building materials, were in the red. During the reform and opening-up period, emphasis was placed on promoting exports and earning foreign currency, but most of the exporting sectors found themselves in a dilemma: the more they exported, the larger the deficit in RMB terms. To solve this dilemma, China took steps to devalue the RMB and reform trade goods prices.

In 1981, China introduced a de facto dual exchange rate system by establishing an internal settlement rate that applied to trade in goods. From the mid-1980s, foreign exchange adjustment centers were established to provide foreign exchange between enterprises with ample foreign currency and those with insufficient foreign currency, and the dual exchange rate between the exchange rate of the foreign exchange adjustment centers and the official exchange rate continued until 1994, when the exchange rate was unified. In the early years of the reform and opening-up, China had three price systems: official government prices, government-guided prices, and market-adjusted prices. By the early 1990s, not only retail goods, but also agricultural products and many prices of manufactured goods had become market-adjusted prices.

The reform of trade goods prices became the most effective measure to reduce the deficit of foreign trade companies.

Immediately after the reform and opening-up, exports and foreign currency acquisition were encouraged in China. However, it was not possible to grow exports without promoting market-oriented reforms as described above, and in order to expand foreign trade, it was essential to further promote market-oriented economic reforms. Foreign trade became the factor that most effectively promoted the transformation of the Chinese economy into a market economy.

With the progress of market-oriented reforms, China's exports also expanded dramatically. According to Naughton (1996), China's foreign trade regime in the catch-up stage defined in this chapter forms a dual structure: an OT (ordinary trade) regime protected by high tariffs and quantitative restrictions, and an EP (export promotion) regime where tariffs are not imposed under bonded conditions. The success of China's export sector can be attributed to the rapid development of the EP regime, especially the increase in processing trade and direct investment.

China's processing trade is a transaction in which parts and materials provided by foreign companies are processed in factories in China according to the specifications of the foreign companies. Imports of parts and materials brought into China are exempt from customs duties, but 100% of the assembled and processed products must be exported. The Chinese side receives the processing fee in foreign currency. This type of processing trade is also seen in export processing zones and bonded factories in other countries, but in China it has been expanded nationwide. As a result, from the mid-1990s to the mid-2000s, processing trade accounted for more than half of China's exports and has dramatically expanded China's exports (Ohashi, 2014).

Processing trade has brought not only capital and technology, which were in short supply in China at the time, but also sales channels, and has enabled China, with its heavy industry, to industrialize with a focus on manufacturing, mainly consumer goods. Processing trade has created enormous employment opportunities and promoted inter-industry and inter-regional labor migration in China.[8] With the development of processing trade, the domestic sourcing rate and domestic value-added rate also increased. Processing trade, which specializes in the assembly and processing of final goods, has created huge downstream demand, and contributed to the upgrading of domestic industries through backward linkage effects.

In China, foreign-invested enterprises have become the main players in this processing trade. From the 2000s to the early 2010s, foreign-invested enterprises accounted for more than half of China's exports. Most of them entered China for the purpose of export production, and the bonded system for processing trade was a major incentive to enter China. As many empirical studies have pointed out, FDI makes a significant contribution to the economic growth of the host country in terms of production expansion, job creation, capital formation, foreign currency acquisition, and the transfer of technology and management know-how. According to Enright (2017), which emphasizes the role of FDI in China's economic development, the impact of the establishment, operations, and supply chains of foreign-invested enterprises amounted to 33% of GDP and 27% of employment in China for the five-year averages from 2009 to 2013.

The reason why China, which had been suffering from a trade deficit until the 1980s, has continued to be in the black since the 1990s is simply because the export-oriented foreign-invested enterprises that earned a surplus through processing trade and set up operations in China expanded their exports. In this way, China became the world's largest exporter, one of the world's leading recipients of FDI, and the "factory of the world".

3.3.3 Comparison: Differences in Initial Conditions and Use of Foreign Capital

Looking at the initial conditions for economic growth, Japan had completed its postwar reconstruction and was on the fast track to high growth. Based on the experience of the market economy, which had reached a certain level before the war, and through a series of postwar reforms, the institutional capacity for economic growth was well in place. However, even accelerating economic growth was hampered by the "balance of payments ceiling".

After the founding of the PRC, the country was in a state of economic devastation due to repeated political upheavals from the Great Leap Forward to the Cultural Revolution. Although various systems were put in place for the construction of a socialist state, the rigidly planned economy, combined with political turmoil, resulted in a long period of economic stagnation. Even after turning to the reform and opening-up, it was necessary to promote a "dual market transition."[9] In addition to the transition from a traditional customary economy to a market economy as in other developing countries, China needed to achieve a transition from

a planned command economy to a market economy, that is, a transition to a de-planned economy. In each transition process, China has to face the "middle-income trap"[10] and the "regime transition trap"[11] (Fig. 3.3).

Without natural resources, Japan's foreign trade also took the form of processing trade. However, unlike China's processing trade, this is a form of trade in which raw materials are imported, intermediate goods are made from them, and then processed into final goods for export. Compared to China's processing trade, higher added value can be expected, but the heavy dependence on foreign countries for raw materials, such as during the oil crisis, made the country vulnerable. Japan has been extremely cautious about introducing foreign capital but has been enthusiastic about introducing technology. This was because global capital movement was not as active as it is today, and the Japanese manufacturing industry had the ability to catch up simply by introducing software technology.

On the other hand, China's processing trade is a form of importing input goods and intermediate goods, assembling and processing them using China's abundant labor force, finishing them into final goods, and exporting them. The value added must be limited, but by joining the

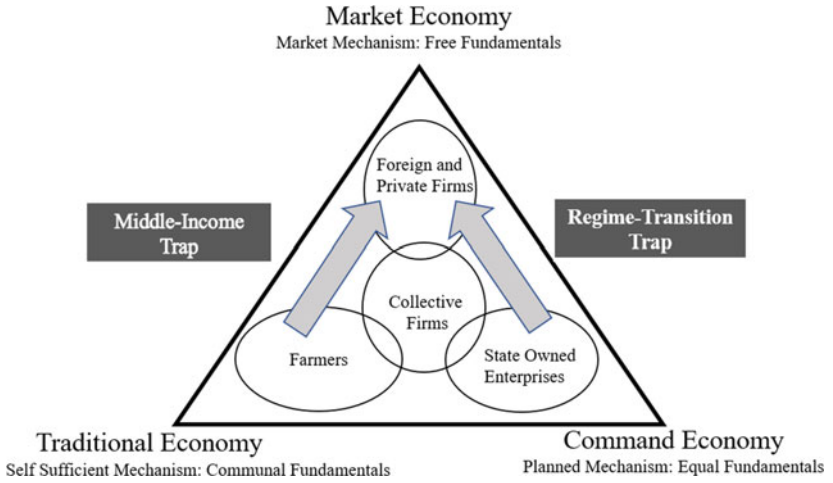

Fig. 3.3 China's dual transition to the market economy (*Source* Author's creation based on Ohashi [2019, p. 17])

global value chain, the benefits of trade can be effectively obtained. It was China's bold policy of introducing foreign capital that made it possible for this processing trade to proceed efficiently. As a result, in the 1990s, the Chinese economy became much more dependent on foreign capital, and a growth pattern that could be called the FDI/trade nexus was seen: FDI increased exports, export expansion increased the growth rate, and foreign capital focused on the high growth rate went to China, resulting in another increase in exports.

3.4 Grow-Up Stage: Coping with Excessive Savings and External Imbalances

3.4.1 Japan: Export-Led Growth and Trade Frictions with the United States

1. **Japan's export-led growth**

The high growth of the Japanese economy ended with the first oil crisis of 1973–1974. In emerging from the recession that followed the outbreak of the oil crises in the 1970s, the impact of exports in creating effective demand was extremely large. Exports achieved double-digit growth in 1980–1981, and the growth contribution of external demand remained positive during 1980–1985. There was still a limit to Japan's ability to recover on its own through domestic demand. At the same time, economic stimulus measures in the United States and other developed countries during the oil crises, as well as the weakening of the yen against the U.S. dollar, provided a tailwind for the increase in Japan's exports.

In terms of specific industries, after the oil crises, heavy and large-scale industries such as steel and shipbuilding, which had supported Japan's rapid economic growth, fell on hard times. However, thanks to the energy-saving technologies developed during the oil crises and the use of microelectronics (ME), automobiles, and home appliances have emerged as industries that drive the Japanese economy.

With the oil crises, the U.S. economy, which had been widely receptive to Japanese exports, began to show signs of recession, and the Japanese economy faced new difficulties. In 1971, the U.S. fell from a trade surplus to a deficit for the first time in a century, and the Nixon administration decided to suspend the exchange of gold for dollars; in 1985, the U.S. fell from a creditor nation to a debtor nation for the first time in 70 years,

and the Reagan administration adopted a new trade policy centered on Section 301 of the Trade Act of 1974, which allows for countermeasures and retaliation in trade. During this period, East Asian countries, including Japan, which had continued to achieve high growth by leveraging their exports to the U.S., enjoyed a further increase in exports to the U.S. because of Reaganomics' tax cuts, while the U.S. faced an expansion of its "twin deficits".

Trade frictions between Japan and the U.S. were seen in the 1950s and 1960s over textiles, in the 1960s over steel, and in the 1960s and 1970s over color TVs. In the 1980s, the focus of trade friction shifted to automobiles, machine tools, and semiconductors, and the scale and severity of the friction became more intense than before. First, the targets of trade frictions became aligned with major and strategic U.S. industries, such as automobiles and semiconductors. Second, as Japan's international competitiveness increased, there was a growing sense of crisis in the U.S. that Japan and the U.S. could turn the tables on each other. Third, the main cause of the macroeconomic imbalance symbolized by low savings and high consumption in the U.S. was also attributed to the expansion of Japanese exports to the U.S. Finally, the U.S.–Japan trade imbalance was also due to the lack of growth in U.S. exports to Japan, which was increasingly criticized because of the closed nature of the Japanese market.

2. **U.S. aggressive unilateralism**

Throughout the 1980s, the U.S., the founder of the GATT system, emphasized aggressive unilateralism in its trade policy. This is evident in the changes in U.S. trade law.[12]

The Reciprocal Trade Agreements Act of 1934 was a trade law that marked a shift from protectionism, symbolized by the Smoot–Hawley Tariff Act under the bloc economy, to unconditional most-favored-nation (MFN) treatment, and was the prototype of GATT principles. The 1962 Trade Expansion Act, which was passed in response to the expiration of the Reciprocal Trade Agreement Act of 1934 in 1963, respected the principles of GATT and the Reciprocal Trade Agreement Act of 1934 under the overwhelming economic power of the U.S. However, it included Section 252, which describes retaliation against unjustifiable, unreasonable, and discriminatory trade practices of foreign countries. The Trade Act of 1974, after the U.S. turned into a trade deficit nation in 1971,

emphasized reciprocity and established Section 301, which allows the President to take counter and retaliatory measures to cancel restrictions and subsidies of foreign governments. The 1979 Trade Act, which was under "trade détente" after the GATT Tokyo Round agreement, clarified the scope of application and procedures of Section 301.

As the U.S. trade deficit continued to increase, the Trade Act of 1984 expanded the scope of Section 301 to include direct investment, trade in services, and intellectual property rights; expand the definition of unfair, unreasonable, and discriminatory and provided specific examples; and allowed the U.S. government to initiate investigations at its own discretion without a complaint by a private company. In 1985, the Reagan administration's new trade policy made clear its intention to place Section 301 of the Trade Act at the center of its trade policy. This led to the passage of the Omnibus Foreign Trade and Competitiveness Act of 1988. In this legislative process, there was a series of protectionist proposals, including the Gephardt Amendment, which included a mandatory 10% reduction in the surplus of unjustified excessive surplus countries (meaning Japan implicitly) with the U.S. As a result, Super 301 was added as a timed legislation in 1989 and 1990 to conduct investigations into the trade-distorting practices and foreign barriers. At the same time, Special 301 was added, which allows for the imposition of retaliatory measures against infringement of intellectual property rights.

3. U.S.–Japan trade friction

In response to the U.S. aggressive unilateralism, Japan responded to this "external pressure" quite obediently. As Japan is dependent on the U.S. for its security, it gave priority to its relationship with the U.S. as an ally.

First, the voluntary export restraint (VER) measures were adopted. Self-imposed export restrictions arose as Japan's export capacity increased, and from the 1970s onward, regulatory measures were successively imposed on textiles, steel, color TVs, automobiles, and machine tools from Japan to the U.S., as well as steel and video tape recorders (VCRs) to the then European Community (EC). A symbolic item of the Japan–U.S. trade friction and export self-imposed restrictions is automobiles: In 1981, Japan's export self-imposed restrictions were introduced with the aim of restricting U.S. imports of automobiles from Japan, setting

an annual export limit of 1.68 million vehicles. This quota limit was introduced with the intention of eliminating it in April 1984, three years after it was set. However, due to the widening of the U.S. trade deficit with Japan and strong pressure from U.S. auto manufacturers, the quota restrictions continued to be extended and were finally removed in 1994 (Obi, 2009). Thereafter, the Japanese auto industry responded by moving its production facilities to the U.S. Beginning in the late 1980s, exports of Japanese cars to the U.S. were replaced by the production of Japanese cars in the U.S. (Fig. 3.4).

The next step was the voluntary import expansion (VIE), which led to the signing of the Japan–U.S. Semiconductor Agreement in September 1986. Semiconductors developed in the U.S. are the core devices for industrial development and national defense. In the 1980s, Japan and the U.S. reversed their share of the global market.[13] In the U.S., Japanese semiconductor companies have been accused of industrial espionage in

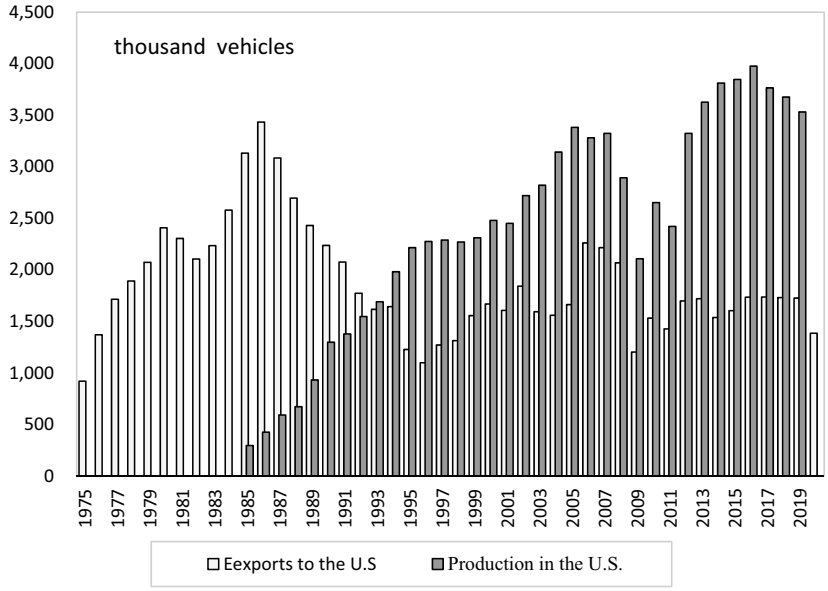

Fig. 3.4 Japanese automobile exports to the U.S. and production in the U.S. (*Source* Authors' creation based on JAMA [2021])

Silicon Valley, of dumping to increase their market share, of having developed with government subsidies and low-interest loans, of being typical of the public–private "Japan Inc." A series of criticisms followed, such as high barriers for U.S. manufacturers to manufacture and sell their products in Japan (Okimoto et al., 1984).

In 1985, the U.S. Semiconductor Industry Association (SIA) and DRAM manufacturer Micron filed complaints with the USTR and the Department of Commerce, respectively, alleging dumping of Japanese products. In response, the U.S.–Japan Semiconductor Agreement was signed. Under the agreement, it was agreed that the share of foreign-made semiconductors in the Japanese market should be at least 20% within five years as a measure to improve market access, and that they should not be sold at prices below the fair market value (FMV) as an anti-dumping measure.[14] By the time the second agreement, which took effect in 1991, expired in 1996, the U.S. resurgence in the semiconductor industry had been realized while Japan's semiconductor business was severely damaged by the stranglehold of the market share monitoring system and the FMV rule. As a result of the U.S.–Japan Semiconductor Agreement, which was signed under U.S. aggressive unilateralism, the semiconductor trade was conducted under managed trade and increased the gray measures in the GATT regime, under which the Japanese economy had enjoyed the benefits of free trade.

In September 1985, the G5 Plaza Accord led to the appreciation of the yen, and the Japanese economy fell into a recession with a strong yen. The monetary easing measures adopted to cope with the strong yen recession created the bubble economy. With the bursting of the bubble economy, the Japanese economy entered a tunnel of long-term economic stagnation.[15]

3.4.2 China: U.S.–China Trade Imbalance and Competition for Technological Supremacy

1. **China's growing trade surplus with the U.S.**

The postwar U.S.–China economic relationship was restarted during the Cold War, so even after China turned to the reform and opening-up, the U.S. carefully relaxed export controls and strictly monitored the

human rights situation while working to expand the economic relationship. By the time China got on an export-led growth path and joined the WTO in 2001, the trade disputes over trade imbalances, market access, intellectual property rights, and the RMB rate became the focus of U.S.–China relations.

At the root of the trade friction between the U.S. and China is a long-standing, massive trade imbalance, consisting of a U.S. trade deficit with China and a Chinese trade surplus with the U.S. (Fig. 3.5).[16] Until 2018, when the U.S.–China trade war and the COVID-19 had not yet had much of an impact, the U.S. deficit with China and China's surplus with the U.S. were quite asymmetric. For example, according to the customs statistics of the U.S. and China in 2018, the U.S. deficit with China was $419.2 billion, while China's surplus with the U.S. was $323.3 billion, a gap of nearly $100 billion between the two. The reason for the inconsistency in the trade statistics between the U.S. and China is due to differences in the methods used by the two countries to deliver trade goods (Free Alongside Ship: FAS and Customs Value: CV for the U.S., Free on Board: FOB and Cost, Insurance and Freight: CIF for China), the scope of the statistics (e.g., whether Puerto Rico and the U.S. Virgin Islands are included or not), the timing of customs clearance, the country of origin, and the exchange rate (JCCT, 2009, 2012).

In addition to these technical issues, after China's processing trade started in earnest, entrepôt trade via Hong Kong (Hong Kong's re-exports originating in China) began to have a significant impact on the U.S.–China trade balance. Subsequently, the *China's Customs Statistics* gradually improved the reclassification based on final destination, and the form of transit trade via Hong Kong also changed significantly. There has been an increase in the number of products, such as transshipment, that originate in China but are transferred to their final destination without being cleared in Hong Kong, using only Hong Kong's port facilities and settlement functions, and the handling of exports to the U.S. via Hong Kong has become increasingly complex.

2. **China in the global value chain (GVC)**

As the U.S.–China economic relationship deepens, U.S. business with China is also undergoing significant changes. The sales of local subsidiaries of U.S. companies located in China reached $573.383 billion

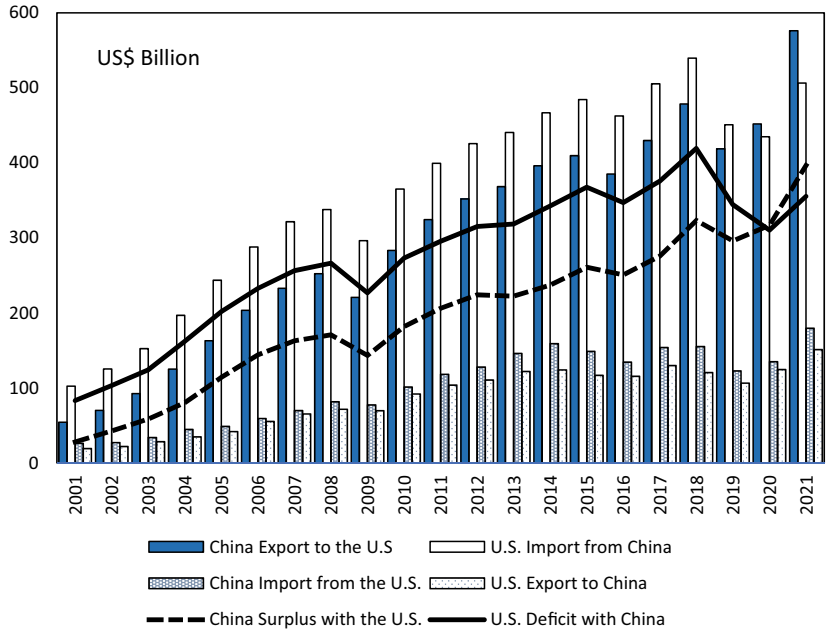

Fig. 3.5 U.S.–China trade balance (*Source* Author's creation based on the data from *U.S. Foreign Trade Highlights* and *China Customs Statistics*)

in 2019, already more than five times the size of U.S. exports to China (BEA, 2021), and the business of U.S. companies with China is shifting from exports to China to production and sales by local subsidiaries in China. In addition, the weight of U.S. intrafirm trade is also high, with 29.4% of U.S. imports from China at its peak in 2010 coming from companies affiliated with China, and the ratio of intrafirm trade thereafter remaining at 23–26% in the latter half of the 2010s (Census, 2022). Thus, a borderless business development is unfolding between the U.S. and China, and the asymmetry in the trade balance is becoming more structured.

Furthermore, looking at value-added trade between the U.S. and China from the perspective of the global value chain (GVC), we can see a different picture from the bilateral trade depicted by customs statistics. One of the pioneering studies on GVC is the case study of Apple's iPhone by Xing and Detert (2010). iPhones are shipped and exported to

the U.S. market from factories in China, the country of production of the final goods. According to customs statistics, the U.S. posted a trade deficit with China because it imported the iPhones from China. However, in value-added trade, we focus on the country of origin of the components and parts that make up the iPhone, with component manufacturers from Japan, the U.S., Europe, South Korea, and Taiwan supplying essential components and parts to final assembly plants in China. In contrast, China only provided labor for the iPhone production, and the value added generated in China in the late 2000s was only a few percent of the iPhone shipment value.[17] If we look at the U.S.–China trade balance based on value-added trade statistics, the U.S. deficit with China and China's surplus with the U.S. will shrink considerably. Compared to the U.S. trade balance with China based on customs statistics, the scale of the U.S.–China trade balance (the U.S. deficit with China and China's surplus with the U.S.) will be less than a half of that based on customs statistics in terms of value added.[18]

From the last years of the Bush administration to the Obama administration, the U.S. began to focus on China as a global growth center, while taking individual actions such as the implementation of anti-dumping (AD), countervailing duty (CVD), and safeguard measures. Debates over trade imbalances and the undervaluation of the RMB have been removed from the main agenda of U.S.–China trade negotiations and strategic and economic dialogues,[19] partly due to structural changes in the U.S.–China economic relationship.

3. U.S.–China competition

In the 2010s, Chinese investment in the U.S. also increased rapidly, and the frictions associated with Chinese investment in the U.S. became apparent, as did the period of U.S.–Japan trade friction. China's investment in the U.S. is overwhelmingly M&A and majority control. There are not a few investments by Chinese state-owned enterprises, many of which are aimed at acquiring strategic assets. Moreover, in many cases, the behavioral patterns of Chinese companies buying up U.S. assets did not conform to U.S. business practices and norms, and their contribution to the U.S. economy and society was still limited.

With the advent of the Trump administration, which advocated "America First" and was critical of globalism and multilateralism, the

previous policy of engagement with China was rejected, leading to new tensions in U.S.–China economic relations. Under the Trump administration, the transfer and acquisition of U.S. technology and intellectual property by China became a major point of contention, as indicated by the Section 301 of the Trade Act of 1974 Investigation Report released in March 2018 (USTR, 2018).

Behind this, of course, was the persistent complaint that China had not fully implemented the commitments it made when it joined the WTO. There was unceasing antipathy toward the persistence of barriers to competition and the continued implementation of market-distorting policies, such as the implementation of industrial policies targeting specific industries, preferential treatment of state-owned enterprises, provision of subsidies, coercion and theft of technology transfer, setting of proprietary standards, inaction on excess production capacity, and incomplete competition policies. As a result, the perception took hold that China was in a "state capitalist" system that was quite different from that of the U.S.

In addition, the Xi Jinping administration's stance on foreign affairs, which is out of line with the liberal international order established by the U.S. after World War II, has further raised the alarm of the U.S. As China emerged as an economic superpower and modified its posture toward the outside world based on Deng Xiaoping's legacy of *taoguan yanghui* (hiding one's talents and accumulating power within), it began to assert its own "core interests" and develop "great power diplomacy with Chinese characteristics". The U.S.–China relationship has been transformed into one of the great powers vying for global hegemony. At the same time, under the Trump administration, the perception of the general public in the U.S. toward China has also rapidly deteriorated.[20]

The Trump administration, which has been advocating a hard line against China since before the formation of its administration, viewed the U.S.–China economic relationship as a security-encompassing competition for technological supremacy and has imposed sanctions to confront China. The U.S.–China relationship has come to form one of the world's most important, yet highly volatile, bilateral relationships, to the extent that historical empirical evidence points to a "Thucydides trap" (Allison, 2017), i.e., an inevitable clash between a rising emerging power and an existing hegemonic power. The U.S. stance toward China is also followed by the Biden administration.

3.4.3 *Comparison: Trade Frictions with the U.S. and Differences in Responses to Market and Non-Market Economies*

In the grow-up stage, both Japan and China maintained strong economic growth with huge surpluses with the U.S. A country's current account balance reflects its savings-investment balance. Japan's current account surplus in the 1980s reflected Japan's excess savings and the U.S.' deficit. Similarly, China's current account surplus in the 2000s reflects China's excess savings and the U.S.' shortage of savings (Fig. 3.6). Thus, the debates over the global imbalances in the 1980s and 2000s were caused by the current account surpluses of Japan and China and the current account deficits of the U.S., respectively (Fig. 3.7).

In the 1980s, Japan, which had a huge trade surplus with the U.S., was subjected to severe bashing from the U.S. First, Japan's surplus with the U.S. was regarded as the export of unemployment in the U.S. and was harshly criticized not only by industry but also by labor unions. At the same time, the U.S. denounced the closed nature of the Japanese

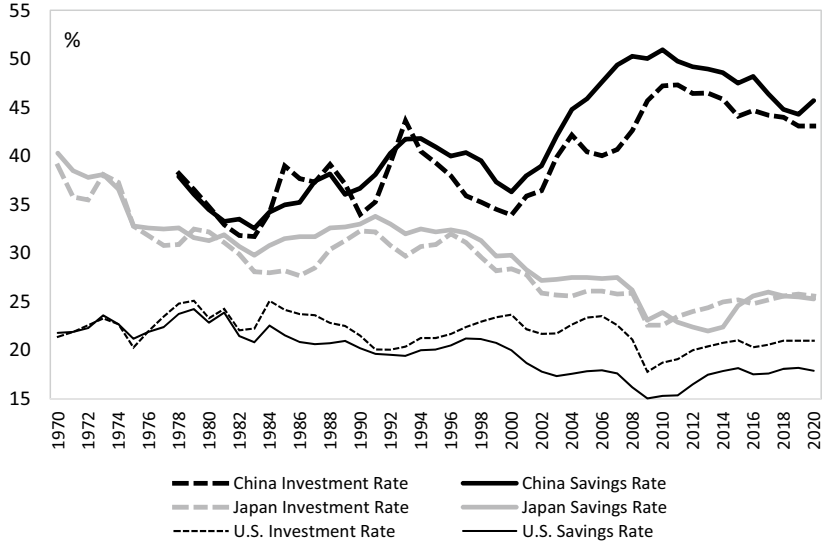

Fig. 3.6 Savings and investment balance of Japan, the U.S., and China (a percentage of GDP) (*Source* Author's creation based on IMF, *International Financial Statistics* and *China Statistical Yearbook*)

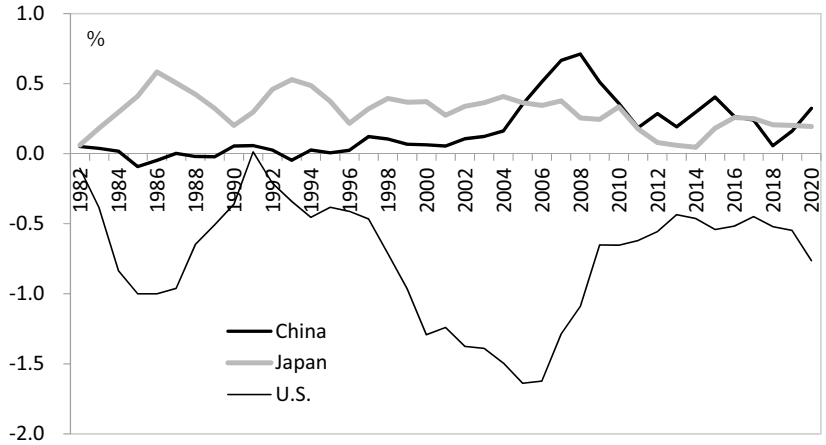

Fig. 3.7 Global imbalance (current account balance as a percentage of world GDP) (*Source* Author's creation based on the data from IMF, *International Financial Statistics* and *China Statistical Yearbook*)

market, criticized unfair trade practices, trade barriers, and the policy agency represented by the Ministry of International Trade and Industry (MITI) behind them, and stepped up its calls for market opening and import expansion. The U.S. raised the issue of the exchange rate, which is the source of Japan's competitiveness, and called for exchange rate adjustments.

The appreciation of the yen gave Japanese companies an advantage in importing goods and made them realize that the overseas assets were undervalued, and they embarked on a massive acquisition of U.S. assets, buying up iconic U.S. buildings and companies, which drew even harsher criticism. In addition, as seen in the case of Toshiba Machine's violation of the COCOM regulations, the actions of Japanese companies that deviated from international norms were subject to severe criticism from a security perspective as well. Such U.S. criticism of Japan has something in common with the U.S.' subsequent harsh stance toward China, which also has a huge trade surplus with the U.S.

However, the U.S. bashing of Japan has since moved in the direction of mitigation and resolution. First, the bursting of the bubble economy severely damaged the Japanese economy, and the U.S. was relieved of its

sense of threat from Japan's overtaking the U.S. Prior to this, bilateral trade negotiations between Japan and the U.S., such as the Market-Oriented Sector-Selective (MOSS) talks and the U.S.–Japan Yen-Dollar Committee, had been held frequently. In 1989–1990, the U.S.–Japan Structural Impediments Initiative (SII) was held, which were not limited in scope to individual items and exchange rates but expanded in scope to include the nature of economic systems and culture, such as business practices and distribution structures. Subsequently, there were repeated efforts to deepen mutual understanding, including the follow-up meetings between 1990 and 1992 to check the progress of the measures to improve the economic structure of the two countries that were included in the Final Report of the SII.[21] In addition, with the passage of time, both the U.S. government and companies were able to gradually adapt to Japanese-style business practices. Moreover, it has gradually become clear that Japanese companies in the U.S. are making a significant contribution to the U.S. economy and society, whether in terms of employment, exports, or research and development (R&D). In 2019, Japanese companies in the U.S. have become the largest foreign presence in the country.[22]

In contrast, the current perception of the U.S. toward China is extremely harsh. It has become a target of criticism from the same perspective as Japan in the past. In addition to this, in the case of China, there are more factors involved than criticism of Japan and Japanese companies. First, there is the critical perspective of trade relations with a nation led by the Chinese Communist Party. There is a wariness of state-owned enterprises that are not expected to compete fairly in the marketplace, and there is also concern about non-market economies and non-competitive trade practices. China is also a security threat and, as the Biden administration describes, the only competitor potentially capable of combining its economic, diplomatic, military, and technological power to mount a sustained challenge to a stable and open international system (White House, 2021), forcing the U.S. to place restrictions on the transfer of dual-use technologies. In the economic context, China, like Japan in the past, is a challenger to the U.S. In the case of China, however, there is a greater emphasis on consideration of multiple factors, including ideology, political system, and security, in addition to economic factors.

3.5 A Comparison of China and Japan: The Benefits of Globalization and Global Governance

Through the comparison of export-led growth between China and Japan, we have been able to make the following implications regarding the relationship between trade, FDI, and economic growth in China.

The first concerns the benefits of opening-up to the outside world (trade and FDI). Before World War II, Japan experienced a highly developed market economy and had an accumulation of manufacturing industries. After the war, it belonged to the capitalist camp and had favorable conditions for access to allied countries and the U.S. market. China, on the other hand, was a semi-colonial feudal society before the war, where commercial capital was the mainstay and industrial capital was difficult to develop. After the war, it belonged to the socialist camp, established a planned economy system, and pursued a "self-reliance" path after the Sino-Soviet split. Thus, China's political and economic system is a limiting factor for economic growth and industrial development. Therefore, the shift to the reform and opening-up at the end of the 1970s and the emphasis on trade and FDI contributed to alleviating the unfavorable initial conditions.

The second is the opportunity of globalization and WTO accession. In the catch-up stage, Japan achieved growth through exports and technology introduction, with little use of foreign capital. In the growth-up stage, Japan promoted the transformation of its industrial structure through capital export. In other words, Japan's economic growth experienced a change in its industrial structure that reflected its comparative advantage. In China, on the other hand, inward direct investment as a form of transfer of management resources played a pivotal role in the process of economic growth. Even in the high-tech industries that were not based in China, China was able to effectively utilize the transferred management resources and rapidly catch up. The trajectory of China's economic development has brought about a modification of the "flying-geese pattern of development" of East Asia.[23] The development of international division of labor and fragmentation under the modularization of industrial products, and the accumulation of industries with foreign-invested enterprises at their core, have led to rapid growth leveraged by the FDI–Trade nexus. The modularization of industrial products has enabled an international division of labor called fragmentation by production process. Industrial clusters centered on foreign-affiliated firms formed

the FDI–Trade nexus, enabling rapid leapfrog-type growth leveraged by trade and FDI in specific industrial sectors (Ohashi, 2005).

The third issue concerns the involvement in global governance. Historically, Japan has been located on the periphery of the international order centered on China. Even in the process of modernization after the Meiji Restoration, Japan focused on adapting itself to the international order. A similar pattern of external behavior has been seen since World War II, as Japan has striven to adapt to the international regime. On the other hand, China, which has historically been a central power, tends to adopt an "exit, voice, and loyalty" approach to the existing international regime (Hirschman, 1970). Therefore, today, China's independent and self-reliant posture as a major power often clashes with the existing international order. In fact, such traditional factors are unverifiable, but it is likely that the traditional factors of the middle kingdom underlie China's current perception of the international order and international behavior.

Needless to say, rigorous empirical research on individual hypotheses will continue to be required for the above three points.

Notes

1. The World Bank (1993) partially evaluates the industrial policies of Japan and Korea, but at the same time warns that industrial policies cannot be implemented in developing countries with low institutional capacity. However, with the expanding role of governments in the face of repeated financial crises, growing awareness of economic security and the Covid-19 pandemic, new industrial policies that respond to the new era beyond growth and employment expansion are attracting attention in many countries (METI, 2021).
2. The studies in Japan, for example, include Minami (1986) for Japan and Ohashi (2003) for China.
3. One of the few exceptions is Minami (1994), and this comparative study of Japan and China is based on Minami (1986). However, both studies focus on the period of rapid economic growth, the catch-up phase as used in this chapter, in Japan and China.
4. The *Jimmu* boom (1955–1957) was named after Emperor *Jimmu*, who is regarded as the first emperor since the beginning of history. The *Iwato* boom (1958–1961) was named after the founding myth of Japan, as it was a bigger boom (42 months) than the *Jimmu* boom. The Olympic boom (1962–1964) was due to the special demand for construction of the 1964 Tokyo Olympics. The *Izanagi* boom (1966–1970) was even larger than the *Iwato* boom (57 months) and was named after the founding myth.

5. This policy is reflected in the strategy for the development of the dual circulation proposed at the May 2020 meeting of the Standing Committee of the Chinese Communist Party Central Politburo. According to General Secretary Xi Jinping, "We aim to create a new model of economic development in which the domestic circulation takes the lead and the domestic and international dual circulation promote each other" (*Xinhua*, July 21, 2020).
6. Article XI of the GATT stipulates the prohibition of import and export volume restrictions in principle, and Article VIII of the IMF provides for the avoidance of restrictions on payments in current transactions, the avoidance of discriminatory currency measures, and the maintenance of the convertibility of balances in the national currency held by other countries.
7. For the details, see Ohashi (2003, Chapter 2).
8. According to Wei Jianguo, Vice Minister of Commerce at the time of 2007, direct employment in processing trade is 30–40 million (about 20% of the secondary industry), and the number of workers in processing trade-related industries is 50–60 million (*Guoji Shangbao*, July 24, 2007).
9. The idea of "dual market transition" is based on Ishikawa (1990), who attributed the failure of the rapid transition to a market economy in the former Soviet Union and Eastern European countries to the underdevelopment of the market economy.
10. The middle-income countries are forced to rely on independent innovation, but it is not an easy task for them to accelerate economic growth by innovation. Gill and Kharas (2007) called this stagnant phase of economic growth in middle-income countries as the "middle-income trap".
11. The 2011 Social Progressive Series Report of Social Development Research Group represented by Professor Sun Liping at Tsinghua University proposed the concept of "regime transition trap," emphasizing the vested interest groups formed in the market transition process tend to distort and deform the economic and social development to maximize their own profits in China. *Zhongguo Qingnianbao (China Youth Daily)*, January 9, 2012, "Zhongdeng Shouru Xianjing Haishi Zhuanxing Xianjing" (Middle-income Trap or Regime-transition Trap), *Kaifang Shidai (Open Times)*, No. 3, 2012.
12. For the details, see Ohashi (1998, Chapter 7).
13. In 1981, Japanese semiconductor manufacturers held a 70% share of the global 64 K DRAM market (*Fortune*, December 14, 1981).
14. The agreement was contained in a closed-door side letter stating that the Japanese government would recognize the expectations of the U.S. semiconductor industry. However, the U.S. government considered this a promise and imposed sanctions against Japan for breaking its promise.

The undisclosed side letter was first disclosed in the release of diplomatic documents on December 19, 2018 (*Asahi Shimbun*, December 19, 2018).

15. As for the Japanese economy after the bubble economy, see Ito and Hoshi (2020).
16. With respect to various scale estimates of the U.S.–China trade imbalance, see Ohashi (2020, Chapter 3).
17. Of course, the iPhone case may be a rather extreme case in China's foreign trade at the end of the 2000s: according to the 2020 edition of Apple's supplier list, the number of Chinese companies surpassed Taiwanese companies to take the top spot for the first time (*Nikkei*, June 3, 2021). In addition, the ratio of domestic value added to China's total exports, as calculated by the OECD (2021), rose to 82.8% in 2018, reflecting the fact that China has since been equipped with a more full-set industrial structure and rapidly increasing its technological capabilities.
18. Calculated based on OECD (2021).
19. A series of U.S.–China high-level dialogues were called the Strategic Economic Dialogue (SED) under the Bush administration and the Strategic and Economic Dialogue (S&ED) under the Obama administration.
20. For example, according to the China Image Survey conducted regularly by the Pew Research Center (https://www.pewresearch.org), since 2012, Americans' unfavorable perceptions of China have significantly outnumbered favorable ones.
21. The final report set forth a wide range of commitments, from macroeconomics to corporate behavior and business practices, as measures that should be taken by both Japan and the U.S. Japan was asked to make commitments to increase public investment, make more effective use of land, deregulate the Large-Scale Store Law, tighten the anti-monopoly law, improve *keiretsu* (intragroup) transactions, and understand the actual difference between domestic and foreign prices, while the U.S. was asked to make commitments to balance the budget, encourage savings and investment, curb excessive executive compensation, strengthen research and development, promote exports, and train and educate workers (RIITI, 1990).
22. According to BEA (2021), among foreign firms located in the U.S., Japanese firms ranked first in 2019 inproperty, plant, and equipment spending and R&D spending, and second in employment and value added, behind British firms.
23. A "flying-geese pattern of development" is a model for the international division of labor based on dynamic comparative advantage in East Asia, where the production of commoditized goods would continuously move from the more advanced countries to the less advanced ones. The

paradigm was developed in 1930s and presented to world academia by Akamatsu (1961). See also Kojima (2000).

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