Evolution of U.S. Trade with China

by James Orr

Over the course of the past decade U.S. trade flows with China have contrasted sharply with overall U.S. trade patterns. While the U.S. trade balance as a whole deteriorated during the first half of the 1980s, our trade with China remained roughly in balance. After 1987, when the overall U.S. trade balance began to improve, a surge in imports from China led to a substantial worsening in the U.S. bilateral balance with China. At present, our trade deficit with China has risen to roughly $12 billion, a sum exceeded only by our deficit with Japan.

This article analyzes developments in U.S. trade with China since 1980. It attributes the surge in U.S manufactured goods imports from China in the second half of the decade to significant changes in China's foreign economic policies. The country has sought both to improve price competitiveness by devaluing its currency and to acquire capital and technology by encouraging foreign investment. These policy changes have enabled China to take advantage of its vast supply of inexpensive labor and to develop an internationally competitive export sector. Between 1985 and 1990, China raised its share of U.S. imports of manufactured goods and became a significant source of relatively low-cost consumer goods.

One corollary of the growth in U.S. imports from China has been the shift in the pattern of U.S. imports from Asia. In particular, Hong Kong's share of U.S. manufactured imports has declined as Hong Kong producers have increasingly moved processing and assembly operations to China.

Trends in U.S.-China trade

The pattern of U.S.-China trade during the past decade differs remarkably from that of U.S. trade with the rest of the world. The overall U.S. merchandise trade balance steadily worsened during the first half of the 1980s, but U.S. bilateral trade with China remained roughly in balance (Chart 1). Since 1985, however, our bilateral trade balance with China has steadily deteriorated at the same time that the U.S. trade balance with nearly all other major trading partners has substantially improved.

The deterioration in our trade position with China is largely explained by the rapid growth in U.S. imports. After having grown by only $3.5 billion between 1978 and 1985, U.S. imports from China increased by nearly $15 billion from 1985 to 1991 (Chart 2). Since 1987, U.S. imports from China have grown at an annual rate of 35 percent, about five times as fast as overall U.S. import growth. In contrast, U.S. exports to China have expanded by about 11 percent annually since 1987, a rate roughly in line with the growth of overall U.S. exports over the same period.[1]

Accompanying the rapid growth in U.S. imports from China has been a significant shift in the composition of these imports. During the first half of the 1980s, food and industrial supplies made up about one-half of U.S.

[1]Overall U.S exports grew at an annual rate of 16 percent since 1987 The 11 percent annual growth in U S exports to China since 1987, however, is low compared with the 21 percent annual growth in U.S exports to the Asian newly industrialized countries (NICs)

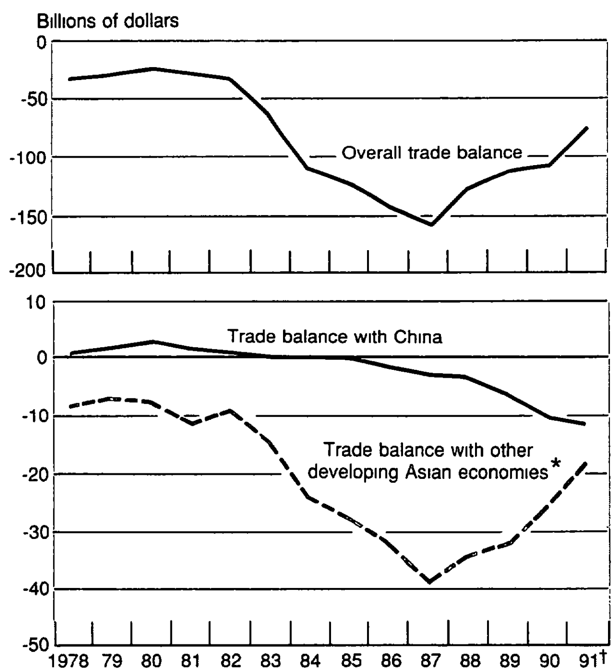
imports from China (Table 1). By contrast, consumer goods imports have dominated the recent growth in trade, expanding to more than three-fourths of U.S. imports from China by 1990 The share of food and industrial supplies by 1990 had fallen to around 15 percent Consumer goods imports have generally been in relatively unsophisticated product categories, particularly toys, textiles and apparel, and telephones and radios.

Our growing trade imbalance with China not only contrasts with overall trade patterns but also runs counter to the substantial progress the United States has made in reducing its trade deficit with other Asian economies.[2] Between 1980 and 1987, the U S trade deficit with all Asian economies rose from $15 billion to $98 billion (Table 2) Japan and the Asian newly industrialized countries (NICs) were the major sources of that deficit Since 1987 the overall deficit with the Asian economies excluding China decreased by about $33 billion, an improvement led by the declining deficits with Japan and the Asian NICs. The $10 billion increase in the deficit with China, however, offset almost one-third of this improvement, and in 1991, the U S deficit with China accounted for one-sixth of the U S trade deficit with Asia

[2]Japan, China, the four Asian NICs (Hong Kong, South Korea, Singapore, and Taiwan), Indonesia, Malaysia, the Philippines, and Thailand

Chart 1

U.S. Merchandise Trade Balance



Source U S Department of Commerce

*The developing Asian economies are Hong Kong, South Korea, Singapore, Taiwan, Indonesia, Malaysia, the Philippines, and Thailand

† Based on data from three quarters

Sources of China's improved international competitiveness

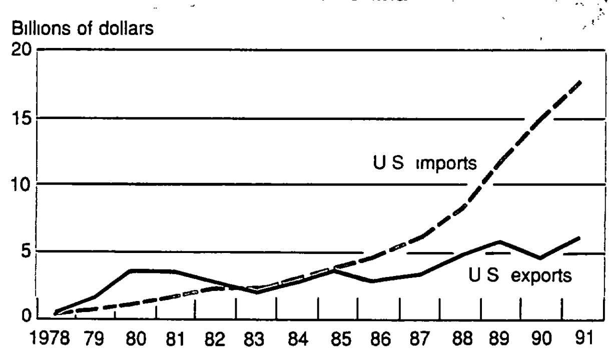
In analyzing the growth of U.S. trade with China, one must recognize that until the late 1970s China was effectively a closed economy. Annual levels of exports and imports were predetermined in five-year economic plans, and trade patterns did not reflect China's relative competitiveness in different products Moreover, the exchange rate was fixed and Chinese firms were insulated from world price movements China's adoption of an "open door" policy in 1978 signaled the beginning of an overhaul of its foreign trade system The country sought to expand the role of market forces in trade and investment decisions and, in particular, to promote manufactured exports

One major change in China's foreign trade system has involved the exchange rate of its currency, the yuan.[3] Since the early 1980s China has actively pursued a policy of improving the price competitiveness of Chinese goods by devaluing the yuan The effects of this policy on China's price competitiveness are seen in Chart 3, which plots the real value of the yuan against the dollar Between 1980 and 1985, the real value of the

[3]The Chinese currency is called the renminbi (RMB) It is denominated in yuan

Chart 2

U.S. Merchandise Trade with China



Source U S Department of Commerce

yuan depreciated by roughly 50 percent against the dollar. Industrial countries and developing Asian economies other than China also recorded large real depreciations against the dollar during this period. Nevertheless, the dollar's sharp fall over 1985-88 reversed earlier trends with most countries, so that at present the real value of both industrial world and other Asian currencies exceeds their 1980 values against the dollar. In contrast, Chinese authorities have acted to maintain the competitive gains made in the first half of the decade. In particular, they undertook large devaluations in 1990 and 1991 that have kept the yuan still roughly 50 percent below its 1980 level relative to the dollar.[4]

This large currency devaluation against the dollar during the 1980s has significantly enhanced the cost advantage enjoyed by Chinese producers. In particular, the devaluation of the yuan has enabled Chinese suppliers to avail themselves of the vast supply of inexpensive (when measured in dollars) labor and to expand the production and export of goods requiring large amounts of low-skilled labor. Comparing China's labor costs with those of other countries underscores the Chinese advantage (Table 3). Earnings of workers in the manufacturing sector averaged a mere $.20 per hour in 1989. Earnings of workers in firms primarily producing manufactured goods for export are estimated to be about twice that level. Even at this higher level, however, Chinese earnings are only about one-fifth as much as the earnings of workers in the manufacturing sectors of the Asian newly industrialized economies and one-twentieth of the wage of comparable U.S. workers.

However dramatic the differences in labor costs, the devaluation of the yuan cannot alone explain the sharp expansion of U.S. imports from China over the past six years. Indeed, as Table 3 suggests, production costs in China were quite low throughout the 1980s, although the gap widened over time. More likely, China's strong export performance in the second half of the 1980s resulted from the combined effects of improved price competitiveness and a series of policy changes in the foreign trade sector designed to expand exports. These changes gave individual firms greater freedom to engage in trade, improved the allocation of foreign exchange by allowing firms to retain and ultimately to trade their foreign exchange earnings, and liberalized

[4]The nominal value of the yuan was set at roughly 1 5 per U S dollar in the early 1980s By mid-1991, the yuan was fixed at roughly 5 2 per U S dollar, about 10 percent above the rate at which the yuan was trading in the rather limited foreign exchange market in China.

Table 1

Commodity Composition of Trade between the United States and China

	U.S Imports from China (Share of Total)			U.S. Exports to China (Share of Total)		
	1980	1985	1990	1980	1985	1990
Food and industrial supplies	47 8	42 7	15.6	87.8	39.2	39 9
Capital goods	1.0	1.7	7 1	11.4	52.6	43.1
Consumer goods	51.0	54 1	75.9	0.0	0.1	1 5
Other	0 2	1.5	1.4	0.8	2.3	15.5

Table 2

U.S. Trade with Asia

Billions of Dollars

	1980	1985	1987	1990	1991†
U.S. trade balance with Asia					
Total	−15.0	−74.5	−98.4	−77.9	−74 2
China	2.7	0.0	−2.8	−10.4	−12.4
Asian economies excluding China	−17.7	−74.5	−95.5	−67.5	−61.8
Japan	−10.1	−46 2	−56.3	−41 1	−42.7
Asian newly industrialized countries	−3.0	−22.2	−34.1	−19.9	−13 5
Other Asian economies	−4.6	−6.1	−5.1	−6.5	−5.6

†Estimates are based on data through October.

the rules governing foreign direct investment (see box) Improved price competitiveness, therefore, did not by itself boost trade; rather, it reinforced the effects on trade of the overall reform of the foreign trade system

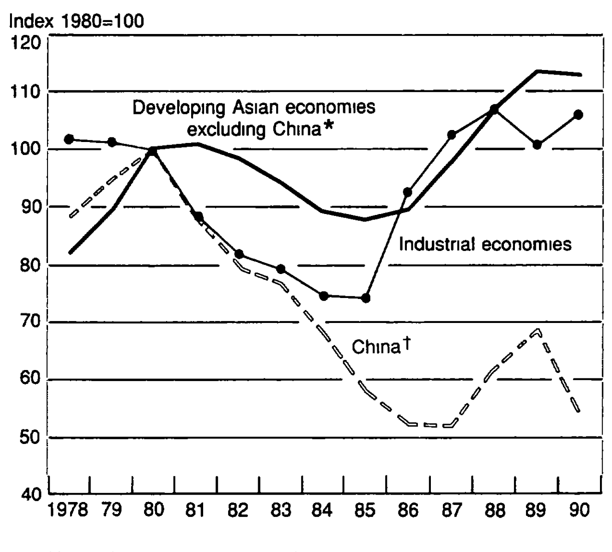
China's relaxation of restrictions on foreign direct investment was one of the most important reforms that spurred the development of a thriving export sector The infusion of foreign capital and technology has enabled China's manufacturing sector to expand current export production and to develop production expertise. Liberalizing foreign direct investment promoted this export expansion in two ways First, Chinese firms were allowed to assemble and export goods made from imported parts and components. These same firms were freed from many of the trade restrictions imposed on other domestic Chinese firms. Second, "special economic zones," created in 1979, offered foreign multinationals specific incentives to establish plants in China for the manufacture and production of goods for export. China initially set aside four geographical areas as special economic zones—three in Guangdong province adjacent to Hong Kong and one in Fujian province directly across the Formosa Strait from Taiwan—and added a fifth, Hainan Island off the coast of southern China, in 1984. Foreign investment was further promoted in 1984 with the designation of fourteen coastal cities as "open areas" offering foreign firms advantages similar to those in the special economic zones.

Although information on individual sources of investment in the zones and open coastal areas is not available, data on overall trends show a rapid increase in foreign direct investment since the mid-1980s. Between 1979 and 1990 China attracted over $20 billion of foreign direct investment The majority of that investment followed the significant liberalization of rules governing foreign investment in 1984 (Chart 4) Foreign investment has accounted for more than 2 percent of total plant and equipment spending in China since 1984, and its importance in domestic capital formation has risen steadily since the early 1980s. In addition, foreign investment has also increased as a share of exports since 1984, exceeding 6 percent of exports in 1990.

The Asian economies accounted for three-quarters of foreign direct investment in China between 1985 and 1990. Of these economies, Hong Kong has been by far the single most important source of foreign investment in China The flow of investment from Hong Kong into China reflects the large-scale restructuring of Hong Kong's manufacturing sector in the face of rising labor costs. Although Hong Kong firms have invested in factories throughout Asia, China has been the most favored location. Industrial countries have also invested in China, though to a lesser extent. Between 1985 and 1990, investment by the United States, Japan, and the European Community accounted for about one-third of total direct investment in China

Chart 3

Real Exchange Rates versus the U.S. Dollar



Note A rise signifies dollar depreciation

* Weighted average using 1985 shares of U S. imports.

† Computed using China's retail price index and the U S wholesale price index

Table 3

Labor Cost Comparisons: China and Selected Asian Economies

	Hourly Wage in Manufacturing (U S Dollars)		
	1980	1985	1989
China†	26	20	22 (0 40‡)
Hong Kong§	1 53	1 77	2 69
South Korea§	65	88	2 19
Taiwan§	70	1 17	2 68
Thailand‖	n a	n a	0 47
Malaysia‖	n a	n a	0 58
United States§	5 61	7 27	8 05

Sources *Statistical Yearbook of China*, U S Department of Labor, Hang Seng Bank, *Economic Monthly*, March 1990

† Average industry wages, excluding compensation, converted to U S dollars at the official exchange rate

‡ Hourly wage in firms producing primarily for export

§ Hourly wage of production workers in the apparel sector

‖ Average wage of unskilled workers in manufacturing

Foreign-owned firms in the special economic zones and the other designated areas are either joint ventures or wholly owned companies. The firms typically engage in manufacturing or assembly operations, which often utilize imported parts and components. Foreign investors are attracted to these areas by the relatively low cost of labor and by the preferential treatment accorded them in the areas of import controls, taxes, foreign exchange dealings, and profit repatriation.[5]

Data on foreign-owned firms show the importance of foreign investment in the overall expansion of Chinese

[5]At the end of 1990, over 25,000 foreign-owned firms had contracted to invest in operations in China and roughly 12,000 were in operation These included foreign-owned firms and Chinese firms engaged in the assembly of imported parts and components for export

Box: China's Changing Foreign Trade System

In 1978 China adopted an "open door" policy toward foreign trade and investment as the first step in an ambitious program of trade reform. Before 1978, Chinese firms were effectively insulated from the world economy. The Chinese government had set required levels of exports and imports in its five-year economic plans. Foreign direct investment was restricted, and only twelve national foreign trade corporations were permitted to have contact with foreign businesses and to carry out the purchase and sale of goods.

Since 1978, these policies have been gradually transformed. The government has been working to expand the role of market forces in trade and investment decisions and, in particular, to expand and improve the efficiency of China's manufactured exports. Although China's foreign trade system is significantly more market-oriented today than in the late 1970s, the transition is by no means complete.

A chronology of the principal reforms since 1978 follows.

1979/1980

The government enacts the "Law of the People's Republic of China on Joint Ventures Using Chinese and Foreign Investment," which encourages the growth of joint ventures between Chinese firms and foreign partners and establishes four special economic zones offering incentives for firms to locate there and produce goods for export. Over time, the law is interpreted as allowing the establishment of wholly foreign-owned firms.

The government decentralizes the control over exports and imports; the twelve national trade corporations share this authority with provincial and other local-level governmental authorities.

The government introduces a system of import licensing; licenses and tariffs become means of controlling imports. The ease of obtaining a license and the number of goods requiring a license have varied with economic circumstances over time.

1984

Local area authorities are given expanded power to export and import, and large private firms are allowed to engage in trade directly. Over 4000 such entities now engage in trade.

Local foreign trade corporations and private firms engaging in exporting are allowed to retain the rights to 25 percent of their foreign exchange earnings. Retention rights are increased beyond the 25 percent level for "key" export industries, exports in excess of planned targets, and provinces in which the special economic zones are located.

Foreign-owned firms are allowed to trade foreign exchange in a newly established foreign currency market.

The Chinese currency is devalued by 40 percent.

Hainan Island is designated as the fifth special economic zone, and similar foreign investment incentives are extended to fourteen coastal cities.

1985/1986

The authority to export and import extended to various local authorities and enterprises in 1984 is curtailed in the face of balance of payments problems; some central government control over trading is reimposed.

The Chinese currency is devalued by 14 percent.

1988

The government establishes local foreign exchange swap centers where firms can trade foreign exchange at market prices.

The Chinese currency is devalued by 40 percent, a measure that mitigates the adverse effects of high domestic inflation on competitiveness.

1990

Incentives for foreign investment in relatively high-tech industries, similar to the incentives in special economic zones, are extended to a municipality of Shanghai.

1991

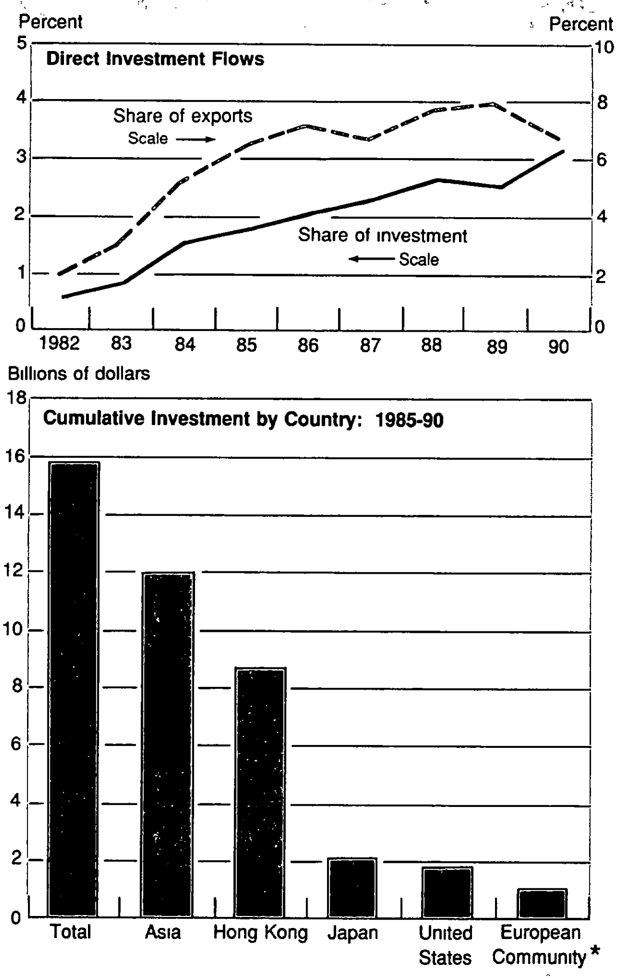
The Chinese currency is devalued by 10 percent. All residents of China are permitted to trade in the foreign exchange swap centers.

exports The firms' first exports, reported in 1985, accounted for only about 1 percent of total Chinese exports in that year (Table 4). By 1990, exports of foreign-owned firms accounted for almost 17 percent of total Chinese exports. Moreover, in 1990 alone, these exports accounted for nearly three-quarters of the growth in China's exports.

The available data on the performance of foreign-owned firms in China cannot track the firms' exports to specific final destinations. But two observations, taken together, suggest that foreign-owned firms have contributed significantly to the growth of China's exports to the United States. First, foreign investment has been largely concentrated in the manufactured goods sector. Second, virtually all of the growth in China's exports to the United States since 1984 has consisted of manufactured goods Foreign-owned firms are thus likely to have accounted for a substantial share of the growth of these manufactured exports to the United States.

Chart 4

Foreign Direct Investment in China



Source Ministry of Foreign Economic Relations and Trade, China

* Includes the following European Community countries Belgium, the Netherlands, Luxembourg, Germany, France, Italy, and the United Kingdom

Note, however, that the United States has not been the only destination for China's manufactured exports in 1990, 30 percent of China's manufactured exports were to the United States, while about 25 percent were to Japan and the European Community Nevertheless, since 1984, China's manufactured exports to the United States have grown faster than exports to these other industrial countries[6] The increasing importance of the United States as a destination for China's manufactured exports between 1984 and 1990 further suggests that a significant part of China's export growth to the United States since the mid-1980s has been due to the growth in exports of foreign-owned firms.

The changing pattern of U.S. trade with Asia

The growth of foreign investment in China and, in particular, the importance of Asian countries as a source of that investment have significantly altered the trade links between the United States and the region An examination of Asian market shares in U.S. manufactured goods imports indicates that Chinese inroads in U S. markets for several categories of low-tech consumer goods have often been made at the expense of other countries in Asia

China's share of U S. manufactured goods imports has grown substantially over the past decade, reaching 3 8 percent in 1990 (Table 5). Dramatic market share gains have been made in three categories. telecommunications equipment, textiles and apparel, and toys, games, and sporting goods In each of these areas China's market shares rose by more than 5 percentage points during the 1980s, with the most rapid gains recorded between 1985 and 1990

The market share of other Asian economies (excluding Japan) in these categories declined over the course of the 1980s. In particular, the large increase in China's market share in textiles and apparel contrasts sharply with the declines recorded by other Asian countries Note, however, that the overall market share of U S manufactured goods imports from other Asian countries increased over the course of the 1980s This evidence suggests that losses in market share incurred by these

[6]The U S share of China's manufactured exports rose from 20 to 30 percent between 1984 and 1990, while the combined shares of Japan and the European Community rose from 20 to about 23 percent

countries in low-tech goods were offset by gains in other areas.[7]

One country whose U.S. market share in manufactured goods has declined is Hong Kong. Hong Kong's share of U.S. manufactured goods imports fell by a percentage point during the 1980s. Considerably larger declines were observed in each of the categories in which Chinese imports expanded rapidly. Given the importance of Hong Kong as an investor in China, these shifts in market shares are not surprising. As noted earlier, more than one-half of all foreign investment in China since 1985 has been from Hong Kong. Furthermore, roughly 75 percent of that investment has been in the manufacturing sector, primarily in relatively low-wage industries.[8] Within China, Hong Kong investors have tended to establish manufacturing plants in Guangdong province, a location that is linked to Hong Kong by efficient transportation and communications networks and that contains three of the five special economic zones.[9]

Data on trade links between China, Hong Kong, and the United States suggest how the growth of foreign-owned firms in China has altered trade patterns. Although Hong Kong's share of total imports has fallen, total shipments from Hong Kong to the United States have increased substantially over the course of the 1980s (Table 6). Underlying this increase, however, is the expansion of Hong Kong's re-exports from China.[10] These re-exports, which are measured as Chinese

[7]The gains were recorded mainly in capital goods, especially electronic components and equipment.

[8]Data are not available to determine how much of the investment recorded as coming from Hong Kong is actually from other Asian countries that for a variety of reasons list their Hong Kong subsidiaries as the source of their investment.

[9]Recent trends suggest that Taiwan, and to a lesser extent, South Korea, are rapidly becoming important sources of foreign investment in China as their manufacturing sectors face growing competitive pressure. Reports indicate that Taiwan's investments have been concentrated in Fujian province; over 90 percent of this investment has been in manufacturing industries. The investment includes relocating the production facilities for Taiwan's shoe, umbrella, textiles, and toy industries to China.

[10]Hong Kong's re-exports consist of goods produced in China and shipped through Hong Kong to other destinations. They can include goods produced in both foreign-owned firms in China and Chinese-owned firms.

Table 4

The Role of Foreign-Owned Enterprises in China's Exports: 1984-90

	Total Merchandise Exports (Billions of Dollars)						
	1984	1985	1986	1987	1988	1989	1990
Total exports	26.1	27.4	30.9	39.4	47.5	52.5	62.1
Exports of foreign-owned enterprises	0	.3	.9	1.3	2.3	3.9	10.5
Foreign-owned enterprises' share of total (in percent)	0	1.1	2.9	3.3	4.8	7.4	16.9

Sources: *China's Customs Statistics*, Hong Kong Bank, *China Briefing*, March 1991.

Table 5

Shares of U.S. Imports: China and Selected Asian Economies

	Share of U.S. Imports (Percent)								
	China			Developing Asian Economies Excluding China			Hong Kong		
Product	1980	1985	1990	1980	1985	1990	1980	1985	1990
All Manufactures	0.6	1.0	3.8	16.5	18.1	19.2	3.5	3.3	2.5
Telecommunications†	0.0	0.1	5.3	32.8	31.2	31.2	3.9	3.1	2.2
Textiles and apparel	4.5	6.9	13.0	54.7	47.8	41.8	19.9	17.7	13.1
Toys, games, and sporting goods	1.2	3.2	10.6	46.5	45.7	44.5	11.5	9.3	6.1

† Primarily radios, televisions, and telephones.

Table 6

Trade between China, Hong Kong, and the United States: 1984-90

Billions of U S Dollars

	1984	1988	1990
Hong Kong's shipments to the United States			
Total[†]	9 4	15 6	19 8
Exports	7 8	9 3	8 5
Re-exports from China	1 1	5 5	10 5
Trade of China's licensed processing and assembly firms with Hong Kong			
Imports of parts/components from Hong Kong	n r	6.0	7.5
Share of total imports from Hong Kong (percent)	n r	50 0	53 2
Exports of assembled goods to Hong Kong[‡]	n r	5 9	9 1
Share of total manufactured exports to Hong Kong (percent)	n r	32 4	34 2

Sources *China's Customs Statistics* and *Hong Kong Review of Overseas Trade*

† These data are not comparable to U S trade data because they treat re-exports differently Total shipments includes a small amount of re-exports from other countries

‡ Finished products assembled in licensed processing firms in China using imported parts, components, and materials

n r = not reported

exports in U.S. trade data, rose from $1 1 billion in 1984 to $10 5 billion in 1990 In contrast, direct exports from Hong Kong to the United States have actually declined over the past three years. Shipments of Chinese exports through Hong Kong to the United States now make up almost one-half of the combined exports of Hong Kong and China to the United States

As investment from Hong Kong spurs China's export trade and encourages the growth in shipments of Chinese goods through Hong Kong, a new pattern of trade is evolving between China, Hong Kong, and the United States. Although precise data on the operations of Hong Kong firms in China are not available, evidence suggests that a sizable number of these firms are engaged in the processing and assembly of goods from parts and components imported from Hong Kong. In fact, the economic reforms that encouraged foreign investment also encouraged firms, both foreign-owned and wholly Chinese firms, to engage in these operations. The one advantage to firms performing these operations in China is the low cost of labor; the actual value added to the good in China may be relatively small

Data on the activities of these licensed processing firms in China show that the firms play an important role in trade between Hong Kong and China In 1990, the firms imported parts and components from Hong Kong totaling $7.5 billion, or more than 50 percent of all of China's imports from Hong Kong At the same time, China exported over $9 billion of assembled goods to Hong Kong, a quantity that represents almost 35 percent of its total exports to Hong Kong. Although these data neither fully describe the activities of Hong Kong firms in China nor indicate the final destination of the goods, they suggest that these firms are increasingly using China as a base for the final processing and assembly of exports.

Conclusion

The growth of manufactured exports from China to the United States since the mid-1980s reflects both China's effort to improve price competitiveness through exchange rate devaluation and the acquisition of capital and technology through foreign investment. These developments have enabled China to take advantage of its vast supply of inexpensive labor and to increase significantly the ability of its manufacturing sector to compete in world markets. In the latter half of the 1980s, China raised its share of U S imports of manufactured goods and became a significant supplier of several categories of relatively low-cost manufactured goods.

The growth of foreign investment in China has shifted the pattern of U S imports from the region In the categories where China has significantly increased its share of U S imports—telecommunications, textiles and apparel, and toys, games, and sporting goods—the shares of other Asian economies have declined Hong Kong, in particular, has seen substantial declines in its shares of U S. manufactured imports Shipments of goods from Hong Kong to the United States are increasingly goods produced in China. Nevertheless, the amount of actual value added to the product by firms in China may be relatively limited.