Why is the U.S. Trade Deficit with China so Big?

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Whereas U.S. trade deficits have arisen in general when U.S. investment spending exceeds U.S. domestic savings–due in recent years to the attractiveness of the U.S. economy to foreign investors, the comparatively lower savings rate of U.S. consumers, and until recently U.S. federal budget deficits–several other factors affect the U.S.-China bilateral trade deficit in particular. These include China's high savings rate, differing measurement of entrepot trade through Hong Kong, China's tariff and nontariff trade barriers, trade diversion between China and other Asian countries, and the Chinese government's recent use of trade policy to boost slow domestic spending in China.

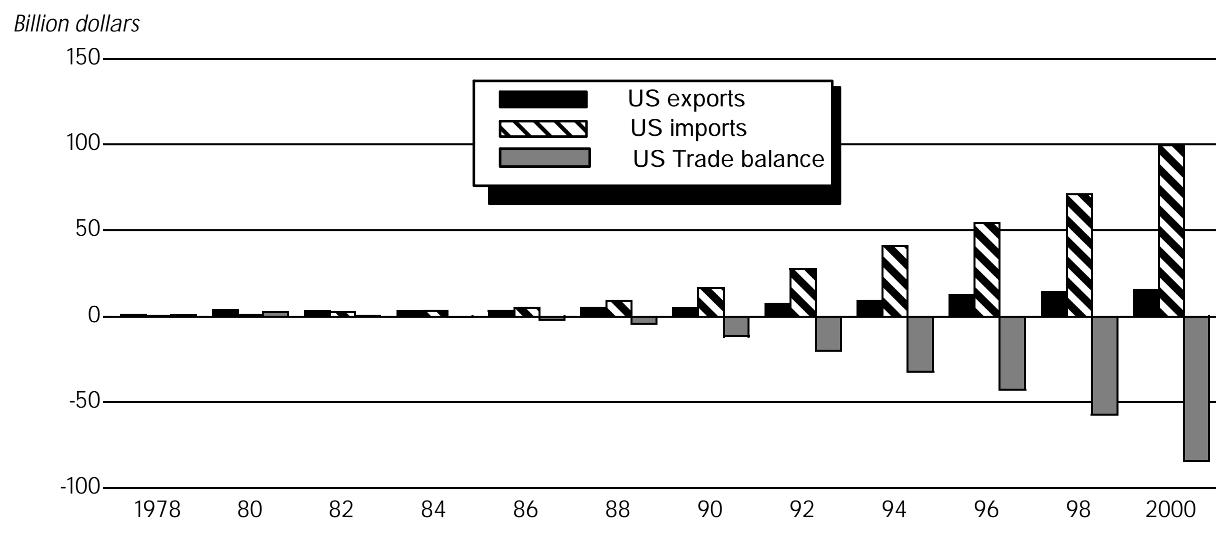
Introduction

The U.S. trade deficit with China measured $84.2 billion in 2000, with U.S. exports totaling $15.3 billion and U.S. imports measuring $99.6 billion.[2] The bilateral trade deficit has grown 633 percent since 1990, and 22 percent in the year 2000 alone (figure 1). In terms of total trade, China is the United States fourth largest trading partner, but the trade deficit with China is almost identical to the largest U.S. bilateral trade deficit, that with Japan ($84.9 billion) (figure 2). The coming accession of China to the World Trade Organization has brought renewed attention to the size of U.S. trade deficits. This article will first discuss some of the factors contributing to the overall U.S. trade deficit with the world, and then focus on the U.S. trade deficit with China. Some of the factors contributing to the U.S. trade deficit with China include the savings-investment gap, the U.S. budget balance, Hong Kong entrepot trade, trade diversion in Asia, treatment of services trade, Chinese reserve accumulation, trade barriers, and Chinese domestic stimulus policies.

[1] The views and conclusions expressed in this article are those of the author. They are not the views of the U.S. International Trade Commission as a whole or of any individual Commissioner.

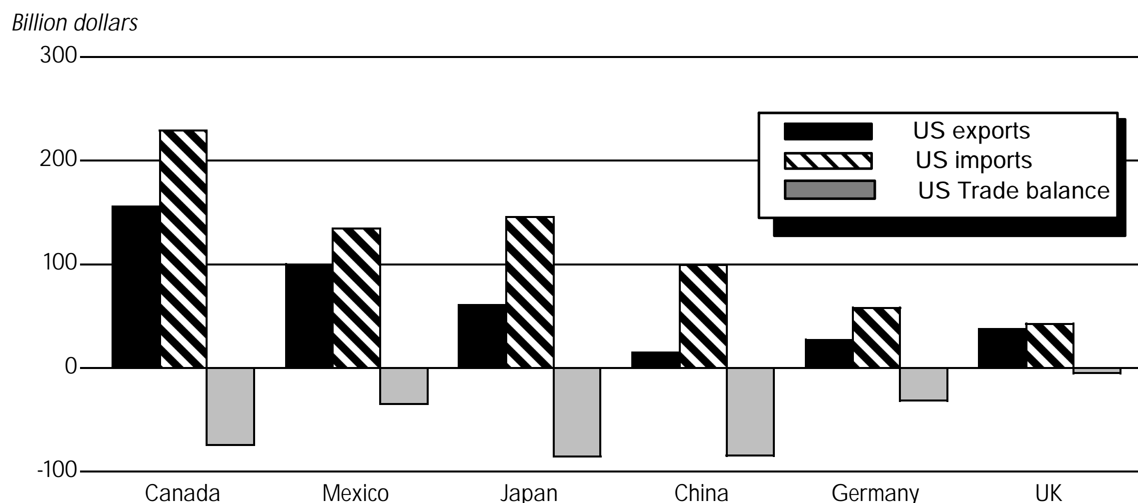
[2] Trade data used in this article was compiled from official statistics of the U.S. Department of Commerce. Additional data was taken from IMF, *International Financial Statistics*; and from the World Bank, *World Development Indicators*, CD-ROM.

Figure 1
U.S. merchandise trade with China, 1978-2000



Source: Compiled from official statistics of the U.S. Department of Commerce.

Figure 2
U.S. trade balances, selected countries, ranked by two-way trade, 2000



Source: Compiled from official statistics of the U.S. Department of Commerce.

U.S. Trade Deficit with the World

Savings-Investment Gap

The U.S. trade deficit with the world measured $493 billion in 2000. A major reason for this long-standing overall deficit is that U.S. investment spending exceeds U.S. savings. American consumers do not save as much as their major trading partners do, and the United States is an attractive destination for foreign investors. The opposite is true for many other countries, including China and Japan, where savings is larger than investment. The result is that countries with excess savings (China and Japan) lend to countries with not enough savings (the United States).

As shown in table 1, the United States domestic savings rate in 1998 measured 18.4 percent of GDP, compared to 42.3 percent in China and 28.7 percent in Japan.[3] Given the rates of investment in each country, the table shows that China's savings exceeded investment by 7.1 percent of GDP and Japan's savings exceeded its investment by 1.9 percent. The opposite was true in the United States, where savings fell short of investment by 0.9 percent of GDP. The conclusion is that China was in a position to lend $67.0 billion to the world in 1998, and Japan could lend $72.3 billion. In contrast, the United States would have to borrow from the world approximately $75.6 billion. This "borrowing" is reflected in the bilateral trade deficits with China, Japan, and other countries.

[3] Data from 2000 is cited where available, but 1998 data has been used to make international comparisons.

A basic macroeconomic relationship states that for any economy that trades with other countries, the amount of investment that takes place must be equal to the sum of personal savings, government savings, and foreign savings in that economy. If investment increases, it must be true that one of the sources of savings also increases. Similarly, if one source of savings decreases, another source must increase to finance the same level of investment.

Among the three types of savings, personal savings is that done by U.S. consumers. Government savings is the government budget surplus, which has been negative (a budget deficit) until recently in the United States. Finally, foreign savings is equal to a U.S. trade deficit–that amount by which foreign countries' exports to the United States exceed their imports from the United States. This foreign savings appears as capital inflows into the United States as foreigners use the trade proceeds to purchase U.S. investment assets and property. The conclusion is a three-sided relationship effect: (1) if U.S. investment is greater than savings, then (2)U.S. capital inflows must exceed capital outflows, and (3) U.S. imports must exceed U.S. exports.

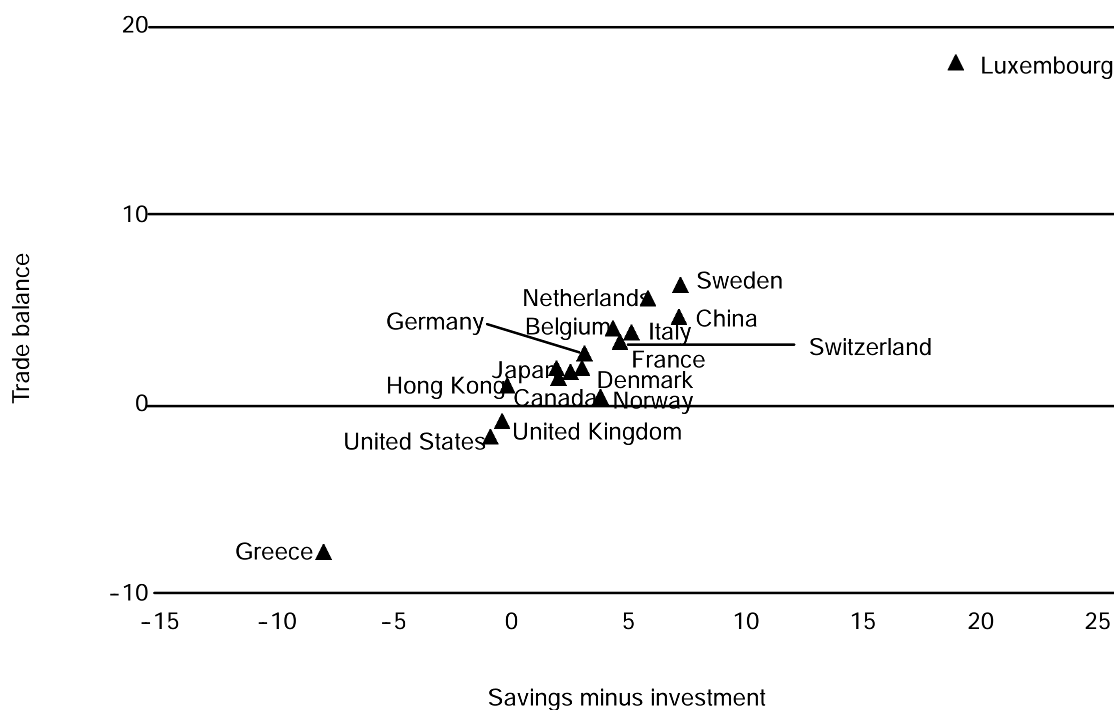
This relationship can be seen to hold true for the countries illustrated in figure 3. The more savings exceeds investment for each country, the more likely it is to have an overall trade surplus. For example, this is especially true for Luxembourg, where in 1998, domestic savings exceeded investment by 18.9 percent of GDP and the trade surplus measured 18.6 percent of GDP. At the other extreme, in Greece, domestic savings were smaller than investment by 8.0 percent of GDP and the country ran a trade deficit of 7.8 percent of GDP. In the United States, savings were less than investment by 0.9 percent of GDP, while its trade

Table 1
Savings and investment in selected countries, 1998

	(Percent of GDP)			(Billions dollars)	
	Savings	**Investment**	**S-I**	**GDP**	**S-I**
China	42.4	35.3	7.1	946.3	67.0
Luxembourg	38.1	19.2	18.9	18.3	3.5
Hong Kong	30.1	30.4	-0.2	162.9	-0.4
Norway	28.8	25.0	3.8	147.0	5.6
Japan	28.7	26.8	1.9	3,808.1	72.3
Netherlands	27.5	21.7	5.8	391.3	22.6
Belgium	25.1	20.8	4.3	250.4	10.7
Switzerland	25.0	19.9	5.1	262.1	13.5
Germany	23.5	21.1	2.5	2,150.5	52.8
Denmark	23.2	20.2	3.0	173.7	5.2
Italy	23.0	18.4	4.6	1,190.9	54.6
Sweden	23.0	15.8	7.2	237.8	17.1
Canada	21.6	19.6	2.0	598.2	12.0
France	21.5	18.3	3.1	1,447.0	45.1
United States	18.4	19.3	-0.9	8,699.2	-75.6
United Kingdom	17.0	17.4	-0.4	1,410.4	-5.0
Greece	14.1	22.1	-8.0	121.5	-9.7

Source: World Bank.

Figure 3
Savings-investment relation to trade balance, selected countries, 1998



Source: World Bank, World Development Indicators, CD-ROM.

deficit with the world measured 1.7 percent of GDP. In contrast, China's investment exceeded its savings by 7.1 percent of GDP, and China ran a trade surplus of 4.6 percent of GDP. Japan saved more than it invested (1.9 percent of GDP), and thus had a trade surplus of 2.0 percent of GDP. Therefore, because of its relatively small savings, the United States tends to run trade deficits with a majority of its trading partners. China and Japan, countries which save more than they invest, run trade surpluses with the world, implying bilateral trade surpluses with a majority of their trading partners–including the United States.

The U.S. Budget Balance

As discussed above, government savings (budget surplus) is one source of financing for investment. When government savings decrease, it must be true that one or more of the following occur: 1) personal savings increase, 2) foreign savings increase, or 3) investment decreases. Sometimes called the "twin deficits," budget deficits can thus contribute to a country's trade deficit by decreasing the domestic pool of funds available to finance investment. According to the International Monetary Fund (IMF), the United States ran an overall budget surplus of $254.4 billion dollars in 2000, while in 1994 the United States had a budget deficit of $184.6. billion.[4] A U.S. budget surplus, implies the U.S. Treasury has excess funds to deposit in the U.S. financial market. A surplus translates into more total savings, which in turn implies less capital inflows needed to finance investment, which can result in an improved U.S. trade balance.

In contrast, large U.S. budget deficits (sometimes called government "dis-savings") imply larger trade deficits.[5] The 1994 budget deficit is an example: according to World Bank data, in addition to U.S. investment of over $1.20 trillion, U.S. financial markets had to support $0.02 trillion of borrowing by the government.[6] With private savings of only $1.18 trillion, the gap is financed by capital inflows from abroad, which imply larger U.S. trade deficits.

[4] IMF, *International Financial Statistics*, May 2001, p. 858.

[5] See also Mohammadi, Hassan and Skaggs, Neil T., "The Twin Deficits: Fiscal Imbalances and Trade Deficits," in Shojai, Siamack, *Budget Deficits and Debt: a Global Perspective*, Westport, Conn. and London: Greenwood, Praeger, 1999, pp. 91-101.

[6] World Bank, *World Bank Development Indicators*, CD-ROM. Overall budget deficit is current and capital revenue and official grants received, less total expenditure and lending minus repayments. Data are shown for the central government only.

U.S. Trade Deficit with China

Hong Kong Entrepot Trade

Turning to U.S. trade with China, an important determinant in the size of the U.S. bilateral deficit becomes the methodology used to measure trade. The United States and China disagree on the size of the deficit. According to China, the U.S. deficit is smaller than what the United States publishes. China measured the U.S.-China bilateral trade deficit at $22.5 billion in 1999 (latest year available), while the U.S. Department of Commerce measured it at $68.9 billion (figure 4). The primary reason is the way the United States and China treat trade with Hong Kong.

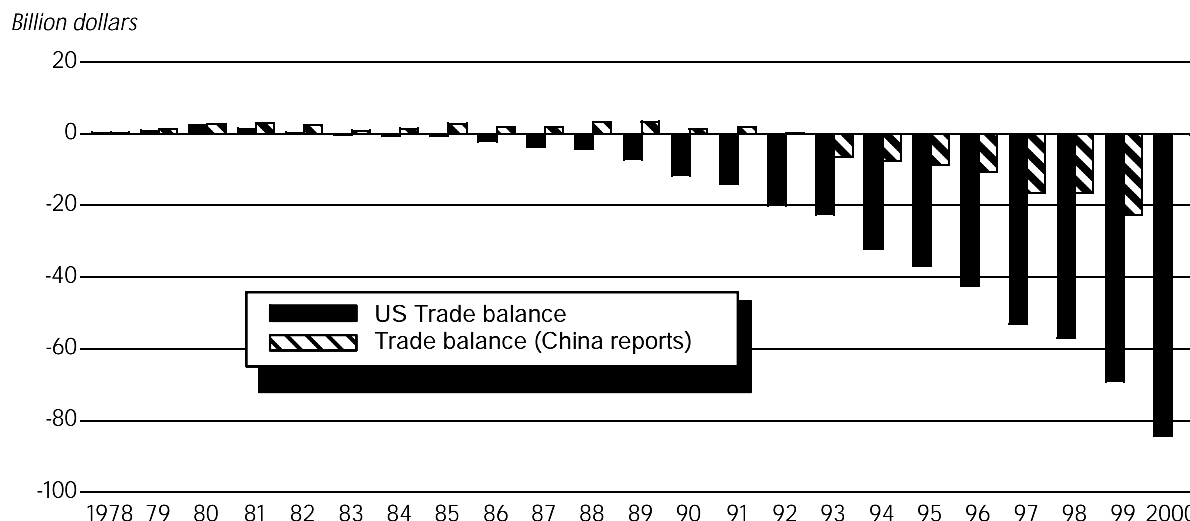
In some ways, Hong Kong acts as a middle-man between China and many of its trading partners. A large quantity of Chinese goods go through Hong Kong before being shipped to the United States. The United States considers these goods as Chinese exports to the United States. In contrast, China considers the goods as exports to Hong Kong, irrespective of what happens to them after that. The same gap appears in the measurement of U.S. goods exported to China–many of them go through Hong Kong first. There are often varying degrees of value added to the goods entering Hong Kong, but again, the United States considers China as the final destination for these U.S. exports. Some research has been done to reconcile this measurement gap, but neither country has officially adopted new methodologies. Research identifies three main factors for the U.S. overstatement/Chinese understatement of U.S. imports from China: re-exports through Hong Kong, price mark-up of goods passing through Hong Kong, and shipping and other transport-related factors such as insurance. According to the U.S.-China Business Council of Washington, D.C., the U.S. bilateral deficit is overstated by 22 percent due to this entrepot trade effect.[7]

Trade Diversion in Asia

The U.S. trade deficit with China has also grown because many producers of labor-intensive U.S. imports have moved out of high-wage Asian countries and into low-wage China. Besides the lower wages in China, this reasoning is supported by three trends: (1) large foreign direct investment into China, (2) a significant shift in Chinese manufacturing towards more labor-intensive products, and (3) the improvement in U.S. trade balances with other Asian trading partners, notably Hong Kong and Taiwan.

[7] The United States-China Business Council, "Understanding the U.S.-China Balance of Trade," found at Internet address *http://www.uschina.org/*, retrieved Oct. 10, 2001.

Figure 4
Bilateral trade balance: U.S. versus Chinese reporting, 1978-2000



Source: Compiled from official statistics of the U.S. Department of Commerce.

The flow of direct investment into China reached $38.8 billion dollars in 1999,[8] and data suggests up to 45 percent of this investment is coming from Hong Kong, with over 60 percent going into Chinese manufacturing.[9] Manufactured goods formerly produced in Hong Kong and Taiwan and purchased by the United States are now being produced in mainland China. As a result, while the U.S. trade deficit with China increases, bilateral trade balances with Hong Kong and Taiwan have moved to U.S. trade surpluses. For example, in 1989, the United States ran trade deficits with both Hong Kong ($3.8 billion) and China ($6.1 billion). By 1997, when the deficit with China had grown to $39.4 billion, the deficit with Hong Kong had turned into a $3.4 billion surplus. And by 2000, the deficit with China measured $84.2 billion, while the trade surplus with Hong Kong measured $0.9 billion (table 2).

Services Trade

The trade deficit data typically cited often does not include U.S. services trade with China–which has grown from a $0.6 billion surplus in 1996 to a $1.3 billion surplus in 1999.[10] Including services trade would reduce the measure for the U.S. bilateral trade deficit with China. According to a study done by the U.S. International Trade Commission (USITC), China's entry into the World Trade Organization will further increase U.S. services exports to China.[11]

[8] IMF, *International Financial Statistics*, May 2001, p. 230

[9] USITC, *Assessment of the Economic Effects on the United States of China's Accession to the WTO*, Investigation No. 332-403, Sept. 1999, p. 2-17.

[10] U.S. Department of Commerce.

[11] USITC, *Assessment of the Economic Effects on the United States of China's Accession to the WTO*, Investigation No. 332-403, Sept. 1999, p. xiv.

Table 2
U.S. Trade Bilateral Trade Deficits with China and Hong Kong, 1989-2000

(Billion dollars)

	China	Hong Kong
1989	-6.083	-3.776
1990	-10.344	-3.318
1991	-12.616	-1.836
1992	-18.175	-1.57
1993	-22.806	-0.704
1994	-29.394	0.506
1995	-33.757	2.472
1996	-39.408	2.497
1997	-49.462	3.441
1998	-56.906	1.157
1999	-68.937	0.598
2000	-84.425	0.859

Source: Compiled from official statistics of the US Department of Commerce.

Foreign Participation in Chinese Exports

Chinese exports to the United States do include a very large number of goods that are made by U.S. companies located in China, or by companies that use non-Chinese imported raw materials for inputs. In 2000, the imports and exports of foreign firms invested in China reached $236.7 billion, accounting for 50 percent of the country's total trade volume.[12] The significance of such foreign participation is that much of the Chinese export revenues accrue not to China, but to foreign firms.[13] This is reflected in China's current account, which records not only trade of goods and services, but current income on assets owned by foreigners. In 2000, for example, China's current account included $27.2 billion in income payments to foreigners for assets owned in China.

International Reserve Accumulation

If China were to stop fixing its exchange rate and accumulating foreign reserves, the U.S. bilateral trade deficit might also be smaller. The U.S. economy interacts with China in two main ways: trade and capital flows. To maintain a balance of payments with foreign countries, a U.S. trade deficit should be offset by a capital surplus, that is, net capital inflows. This is true in the United States, where in 2000, the overall current-account deficit measured $444.7 billion and net financial inflows from abroad measured essentially the same at $443.4 billion.[14] But in China, there was a current-account surplus of $20.5 billion and net capital inflows of $1.9 billion–not the same.[15]

A major reason why China's current and capital accounts are not equal is that China fixes its exchange rate and accumulates international reserves, adding $10.7 billion to its international reserves in 2000, significantly less than in previous years. In 1994, for example, China added $30.5 billion to its international reserves.[16] These are dollars that China might have otherwise used for imports of goods from the United States.[17] Instead, the extra inflows into China are accumulated by Chinese monetary authorities.[18]

If the Chinese Renminbi appreciated, this would likely improve the U.S. trade balance by making Chinese goods more expensive to Americans, and U.S. goods cheaper to Chinese consumers. The large Chinese trade surplus could disappear. This, however, is not likely for a number of reasons. First, despite China's stock of reserves totaling $166 billion,[19] it has foreign debt of approximately $144 billion. [20] Second, China in recent months has struggled to compensate for weak domestic demand by promoting exports. In fact, much speculation has centered on whether China might further devalue their currency to help exports, rather than let it appreciate by selling off its foreign reserves.[21]

Chinese Trade Barriers

Tariff and nontariff trade barriers on imports into China are additional factors related to the U.S. bilateral deficit with China. Chinese tariff barriers reduce U.S. exports to China by making U.S. goods more expensive to Chinese consumers. Nontariff barriers reduce U.S. exports by both raising the price of U.S. goods and by reducing their access to the Chinese market. According to the Office of the United States Trade Representative (USTR), Chinese trade barriers create an "effective firewall against many imports,"[22] thus increasing the U.S. bilateral trade deficit. Major Chinese trade barriers include the following:

High Tariffs

The average Chinese tariff rate is currently 17 percent (down from an average rate of 42 percent in 1996), but tariffs on selected items, such as autos and various agricultural products, can be 100 percent or more.

[12] Hong Kong Trade Development Council, "China's Foreign Trade Growth in 2000 Hits a Record High," found at Internet address *http://www.tdctrade.com,* retrieved Aug. 10, 2001.

[13] See Nicholas Lardy, *China in the World Economy,* Institute for International Economics, Washington, D.C. Apr. 1994, p. 78.

[14] IMF, *International Financial Statistics*, May 2001, p. 858.

[15] IMF, *International Financial Statistics*, May 2001, p. 230

[16] Ibid.

[17] Another alternative to the accumulation of international reserves in China would be greater Chinese investment abroad, or Chinese capital outflow.

[18] The accumulation of foreign reserves would suggest the foreign-exchange value of Chinese currency is being held lower than the free market would determine on its own. The Chinese Renminbi is, in fact, held at a fixed value of 8.3 per U.S. dollar. Fixing the value of a currency below its free market equilibrium value usually results in an excess demand for that currency on the foreign-exchange market. To maintain the fixed rate, monetary authorities supply the needed currency. In this case, Chinese monetary authorities sell Renminbi on the Chinese market in exchange for U.S. dollars. These dollars accumulate in the form of international reserves.

[19] IMF, *International Financial Statistics*, May 2001, p. 230.

[20] Orbis Publications, *China Watch*, Mar. 15, 2001, p. 1.

[21] Ibid.

[22] United States Trade Representative, *2000 National Trade Estimate Report on Foreign Trade Barriers*, p. 43.

Pervasive Nontariff Barriers

Nontariff barriers are used to control the level of certain imports into China, including quotas, import licenses, registration and certification requirements, and restrictive technical and sanitary standards (especially in respect to agricultural products).

Non-transparent Trade Rules and Regulations

China's trade laws and regulations are often secretly formulated, unpublished, unevenly enforced, and may vary across provinces, making it difficult for exporters to determine what rules and regulations apply to their products. In addition, foreign firms find it difficult to gain access to government trade rulemaking agencies to appeal new trade rules and regulations.

Trading Rights

China restricts the number and types of entities in China that are allowed to import products into China, which limits the ability of both Chinese and foreign firms in China to obtain imported products. Foreign companies are not permitted to directly engage in trade in China. In addition, trading rights for many agricultural products are given exclusively to Chinese state trading companies, which are directed to import only if there is a domestic shortfall of certain products.

Distribution Rights

Most foreign companies are prohibited from selling their products directly to Chinese consumers.

Investment Restrictions

Chinese officials pressure foreign investors to agree to contract provisions which stipulate technology transfers, exporting a certain share of production, and commitments on local content. Other problems faced by foreign firms in China include the denial of national treatment (i.e., foreign firms are treated less favorably than domestic firms), foreign-exchange controls, distribution and marketing restrictions, and a lack of the rule of law.

Many studies have analyzed what impact China's WTO entry would have on the U.S. bilateral trade deficit, with varying results. The USITC study found that tariff cuts associated with China's WTO membership would increase the bilateral deficit, but would not affect the overall U.S. trade balance with the world.[23] Removal of Chinese nontariff barriers would likely result in increased U.S. exports and U.S. investment in China.

[23] USITC, *Assessment of the Economic Effects on the United States of China's Accession to the WTO*, Investigation No. 332-403, Sept. 1999, p. 2-17.

Chinese Domestic Economy

A final element of China's trade surplus with the United States and the rest of the world is the important role trade has played in China's economic development program as well as recent macroeconomic policy implemented to speed up a slowing economy.

Chinese Economic Development

Under Chairman Mao, China's foreign trade served a dual purpose: (1) to meet its needs for foreign goods and services, and (2) to promote political relations with foreign countries. In fact, many Western countries established trade or economic relations with China before they extended diplomatic recognition. After 1978, however, China renounced their self-imposed economic isolationism and opened the door to outsiders, especially to Western countries. The three elements of external sector reforms in China have been changes in foreign exchange, the trading system, and foreign direct investment. The move has been toward less central planning, market based foreign-exchange markets, current-account convertibility, and an "open door" to foreign direct investment through special economic zones.[24] Specific trade reforms have included: (1) expansion of trading rights, (2) gradual phase-out of mandatory planning, and (3) price liberalization.[25] Trade has become a principle avenue for Chinese economic development.

Recent Chinese Economic Stimulus Policy

In recent years, exports have been used as a policy tool to stimulate a slowing domestic economy. China's 7.1 percent GDP growth rate[26] during the second quarter 1999, might have been the envy of most countries around the world, but a slowdown has been occurring in the Chinese economy since 1992 when GDP grew at 14.2 percent annually.[27] By the middle of 1999, three main trends described poor economic conditions in China: falling exports, a drop in foreign direct investment and foreign lending, and a slowdown in consumer spending. With weak consumption expenditure, slow government expenditures financed largely by the sale of government bonds,[28] as well as slow exports, investment was the remaining source of economic growth for China. The government took several steps to try and speed up spending in each of the expenditure categories.

[24] IMF, "China: External Sector Opening," *IMF Staff Country Report*, No. 97/72.

[25] See both Lardy, *China in the World Economy*; and *IMF Staff Country Report*, No. 97/72.

[26] Economic Intelligence Unit, CD-ROM, 1999.

[27] *Chinese Statistical Yearbook*, 1998.

[28] Nicholas Lardy, "China and Normal Trade Relations," seminar at the CATO Institute, Washington DC, June 15, 1999.

Some of the policies that China either implemented or actively considered included increased fiscal spending, a savings tax to boost consumption, looser monetary policy, housing investment incentives, and even a scheme to increase stock market values. Most relevant to the trade balance, however, was China's emphasis on increasing exports to replace slow domestic demand. Beside the strong speculation of a currency devaluation to increase exports, the policies implemented finally included increased tax rebates for exporters, reform of export regulations, and government involvement in export market development. Results were positive, with Chinese exports increasing 28 percent in 2000. (Imports also increased, by 36 percent). Chinese exports to the United States increased 22.1 percent in 2000, a jump from the 7.6 percent growth recorded in 1998.[29]

[29] U.S. Department of Commerce.

Conclusion: Bilateral Trade Deficits in General

The principal reason the United States has enormous trade deficits is that investment spending exceeds savings in the United States. This is compounded by the exact opposite situation in China, where the savings rate is very high. The result is that China runs a large trade surplus with the world and, given that given the United States is one of China's largest trading partners, it would seem likely that China would continue to run a surplus with the United States.