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The Economic and non-Economic Analysis of U.S.-China Trade Deficits

Shuqin MA

Zhejiang Gongshang University(China), Professor

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Abstract

While the bilateral trade volume between China and U.S. has been growing rapidly, the trade deficits of U.S. to China has also been expanding. This growing trade deficit of U.S. to China has several reasons: the increase of foreign direct investment to China, the transfer of trade deficit origins, the intervention of U.S. domestic politics to China-U.S. trade relations, and U.S. direct control on export to China. However, the increased U.S. trade deficit to China does not mean that U.S. is in a disadvantaged position in its economic relations with China, or its international competitiveness is deteriorating. When U.S. surplus in service trade to China is included, the picture would be very different. Also, as internationalization progresses and China's industrial structure adjusts, the trade deficit of U.S. to China would narrow.

Key Words: China-U.S. Trade, Trade Deficit, Trade Balances

T. Introduction

As a country with tremendous capital accumulation and advanced technology, U.S.'s resource endowment determines that U.S. would export products that are capital intensive and technology intensive, and import products that are labor intensive. Since China has rich labor endowment, the trade pattern between the two countries should be complementary. Trade relations based on comparative advantages between the two countries have been developing rapidly. Currently, China imports from U.S. include mainly agricultural products, airplanes, power plant equipments, petroleum equipment, electronic products, chemical products, and machineries. China exports to U.S. include shoes, garments, toys, electronic appliances, common machine tools, hardware (metal) products, lights, and furniture. According to statistics from China custom, in 2003, China-U.S. trade totaledto US\$126.33 billions, a 30% increase from the previous year. China's trade surplus from U.S. was US\$58.61 billion, an increase of 37.2%. China became the number one origin of U.S.'s trade deficit. Trade conflicts between the two countries have marked the path of trade relations development.

II. China-U.S. Trade Balances

1. Statistics from China

According to statistics from China's Custom, during the years of 1990-1992, China trade deficits to U.S. was about US\$1.277 billions, US\$1.812 billions, and US\$0.304 billions, respectively. Since 1993, however, China has been experiencing trade surpluses to U.S. as shown in table 1.

⟨Table 1⟩ China-U.S. Commodity Tr	ade Balances (1990-2003	(unit:US\$ billions)
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	Chinese	Chinese	Trade	Vaar	Chinese	Chinese	Trade	
year	Export	Import	Balance	Year	Export	Import	Balance	
1990	5.314	6.591	-1.277	1997	32.69	16.3	16.39	
1991	6.198	8.010	-1.812	1998	37.98	16.96	21.02	
1992	8.599	8.903	-0.304	1999	41.95	19.48	22.47	
1993	16.97	10.69	6.28	2000	52.1	22.36	29.74	
1994	21.46	13.89	7.57	2001	54.28	26.2	28.08	
1995	24.71	16.11	8.6	2002	69.95	27.23	42.72	
1996	26.68	16.15	10.53	2003	92.47	33.86	58.61	

Source: 1993-2002 from China Statistics Yearbook, 2003 from Ministry of Commerce, P.R.China.

¹⁾ Rongjun Wang, "2002: China-U.S. Trade Relations," The World Economy, March, 2003, p.16.

2. Statistics from U.S.

According to the statistics by the Ministry of Commerce of the U.S., trade deficit to China started in 1983, and grew rapidly after 1985. In 1990, U.S. export to China was US\$4.807 billions, U.S. import from China was US\$16.296 billions, a trade deficit of US\$11.489 billions. U.S. trade deficit with China was the third biggest among all of its the trade partners. In 1991, U.S. trade deficit to China increased to US\$14.018 billions, only smaller than its deficit to Japan. By 2002, the trade deficit with China was US\$103.06 billions, and China became the number one trade partner with who the U.S. had the biggest trade deficit.

(Table 2) U.SChina Commodity Trade Balances (1990-2003) (unit: US\$ b	hillions)
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year	U.S. Export	U.S.	Trade Balances	year	U.S. Export	U.S. Import	Trade Balances
1990	4.807	16.296	-11.489	1997	12.87	62.56	-49.69
1991	6.287	20.305	-14.018	1998	14.24	71.17	-56.93
1992	7.470	27.413	-19.943	1999	13.11	81.79	-68.68
1993	8.76	31.54	-22.78	2000	16.19	100.02	-83.83
1994	9.28	38.78	-29.50	2001	19.18	102.28	-83.1
1995	11.75	45.54	-33.79	2002	22.13	125.19	-103.06
1996	12.0	51.51	-39.51	2003	28.42	152.38	-123.96

Sources: Ministry of Commerce, U.S.

U.S. Census Bureau, Foreign Trade Division, Data Dissemination Branch, Washington, D.C. 20233

3. Product structure of U.S.-China trading

In 2003, US-China's trade has been strongly increased, and the quantity amounts to \$126.33 billion. Not only the trading scale is becoming larger and larger, but also the product is changing at the same time.

1) Analysis of china's product exported to U.S.

In 2003, china's products exported to the U.S. has been improved to a higher level, the ratio of mechanic and electronic product is arising quickly. USA now has small advantages in labor-intensive products, because U.S. is adjusting its industrial structure. So China's product structure imported from U.S. is improved also, mainly including mechanic and electronic and phonotape and videotape equipment, chemical products, optics equipments, medical materials and equipments, agricultural product, iron and steel products.²⁾ According the Ministry of Commerce of People's Republic of China, manufactured goods account a mainly ratio in both

Shuqin Ma, "Focal Analysis of Sino-US Trade Conflict in 2003," Journal of Shanxi Finance and Economics University, April, 2004, p.56.

China's import and export to US. In china's export to US, the manufactured goods amount to \$89.652 billion, and in china's import from US, the manufactured goods amount to \$26.056 billion. In China's exported manufactured goods, Machinery and Transport Equipment take the first place, amounting to \$42.904 billion; the second is Miscellaneous Manufactured Articles, amounting to \$32.56 billion; the third is Manufactured Goods Classified Chiefly by Material, amounting to \$11.444 billion. In China's imported manufactured goods, Machinery and Transport Equipment also accounts the biggest ratio, amounting to \$14.265 billion; the Chemicals and Related Products, N.E.S. take the second place, amounting to \$5.757 billion; Miscellaneous Manufactured Articles take the third place, amounting to \$3.328 billion. Generally, primary goods take a small ratio in China's foreign trade, the exporting data is \$2.822 billion, the importing data is \$7.805 billion. In all of China's exported primary goods, Food and Live Animals account the biggest ratio, amounting to \$1.74 billion. In all of China's imported primary goods, Crude Materials, Inedible, Except Fuel stake the first place, amounting to \$6.183 billion. China's import and export product structure in 2003 are listed in table 3.

<Table 3> Product Structure of China's Import from and Export to U.S. in 2003 (unit: US\$ millions)

Commodity	Exp	oort	lm)	oort
Commodity (By 1-digit SITC commodity)	Amount	Increase or decrease (%)	Amount	Increase or decrease (%)
Total	92473.63	32.2	33860.78	24.4
I . Primary goods	2821.69	27.3	7804.95	65.3
(0) Food and Live Animals	1740.32	31.2	1301.87	25.7
(1) Beverages and Tobacco	30.93	-6.8	13.94	73.8
(2) Crude Materials, Inedible, Except Fuels	532.91	12.6	6182.53	76.8
(3) Mineral Fuels, Lubricants and Related Materials	509.77	34.7	224.64	54.7
(4) Animal and Vegetable Oils, Fats and Waxes	7.76	23.4	81.96	119.9
Ⅱ. Manufactured products	89651.94	32.4	26055.84	15.8
(5) Chemicals and Related Products, N.E.S.	2735.89	22.9	5757.43	34
(6) Manufactured Goods Classified Chiefly by Material	11443.75	27.6	2522.14	48.4
(7) Machinery and Transport Equipment	42904.37	49.8	14265.39	4
(8) Miscellaneous Manufactured Articles	32559.62	16.8	3328.07	27.6
(9) Commodities and Transactions, N.E.S.	8.32	14.2	182.81	1

Sources: Ministry of Commerce, P.R.China., www.mofcom.gov.cn.

2) Analysis of USA's products structure imported from and exported to China.

In 2003, USA's export to China has been improved greatly, amounting to \$28.419 billion, increased by 28.4% compared with the same period of last year, much higher than its general export. USA's products exported to China mainly includes agriculture products, airplane, electronic power station equipments, petroleum equipments, electronic products, Chemicals and Related Products and mechanic equipments. According to the department of commerce of USA, in all of USA's exported products to China in 2003, Machinery and Transport Equipment takes the first place, amounting to \$12.546 billion; the second is Crude Materials, Inedible, Except Fuels, amounting to \$6.86 billion. During the same period of time, in all of USA's imported products from China, Miscellaneous Manufactured Articles take the first place, amounting to \$67.21 billion; Machinery and Transport Equipment takes the second place, amounting to \$60.85 billion. Some experts predict that China has the potential to become the important exporting target, because of China's economy growing continuously and china's consumer's purchasing power being improved greatly and continuously.³⁾ USA's import from and export to China in 2003 are listed in table 4.

<Table 4> Product Structure of USA's Import from and Export to China in 2003

(unit: US\$ millions)

Commodity	Ex	port	lmr	Import		
(By 1-digit SITC commodity)	Amount	Increase or decrease (%)	Amount	Increase or decrease (%)		
(0) Food and Live Animals	810.84	46.4	2,000.72	32.3		
(1) Beverages and Tobacco	12.45	117	34.90	-27.0		
(2) Crude Materials, Inedible, Except Fuels	6,859.86	105.6	773.40	21.9		
(3) Mineral Fuels, Lubricants and Related Materials	133.23	41.5	451.20	0.1		
(4) Animal and Vegetable Oils, Fats and Waxes	102.96	267.9	9.04	50.0		
(5) Chemicals and Related Products, N.E.S.	3,622.25	22.4	3,025.51	24.9		
(6) Manufactured Goods Classified Chiefly by Material	2,005.40	53.1	16,217.46	21.3		
(7) Machinery and Transport Equipment	12,546.27	6.5	60,848.34	31.7		
(8) Miscellaneous Manufactured Articles	2,057.07	17.1	67,210.33	13.7		
(9) Commodities and Transactions, N.E.S.	268.17	17.0	1,808.34	28.4		
Total	28,418.49	28.4	152,379.24	21.7		

Source: Ministry of Commerce, U.S., www.doc.gov

³⁾ Jin Zhao, "The Focus and Main Problem of US-China's Trade Confliction," The World Economy, March, 2004, p.19.

Understanding the Imbalances of China-U.S. Trade

1. Impacts of Economic Factors on China-U.S. Trade Balances

1) The Real Size of the U.S. Trade Deficit to China

Statistics from both China and U.S. sources show that there have been imbalances in trade between the two countries. However, the scales of the imbalances are different based on the sources of the data. The reason for the difference in the data lies in the differences of the statistics methods used in U.S. and China.4)

In the U.S. statistics, imports from China not only include China's direct export to U.S., but also include commodities China exports to a third country and later exported by the third party to U.S For example, Hong Kong is the largest transfer port for China's export. According to U.S. Business Association, only 20% of China's exports to the U.S. are directly transported. The rest 80% are indirectly shipped through a third country/area, and 75% of the transfer is done through Hong Kong. U.S. considers the exports of China's products through Hong Kong as China's exports, and collects a 29% duty on them. On the other hand, about 25% of U.S. products in China enter China through Hong Kong, but they are considered by U.S. as exports to Hong Kong, not to China. The result is that the trade deficit of U.S. to China calculated by U.S. is much larger than calculated by China.

Also, U.S. has the most MNCs in the world. The Subsidiaries of the MNCs are very important agencies of U.S. exports. However, the goods China buys from U.S. MNC subsidiaries in China are not included in U.S. exports to China. This also enlarges U.S. trade deficit to China.

Thus, different statistics methods produce different results on trade balances. As the world economy globalizes and internationalizes, trade statistics based on traditional methods can not fully reflect the trade relations among countries. If U.S. insists on following the originality rules in trade statistics, the most direct and obvious reason perhaps is that it provides a convenient excuse for U.S. to apply trade protectionism against China. However, in reality, China's exports to U.S. is not directly competing with U.S. products domestically. Chinese products exported to U.S. are mostly substituting products of other countries exported to U.S. They do not hurt U.S. economy directly, and do not cause higher unemployment in the U.S.

⁴⁾ Hanlin Zhang, "Thoughts on the New Developments of China-U.S. Economic and Trade Relations Since the Entry of China to WTO," China WTO Research Institute, Foreign Economics and Trade University, 2003, p.6.

2) U.S.-China Service Trade Surplus

U.S. is highly developed in the service industry. The share of service industry in its GDP is above 70%. Since 1974, U.S. has been enjoying surpluses in service trade. Beginning in the 1990s, U.S. has been the world's most competitive country in service trade, and its service trade surpluses have been growing year after year. During the years of 1992 to 2002, U.S. service trade surpluses has been between US\$60-100 billions.

In terms of U.S.-China service trade, U.S. surpluses have also been growing over the years. In 1992, U.S. service trade surplus to China was US\$0.515 billions, which reached US\$1.937 billions in 2002. At the end of the transition period after China joins in the WTO, China's service industry will be open up further to the outside world, and U.S. service trade surpluses to China can be expected to increase more.

⟨Table 5⟩ U.S.-China Service Trade Balances (1992-2002)

(unit: US\$ millions)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
U.S. Exports	1569	1916	2050	2509	3166	3610	3957	4027	5199	5650	6073
U.S. Imports	1054	1306	1476	1683	1937	2225	2302	2683	3257	3654	4136
U.S. Surplus	515	610	574	826	1229	1385	1655	1344	1942	1996	1937

Source: ZHANG, Hanlin, "Thoughts on the new developments of China-U.S. Economic and trade relations since the entry of China to WTO," China WTO Research Institute, Foreign Economics and Trade University.

U.S.'s huge and increasing surpluses in service trade to the world and to China explains two things: One, when commodity trade balances and service trade balances are combined, U.S. trade deficits would be significantly reduced. Two, the surpluses in U.S. service trade reflects its comparative advantage in international trade relations. To some extend, the deficits in U.S. commodity trade to China is the reason for its surpluses in service trade.

3) FDI in China and China-U.S. Trade Balances

China has been the one of the hottest spots for FDI during the last two decades. In 2003, China was the number one FDI destination, with real FDI US\$53.5 billions.⁵⁾ The Ministry of Commerce P.R. China, www.mofcom.gov.cn, 10th May, 2004. Foreign owned enterprises are playing very important roles in China's economic growth, and their trade structures also affect China's trade balances to other countries. For example, most of the FDI enterprises in China belong to two categories. Either, they are the centers of

⁵⁾ The Ministry of Commerce P.R. China, www.mofcom.gov.cn, 10th May, 2004.

China's export bases, producing commodities that are export oriented. Or, they are focusing primarily on import substitution. Both of the categories would have the same impact on China's balance of payments. That is, they would both increase China's current account surpluses, either by increasing China's exports, or by decreasing China's imports.

According to the Ministry of Commerce, in 2003, China's foreign trade by FDI enterprises made up 55.48% of China's total international trade. Foreign trade by FDI enterprises reached US\$472.255 billions (exports US\$240.341 billions), a43.01% growth compared to the year before (41.43% growth for exports), and 5.89% higher than the growth of total international trade of China.

Country wise, the origins of China's FDI enterprises are mostly Taiwan, Hong Kong, Japan, Korea, and other Asian Pacific countries/areas. Their products are basically export oriented and the primary market for most of their products has been U.S. FDI enterprises from U.S. have been increasing in recent years. U.S. FDI enterprises focus more on import substitutions. Thus, FDI enterprises in China from other countries are also part of the reasons for the China-U.S. trade imbalances.

4) The Adjustments of Industrial Structures in Asian/Pacific Regions

As we mentioned earlier in 2.1.1, China's exports to U.S. does not directly compete with U.S. products domestically. Chinese products exported to U.S. are mostly substituting products of other countries exported to U.S. The increase of U.S. trade deficit to China is accompanied by decreases of its trade deficit to countries/areas such as Japan, Korea, Taiwan, and Hong Kong. These countries/areas used to be the main origins of the trade deficits for U.S., until 2002 when China surpassed all of them.

Since 1950s, the world has experienced four industrial structural adjustments. All the time, U.S. has been one of the leaders in the adjustments. While the leading industries in the U.S. change from heavy industry to light industry, from capital intensive and labor intensive then to high-tech manufacturing, countries in other regions of the world developed in accordance to form a complimentary pattern of the world economy. In Asia, when Japan was competing with the U.S. for the summit of high-tech industries, it moved its low added value industries and labor intensive industries overseas, to fully utilize the cheaper labor and other resources in the countries known as the Four Little Dragons, and to export the products to U.S. By 1980s, the Dragons upgraded their industrial structures, and transferred the labor intensive industries to the newly found processing bases in China.

Thus, again, the U.S. trade deficit to China is mainly a transfer of the deficit origin from other countries/areas to China. It is the necessary result of the industrial structure adjustments by other countries in the Asian/Pacific regions. And China's exports substitute the exports by others countries/areas, but not

directly substitute U.S. domestic products.

2. Impacts of Non-Economic Factors on China-U.S. Trade

The main non-economic factors affecting China-U.S. trade balances is U.S. domestic political interferences, especially its constrain on exports to China.

A lot of times, the formation of U.S. trade policies is not solely based on maximizing economic benefits of the country, or on long-term economic development. The policies are strongly influenced by special interest groups. These groups are very important constituents. At election times, lobbyists on behalf of the non-competitive enterprises would put special pressures on the government or officials seeking administrative positions to provide protections for the non-competitive industries.⁶⁾ In some cases they would use political reasons, such as human rights issues and child labor regulations, to limit U.S. exports to China, or to restrain U.S. companies from moving to China.⁷⁾ The political interferences strongly affect the expectations of the enterprises in both China and U.S. It is damaging to the long-term investment and trade co-operations.

Many people in U.S. have been spreading the words on "China Threats" because of China's continuous high growth rate and the strengthening of its comprehensive power. To the U.S., China is a huge, attractive market, but also a potential rival economically and militarily. The goal of U.S.'s trade policy to China is to fully exploit this market while not allowing it to become too competitive.

U.S. is very competitive in high-tech industry. It is also a major exporter of high-tech products. China is becoming one of the largest markets and can be the biggest customer for U.S.'s high-tech industry and service industry. China's purchasing list from U.S. can include computers, office equipments, electronic appliances, industrial electronics, electronic medical equipments, semi-conductors and electronic parts, etc. China's telecommunication, computer, and semi-conductor industries are expected to grow at an annual rate of 20-40% in the next 15 years⁸), which can bring tremendous business opportunities to U.S. companies. Technology transfer from U.S. to China is critical to both China's high-tech development, and to U.S. companies investing in China.

However, to prevent China from becoming too competitive in high-tech industries, U.S. has been applying restrictions on exports of high-tech products to China. The restrictions sometimes are applied to products that

⁶⁾ Huaiqin Jia, "Analysis of Bilateral Trading Balance of US and China," Journal of International Trade, April, 2004, p.7.

⁷⁾ Weiwu Li, "An Empirical Analysis on the Effect of Trade Deficit between U.S. and China on the Rate of Unemployment in U.S.," Finance & Trade Economics, May, 2004, p.45.

Expert Group of US Researching School in China's Social Science Academy, "Report of US's Trading Policy," www.mofcom.gov.cn, 13th Jan., 2004.

are not so high-tech intensive. These restrictive measures have multiple results: First, it limits U.S. exports to China, thus negatively affect U.S. trade balances to China. Second, U.S. comparative advantage in high-tech products is not fully explored and realized. Third, it puts U.S. to a disadvantaged position in competitions in the China market against European and Japanese companies. In 2002, U.S. was listed as the number four origin of China's high-tech imports, after Japan, ASEAN, and Taiwan. Its high-tech export to China was only 13.47% of China's total high-tech imports.

Thus, U.S.'s restriction on high-tech exports to China is one of the major reasons for its trade deficit to China. Once the restrictions are lifted, the trade balances would change dramatically.9)

IV. Re-understanding the Economic Implications of U.S.-China Trade Deficit

1. U.S. Trade Deficit to China Does Not Truly, Effectively, and Completely Reflect U.S.'s International Competitiveness

Trade balance is one of the indexes that can be used to reflect a country's competitiveness in the international market situation. However, one single index does not reflect the country's real economic power, or its extend of internationalization. U.S. commodity trade deficit to China is accompanied by its service trade surplus to China. It reflects the industrial structure of U.S. economy and its comparative advantage in service industries relative to commodity processing. This trade pattern is the result of labor division and specialization on an international scale. 10 U.S.'s disadvantage in commodity trade can be made up with its advantage in service trade.

Trade Is Beneficiary to Both Parties

Politically or economically, cooperation between U.S. and China should be beneficiary to both countries. Common interested should be served through trade and other economic cooperation. Conflicts between the two countries should not damage the long-term benefits to the both parties. We should realize that trading

⁹⁾ Anfang Li, "The Effect Judgment and Prospect Analysis of U.S. Technology Export Control to China," Journal of International Trade, July, 2004, p.58.

¹⁰⁾ Jin Zhao, "The focus and main problem of US-China's trade confliction," The World Economy, March, 2004, p.19.

with China has brought and will continuously bring economic benefits to U.S. as to China¹¹).

The reasons for the trade imbalances between China and U.S. are complicated. It is related to the characteristics of U.S. economy. It is also the result of international industrial structures. The solution to the problems of trade imbalances lies in the adjustments of economic variables of both countries. Complete market opening of one country does not solve the problem. Once the transition period ends after China joins WTO, China's service industries will open up further, and U.S. service trade surplus to China would expand. Also, as China speeds up its process of industrialization and structure adjustments, the trade imbalances problem would transfer from U.S. vs. China to U.S. vs. some other countries. (12)

V. Conclusion

Because of the rapid growth and industrial adjustment of china's economy, US-China's trade is getting more and more mutual complementary, which make it natural to enlarge the trade scale between them and both nations benefits from the enlarged trade. In the view of China, USA is one of the most important trade partners and the US market is becoming more and more important to China. Vice versa. The rapid growth of US-China's trade owes mainly to both countries, because they have been exerting their own advantages and making labor division and cooperation very well. But at the same time, trade friction will be common matter in two nations relation. It is very important for both US and China to keep calm when trying to solve the trading problems, they should keep it in mind that what they want is to cooperate, to develop, but not to hurt each other because of counterwork.

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¹¹⁾ Yuxiang Chen, "The Main Trade Rules Analysis of Influencing China's T&C Products Export to U.S. after ATC," *Journal of International Trade*, August, 2004, p.43.

¹²⁾ Hongying Liu, "Investigation into the Reason of the U.S.-China Trade Deficit," Heilongjiang Foreign Trade and Economy, Feb., 2003, p.26.

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