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The U.S.-Singapore Free Trade Agreement: Effects After Three Years

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The U.S.-Singapore Free Trade Agreement: Effects After Three Years

Abstract
The U.S.-Singapore Free Trade Agreement (FTA) (P.L. 108-78) went into effect on January 1, 2004. This report provides an overview of the major trade and economic effects of the FTA over the three years ending in 2006. It also includes detailed information on key provisions of the agreement and legislative action.

The U.S.-Singapore FTA has provided greater access for U.S. companies, has been instrumental in increasing bilateral trade, and has provided reassurance to Singaporeans of U.S. interest in the country. As a city-state, Singapore operates as an entrepot with essentially free trade. Under the FTA, concessions dealt mainly with providing greater access for American service providers and with strengthening the business environment in areas such as the protection of intellectual property rights and access to government procurement.

In 2006, the United States ran a $6.9 billion surplus in its merchandise trade with Singapore, up from $1.4 billion in 2003. U.S. exports of goods to Singapore surged by 49% from $16.6 billion in 2003 to $24.7 billion in 2006. However, even with this rapid increase in U.S. exports, the U.S. share of Singapore's imports declined from 16% in 2003 to 13% in 2006. This suggests that factors other than the FTA, particularly the overall growth in Singapore's imports, contributed greatly to the increase. Major U.S. exports to Singapore include machinery, electrical machinery, aircraft, optical and medical instruments, plastic, and mineral fuel oil.

On the U.S. import side, a noteworthy development is that imports of pharmaceuticals from Singapore have risen dramatically from $0.09 billion in 2003 to $2.4 billion in 2006. The FTA did not lower the U.S. tariff rate for pharmaceuticals, since they already enter the United States duty free. What appears to have occurred has been the development of Singapore as a regional center for multinational pharmaceutical companies that are stepping up exports.

Negotiations for the U.S.-Singapore Free Trade Agreement were launched under the Clinton Administration in December 2000. The FTA became the fifth such agreement the United States has signed and the first with an Asian country. According to the U.S. Trade Representative, the FTA broke new ground in electronic commerce, competition policy, and government procurement. It also included what the U.S. Trade Representative considers to be major advances in intellectual property protection, environment, labor, transparency, and customs cooperation.

The U.S.-Singapore FTA required congressional implementation under expedited Trade Promotion Authority legislative procedures. The debate over implementation of the FTA fell between business and free trade interests who would benefit from more liberalized trade, particularly in services, and labor or antiglobalization interests who opposed more FTAs because of the overall impact of imports on jobs and the general effects of globalization on income distribution, certain jobs, and the environment. Specific provisions of the agreement also generated debate. This report will be updated as circumstances warrant.

Keywords
United States, Singapore, Free Trade Agreement, FTA, trade, free trade, imports, exports, merchandise, surplus

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CRS Report for Congress

The U.S.-Singapore Free Trade Agreement: Effects After Three Years

January 7, 2008

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Prepared for Members and Committees of Congress

Congressional Research Service

The U.S.-Singapore Free Trade Agreement: Effects After Three Years

Summary

The U.S.-Singapore Free Trade Agreement (FTA) (P.L. 108-78) went into effect on January 1, 2004. This report provides an overview of the major trade and economic effects of the FTA over the three years ending in 2006. It also includes detailed information on key provisions of the agreement and legislative action.

The U.S.-Singapore FTA has provided greater access for U.S. companies, has been instrumental in increasing bilateral trade, and has provided reassurance to Singaporeans of U.S. interest in the country. As a city-state, Singapore operates as an entrepot with essentially free trade. Under the FTA, concessions dealt mainly with providing greater access for American service providers and with strengthening the business environment in areas such as the protection of intellectual property rights and access to government procurement.

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On the U.S. import side, a noteworthy development is that imports of pharmaceuticals from Singapore have risen dramatically from $0.09 billion in 2003 to $2.4 billion in 2006. The FTA did not lower the U.S. tariff rate for pharmaceuticals, since they already enter the United States duty free. What appears to have occurred has been the development of Singapore as a regional center for multinational pharmaceutical companies that are stepping up exports.

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The U.S.-Singapore FTA required congressional implementation under expedited Trade Promotion Authority legislative procedures. The debate over implementation of the FTA fell between business and free trade interests who would benefit from more liberalized trade, particularly in services, and labor or anti-globalization interests who opposed more FTAs because of the overall impact of imports on jobs and the general effects of globalization on income distribution, certain jobs, and the environment. Specific provisions of the agreement also generated debate. This report will be updated as circumstances warrant.

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The U.S.-Singapore FTA essentially eliminated tariffs on all goods traded between the two countries. It also included market access measures and other provisions related to trade in services, investment, rules of origin, intellectual property rights, government procurement, licensing of professionals, telecommunications, worker rights, the environment, capital controls, and dispute settlement.

The FTA has provided greater access for U.S. companies, has been instrumental in increasing bilateral trade, and has provided reassurance to Singaporeans of U.S. interest in the country at a time when many in the region perceive that the United States has been focused on the Middle East and has been "neglecting" Asia. This seems to have benefitted overall bilateral relations. The FTA has provided certain advantages exclusively to American businesses, but many of those advantages are being extended to other nations as well. The country is aggressively concluding FTAs with other countries and regions. As a city-state, Singapore operates as an entrepot and shipping center and basically has free trade. It imposes import restrictions on only a handful of goods. Under the FTA, Singapore's concessions dealt mainly with providing greater access for American service providers (particularly financial services) and with strengthening the business environment in areas such as the protection of intellectual property rights and access to government procurement.

In 2006, the United States ran a $6.9 billion surplus in its balance of merchandise trade with Singapore, up from $1.4 billion in 2003. U.S. exports of goods to Singapore surged by 49% from $16.6 billion in 2003 to $24.7 billion in 2006. Major U.S. exports to Singapore include machinery, electrical machinery, aircraft, optical and medical instruments, plastic, and mineral fuel oil. (For details of U.S. exports and imports by sector, see **Table 2** and **Table 3**). U.S. trade with Singapore has increased faster than anticipated before the FTA. However, even with this rapid increase in U.S. exports, the U.S. share of Singapore's imports has declined from 16% in 2003 to 13% in 2006.[1] The main reason for this is that Singapore's overall trade is booming.

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[1] Data sources for this introductory overview are provided in later sections of this report.

The U.S. balance of trade in services with Singapore has declined from $4.0 billion in 2001 to $3.8 billion in 2003 and further to $2.6 billion in 2006. While U.S. receipts of royalties and license fees have risen ($3 billion in 2006), U.S. payments for other private services as well as for travel and transportation also have risen. U.S. access to the Singaporean market through direct investments, however, seems to have been enhanced considerably under the FTA. U.S. income from assets in Singapore rose from $6.7 billion in 2003 to $14.3 billion by 2006. This more than offset the $1.2 billion decline in the U.S. surplus in services trade with Singapore over the same period. As an example of U.S. service providers in Singapore under the FTA, Citibank has been able to expand its operations there (it has 50% of the credit card market), offer innovative products (such as biometric identification for bill paying), and partner with the subway system to issue credit cards that double as subway fare cards and to locate branches and ATM terminals in and around subway stations.

On the U.S. import side, a noteworthy development is that imports of pharmaceuticals from Singapore have risen dramatically from $0.09 billion in 2003 to $2.4 billion in 2006. Singapore is now the second largest exporter of cardiovascular medicaments to the United States. The FTA did not lower the U.S. tariff rate for pharmaceuticals, since such products already enter the United States duty free. What appears to have occurred has been the development of Singapore as a regional center for multinational pharmaceutical companies. This apparently was partly triggered by provisions in the FTA that required Singapore to strengthen its intellectual property protection. The Singaporean government also has provided incentives for multinational biomedical companies to locate research and production in the country. Most of the major pharmaceutical companies of the world have established subsidiaries in Singapore and are exporting part of their production.

Singapore has relatively high labor standards. It ratified the International Labor Organization's Minimum Age Convention in 2005. This brought the number of ILO Conventions the country has ratified to more than 20, including Core Conventions that cover child labor, forced labor, collective bargaining, and equal remuneration.

As a city state with 3.4 million people and an area roughly the size of the Washington, DC, area inside the Beltway, Singapore's environmental challenges relate primarily to industrial pollution (strictly regulated), urbanization, and preservation of natural areas. The country touts itself as a garden city. It recycles all waste water, appears clean, and uses variable tolls to alleviate traffic congestion. The United States has not formally raised environmental or labor issues with Singapore under the FTA.

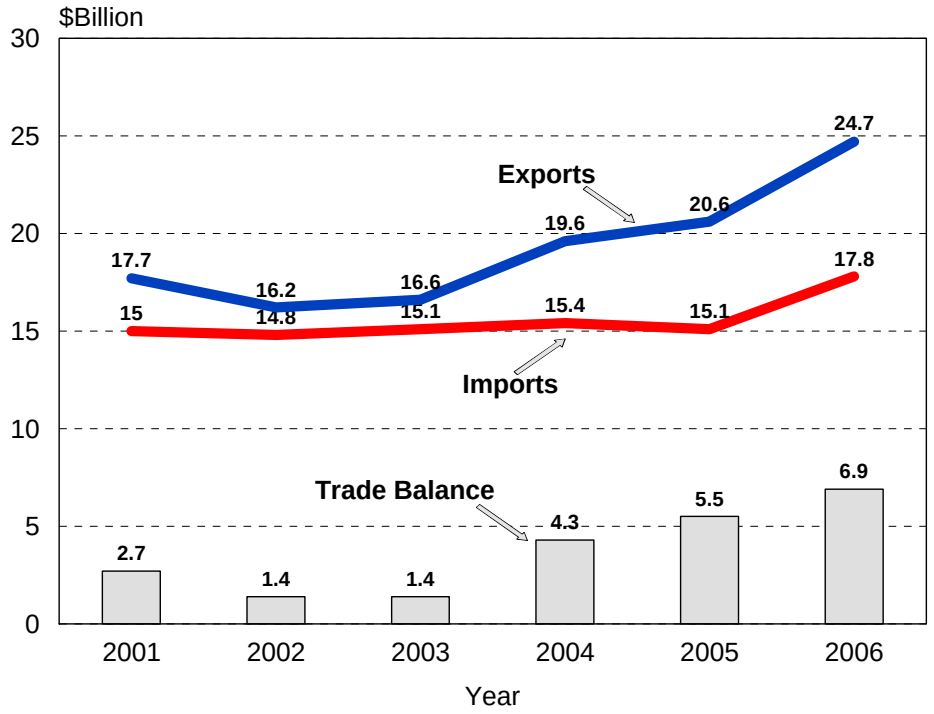
For background information, see CRS Report RL31789, *The U.S.-Singapore Free Trade Agreement*, by Dick K. Nanto.

Trade in Goods

Since the U.S.-Singapore FTA came into effect in January 2004, U.S. trade with Singapore has boomed. As shown in **Figure 1**, U.S. exports of merchandise to Singapore rose by 49% from $16.6 billion in 2003 to $24.7 billion in 2006. U.S.

imports from Singapore increased by a lesser 18% to go from $15.1 billion in 2003 to $17.8 billion in 2006. This increased the U.S. trade surplus with Singapore from $1.4 billion in 2003 to $6.9 billion in 2006.

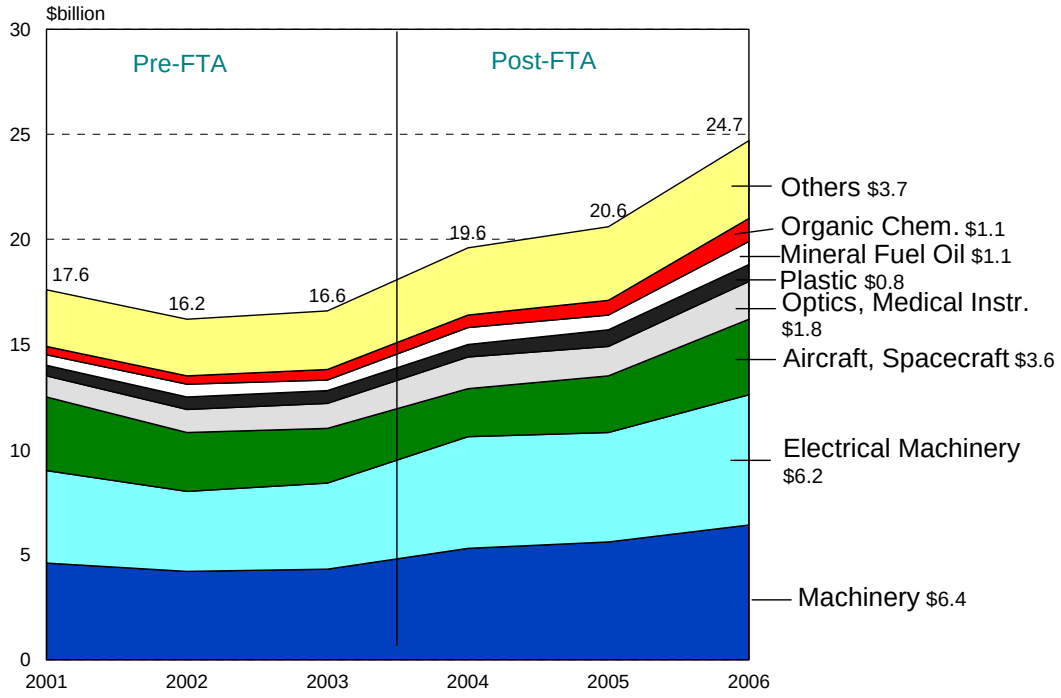
Figure 1. U.S. Merchandise Exports to, Imports from, and Trade Balance with Singapore



Source: Data from Global Trade Atlas

Major U.S. exports to Singapore include machinery, electrical machinery, aircraft/spacecraft, optical and medical instruments, organic chemicals, and plastic. As shown in **Figure 2**, U.S. exports of each of these products have risen since the U.S.-Singapore FTA took effect in January 2004. The highly developed nature of the city-state's economy can be seen in the major U.S. exports there. They consist primarily of machinery, electrical machinery, aircraft, optical and medical instruments, as well as industrial raw materials.

Figure 2. Leading U.S. Exports to Singapore by Category



Source: Data from U.S. Department of Commerce on f.a.s. Basis.

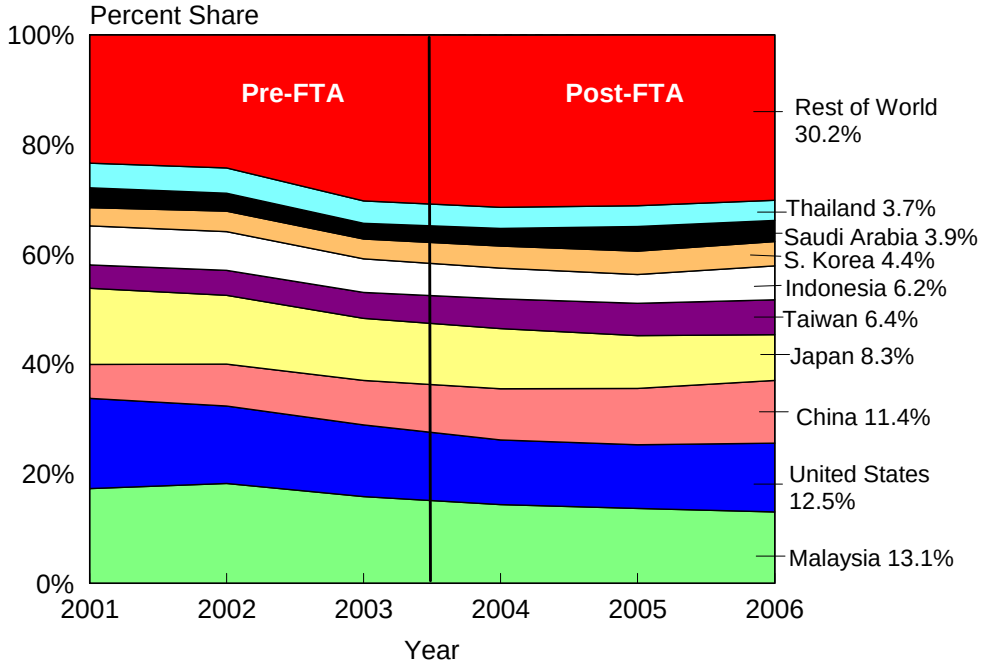
The rising surplus in merchandise trade with Singapore, however, masks other underlying trends that do not bode as well for the United States. Although Singapore's share of U.S. exports to the world has remained at about 2.3% to 2.4%, Singapore's imports from the United States have been declining relative to those from many other countries of the world. As shown in **Table 1** and **Figure 3**, in 2001, the United States accounted for 16.4% of Singapore's imports. By 2006, that share had fallen to 12.5%, despite the rapid growth in U.S. exports there. The share of Singapore's imports accounted for by Malaysia and Japan also have fallen, while the shares of China, Taiwan, South Korea, and the rest of the world have risen. This implies that Singapore is diversifying its imports away from its traditional sources of the United States, Malaysia, and Japan, and buying relatively more from China, Taiwan, and other countries of the world. The United States and Malaysia still are Singapore's largest sources of imports, but China's share is rising.

Table 1. Singapore's Import Market Shares
(percent)

Rank	Import Source	2001	2006
1	Malaysia	17.3	13.1
2	United States	16.4	12.5
3	China	6.2	11.4
4	Japan	13.9	8.3
5	Taiwan	4.3	6.4
6	Indonesia (Est.)	7.1	6.2
7	Korea, South	3.3	4.4
8	Saudi Arabia	3.6	3.9
9	Thailand	4.4	3.7
	Rest of world	23.4	30.2

Source: Underlying data from Global Trade Atlas

Figure 3. Singapore's Imports by Major Country Shares



Source: Data from Singapore Customs accessed via Global Trade Atlas

During the FTA talks, negotiations were intense over Singapore's import restrictions on a few products. Even though Singapore is largely a free-trade nation, it has restrictions on imports of specific controlled items (including chewing gum) and has import duties on beer, stout, and a local beverage called *samsu*. Under the FTA, Singapore allowed imports from the United States of chewing gum with

"therapeutic value" (excluding nicotine gum) to be sold in pharmacies. The country also dropped all duties on beer, stout, and *samsu* from the United States.

Under the FTA, U.S. exports of beer (made from malt, Harmonized System code 2203) rose from $0.352 million in 2003 to $0.549 million in 2005 and to $0.915 million in 2006. As a share of Singapore's total imports of beer, however, in 2006, the United States accounted for about 0.5% of the total and ranked 18th among all sources of beer imports. The top five sources were Malaysia, Mexico, Belgium, the Netherlands, and South Korea.[2] Among these countries, only South Korea has a free trade agreement with Singapore.

With respect to chewing gum, the data on Singaporean imports do not show appreciable imports from the United States. In 2006, out of a total of $1,089,000 chewing gum imports (HS 170410), none came from the United States. There was $588,000 in chewing gum that came from Indonesia and $420,000 that came from South Korea. In 2005, Singapore reported that it had imported $1,000 in chewing gum from the United States.[3]

Trade and Market Access in Services

U.S. business interests point out that the greatest potential effect of the U.S.-Singapore FTA is likely to be increased access by U.S. companies to Singapore's market in services. Services are provided in two ways: in cross-border transactions and from subsidiaries in the trading partner's economy. Services such as insurance, shipping, provision of intellectual property, and travel often are sold across borders and are counted as exports and imports. Other services, such as accounting, legal services, and banking often are provided directly to the consumer through overseas subsidiaries of U.S. companies. These transactions usually do not appear as exports or imports, although the repatriation of profits from such activity is counted as an income flow.

The United States has traditionally run a surplus in its balance of services trade with Singapore. This is shown in **Figure 4**. Under the FTA, this balance has declined from $4.0 billion in 2001 to $3.8 billion in 2003 and further to $2.6 billion in 2006.

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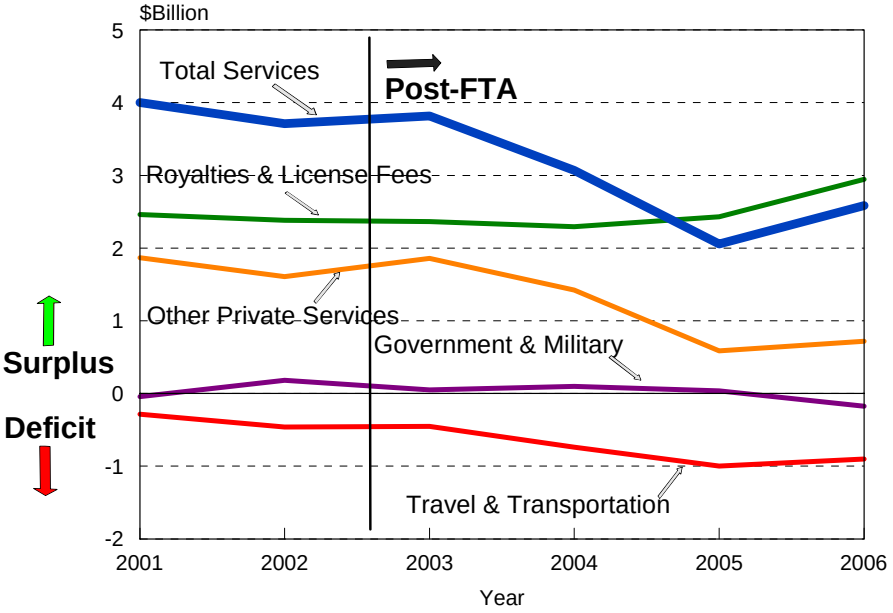
[2] Data are from Global Trade Atlas.

[3] Data are from Global Trade Atlas. CRS attempted to obtain export data from a major U.S. chewing gum company, but it declined to cooperate. Likewise, the International Chewing Gum association would not provide CRS with data on exports to Singapore.

Figure 4. U.S. Balance of Trade with Singapore in Services and Its Components



Source: Data from U.S. Bureau of Economic Analysis

Among the four components of trade in services, the United States ran surpluses in two and deficits in two. In royalties and license fees, the U.S. surplus increased from $2.5 billion in 2001 to $2.9 billion in 2006. Some of this rise in fees for intellectual property likely can be attributed to strengthened intellectual property protection in Singapore resulting from the FTA. In other private services, the U.S. surplus has fallen from $1.9 billion in 2001 to $0.7 billion in 2006. In military and government transactions, the trade balance is small and varies from year to year. It was -$0.04 billion in 2001, $0.2 billion in 2002, and -$0.2 billion in 2006. In travel and transportation, the balance trends toward an increasingly large U.S. deficit. Most of this is in transportation, particularly shipping, as well as in passenger fares and travel. This negative balance grew from -$0.3 billion in 2001 to -$0.9 billion in 2006.

Increased market access in services under an FTA, therefore, may or may not result in an improvement in the U.S. bilateral trade balance in services. It depends on what kind of service is being traded and the relative comparative advantage of each country. U.S. service providers, moreover, may find it more advantageous under the increased access and strengthened intellectual property regime engendered by an FTA to locate a subsidiary in the FTA partner country. This may reduce U.S. exports of private services but also may increase royalties and payments from use of intellectual property and earnings from operations in the host country. In the Singapore case, U.S. income from assets owned in Singapore increased from $3.9 billion in 2001 to $6.7 billion in 2003, and after the FTA jumped to $14.3 billion by

2006.[4] This more than offsets the $1.2 billion decline in the U.S. surplus in services trade with Singapore.

Financial Services

In financial services, Singapore made several key concessions under the FTA. In 2007, the government lifted the ban on new licenses for full-service and wholesale American banks. Licensed full-service banks from the United States (two as of 2007) are now able to offer all their services at an unlimited number of locations. Under the first two years of the FTA, U.S.-licensed full-service banks were able to operate at up to 30 customer service locations (branches or off-premise ATMs). Non-U.S. full-service foreign banks have been allowed to operate at a combined 25 locations. Locally incorporated subsidiaries of U.S. banks are able to apply for access to the local automated teller machine (ATM) network on commercial terms, and branches of U.S. banks are to obtain access to the ATM network by 2008.[5]

Citibank, in particular, has been expanding its presence in Singapore. From four branches in 2004, it now has eleven full-service branches and more planned.[6] It was the first in Singapore to introduce a biometric payment system that allows payments without credit cards based on fingerprint identification. It also has joined with the Singapore MRT subway system to provide credit cards that double as subway tickets and to locate ATMs and branches in and around subway stations.[7] Citibank has a 50% share of the Singapore credit card market.[8] As of mid-2006, Citibank along with the other major foreign banks had created their own ATM network[9] rather than join that of the local banks. American banks are allowed under the FTA to enter the domestic ATM network if financial considerations warrant such a move.

Legal Services

In general, foreigners in Singapore cannot practice Singapore law (without local credentials), employ Singapore lawyers to practice Singapore law, or litigate in local courts. Since June 2004, however, U.S. and other foreign lawyers have been allowed to represent parties in arbitration in Singapore without the need for a Singapore attorney to be present. U.S. law firms can provide legal services with respect to Singapore law only through a joint venture or formal alliance with a Singapore law

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[4] U.S. Bureau of Economic Analysis. Balance of payments data by country. Some of these assets may be in securities.

[5] U.S. Trade Representative. *2007 National Trade Estimate Report on Foreign Trade Barriers*. Online version at [http://www.ustr.gov/Document_Library/Reports_Publications/2007/2007_NTE_Report/Section_Index.html].

[6] See Citibank Singapore website at [http://www.citibank.com.sg].

[7] Citigroup Inc. *Citibank Singapore Expands its Customer Touchpoint Network by 60% with SMRT Partnership*. Press Release, July 16, 2007.

[8] Citibank Offers First Travel Card in Region. *The Straits Times*, August 18, 2007, p. S31.

[9] ATM5 is the shared ATM network of ABN AMRO, Citibank, HSBC, Maybank and Standard Chartered. Banks.

firm.[10] Under the FTA, Singapore has recognized law degrees from Harvard University, Columbia University, New York University, and the University of Michigan for the purpose of admission to practice law in Singapore. Also, since October 2006, graduates of these universities who are ranked among the top 70% of their graduating class may be admitted to the Singapore bar.[11]

Electronic Commerce

The FTA contains state-of-the-art provisions on electronic commerce, including national treatment and most-favored-nation obligations for products delivered electronically, affirmation that services disciplines cover all services delivered electronically, and permanent duty-free status of products delivered electronically.

Intellectual Property Rights (IPR) Protection

The FTA provided the impetus for the Singapore government to amend its laws to create one of the strongest IPR regimes in Asia.[12] In July 2004, amendments to the Trademarks Act, the Patents Act, the Layout Designs of Integrated Circuits Act, Registered Designs Act, a new Plant Varieties Protection Act, and a new Manufacture of Optical Discs Act came into effect. This was followed in 2005 by an amended Copyright Act and Broadcasting Act. Singapore also has implemented or ratified various international conventions or treaties dealing with IPRs.

Singaporean officials have indicated that the provisions in the FTA that strengthened IPR protection in Singapore have attracted foreign business investments. Recently, Microsoft, Pfizer, ISIS Pharmaceuticals, Motorola, Genentech, and Lucas Films have made new investments in operations in Singapore.[13]

Investments

The U.S.-Singapore FTA provides for national and most-favored nation treatment for foreign investors. Investors have the right to make financial transfers freely and without delay. The FTA also provides for disciplines on performance requirements, for international law standards in the case of expropriation, and for access to binding international arbitration. In 2006, Singapore was the third largest destination for U.S. foreign direct investment in the Asia Pacific. U.S. direct

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[10] As of October 2005, 16 of the 64 foreign law firms in Singapore were from the United States.

[11] U.S. Trade Representative, *2007 National Trade Estimate Report.*

[12] For details, see Economist Intelligence Unit. Singapore: Licensing and Intellectual Property. EIU ViewsWire, New York, July 6, 2007.

[13] Meetings with government officials in Singapore, August 2007.

investment (cumulative position) in Singapore was $40.8 billion in 2001, $51.1 billion in 2003, and $60.4 billion in 2006. By comparison, in 2006, it was $122.6 billion in Australia, $91.8 billion in Japan, $38.1 billion in Hong Kong, and $22.2 billion in China.[14]

According to the U.S. Department of Commerce, in 2004 and 2005, one of the strongest increases in the value added of overseas affiliates of U.S. multinational corporations was in manufacturing operations in Singapore. The attractiveness of the country as a "manufacturing base for the Asia-Pacific region was heightened by the enactment of the United States-Singapore Free Trade Agreement, which facilitates the shipment of inputs to production from the United States." In 2005, U.S. affiliates in Singapore accounted for 15% of Singapore's GDP, up from 13.2% in 2004 and second only to the share in GDP of U.S. affiliates in Ireland (18.5%). In 2005, U.S. non-bank affiliates in Singapore employed 123,600 persons, held assets of $150.7 billion, had sales of $162.7 billion, and generated net income of $18.7 billion. This net income in Singapore exceed that by U.S. non-bank affiliates in Japan ($15.0 billion), Australia ($13.0 billion), or China ($7.9 billion) for the same year.[15]

U.S. Imports from Singapore

Just as U.S. exports to Singapore have increased since the U.S.-Singapore FTA came into effect in 2004, so also have U.S. imports. Overall, U.S. imports from Singapore rose by 0.9% from 2001 to 2003 and by 15.6% from 2004 to 2006 (not adjusted for inflation). This, however, was considerably below the growth of all U.S. imports of 10.2% over the first period and 26% since the FTA came into effect.

By sector, however, the growth rates for imports vary considerably. **Figure 5** shows the growth rates for the three years prior to and for the three years after the FTA was implemented for the top 29 products (by 2-digit Harmonized System code) imported from Singapore. In 2006, the value of these products ranged from a low of $0.01 billion for paper and paperboard to $6.7 billion for machinery. Imports from Singapore are concentrated in the top six categories each with amounts exceeding $1 billion. Together these six accounted for 92% of the total imports from Singapore in 2006.

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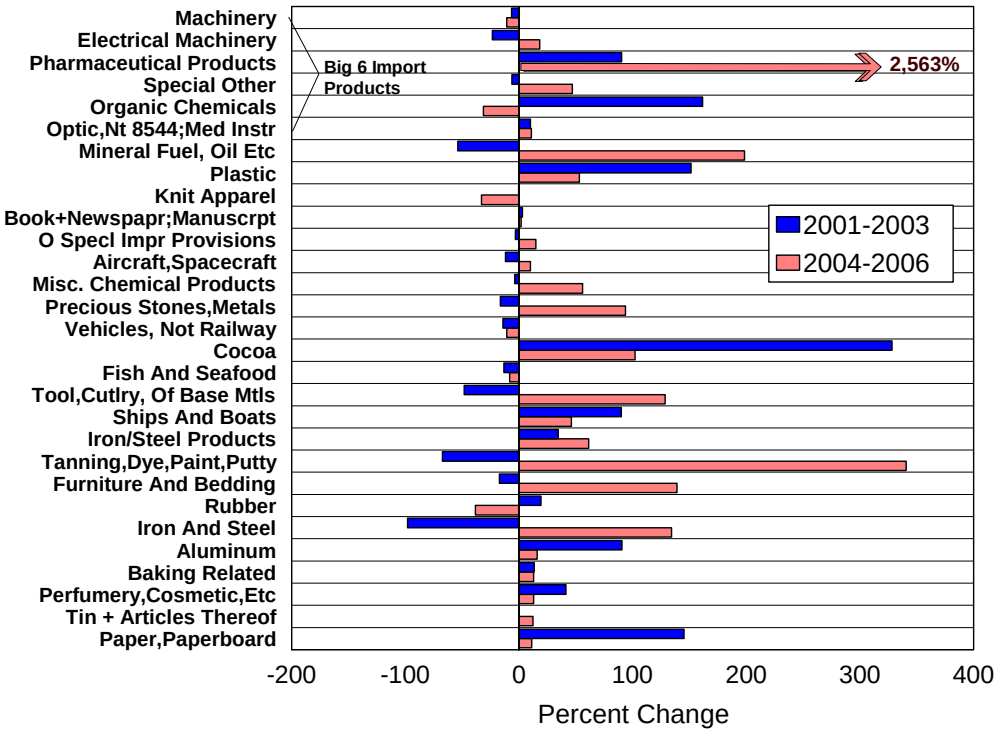
[14] U.S. Bureau of Economic Analysis. On a historical cost basis.

[15] Mataloni, Ray. Operations of U.S. Multinational Companies in 2005. *Survey of Current Business*, November 2007. pp. 48-49, 51, 58.

Figure 5. Growth in U.S. Imports from Singapore by 2-Digit Harmonized System Sectors



Source: Data from Global Trade Atlas

Note also that imports of textiles and apparel from Singapore have not increased significantly. Over the 2004-2006 period, imports of woven apparel fell.

The most significant gains have been in U.S. imports of pharmaceuticals from Singapore. Imports of such products jumped from $0.09 billion in 2003 to $2.4 billion in 2006. Over the first nine months of 2007, imports of pharmaceuticals from Singapore had reached $2.2 billion, an increase of 26.4% over the corresponding period in 2006. The vast majority (98%) of these imports were cardiovascular medicaments (HS 3004909120). The market for drugs in the United States in 2006 was $174 billion, so imports from Singapore accounted for about 1.3% of the U.S. market.

Singapore is now the second largest source of imports into the United States of cardiovascular medicaments. Ireland is the largest with 33% of such U.S. imports in 2006. It is followed by Singapore with 21%, Sweden with 12%, and France with 10%. In 2004, Singapore accounted for 1% of such imports while Ireland accounted for 59%. Imports of cardiovascular medicaments from Ireland have held steady from 2004 at about $3.7 billion, whereas those from Singapore, Sweden, and France have grown rapidly.[16]

[16] Global Trade Atlas.

The increase in imports of pharmaceuticals from Singapore cannot be attributed to a reduction in U.S. tariffs under the FTA. Pharmaceuticals already enter the United States duty free. Rather what appears to have occurred is the development of Singapore as a regional center for multinational pharmaceutical companies — both for manufacturing and for research and development. Two major factors have contributed to this. The first is the strengthening of intellectual property protection and new or revised laws in Singapore. The second is the development of a biomedical industrial park (Tuas Medical Park) for pharmaceutical companies to locate production and other facilities plus a research complex called Biopolis that houses biomedical research institutes, councils, and related organizations.

Multinational companies have come to dominate the manufacture of pharmaceuticals in Singapore. These include Merck Sharp and Dohme, Aventis, GlaxoSmithKline, Pfizer, Schering-Plough, Wyeth, and Eli Lilly.[17] Singapore is increasingly becoming a base for both regional and global pharmaceutical production for a growing number of multinational companies. The government goal is to have at least ten multinational pharmaceutical manufacturing facilities operational in Singapore by 2010. Much of the production is for export, particularly to the United States and Europe. Exports from other Asian countries also flow into Singapore for re-export. The country exports more pharmaceuticals than any other "Asian Tiger" economy (Hong Kong, Taiwan, and South Korea).[18]

Before the FTA, a sizable proportion of Singapore's pharmaceutical exports were transshipments from other countries. While such re-exports continue to increase, exports of domestic production now dominate. **Figure 6** shows Singapore's global exports of pharmaceuticals and the rapid increase in domestic exports relative to re-exports. From 2002 to 2006, the re-export share of all pharmaceutical exports dropped from 60% to 11%.

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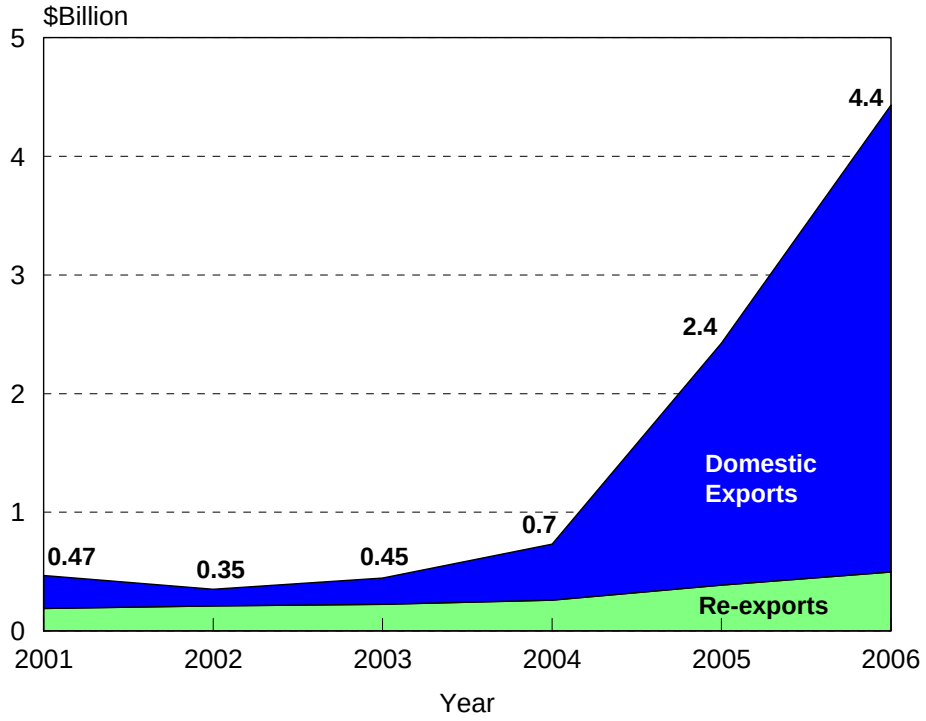
[17] The Singapore Association of Pharmaceutical Industries lists 34 companies as members.

[18] Espicom Business Intelligence Ltd. The Pharmaceutical Market: Singapore. November 2006. (Report description).

Figure 6. Singapore's Exports of Pharmaceutical Products by Origin



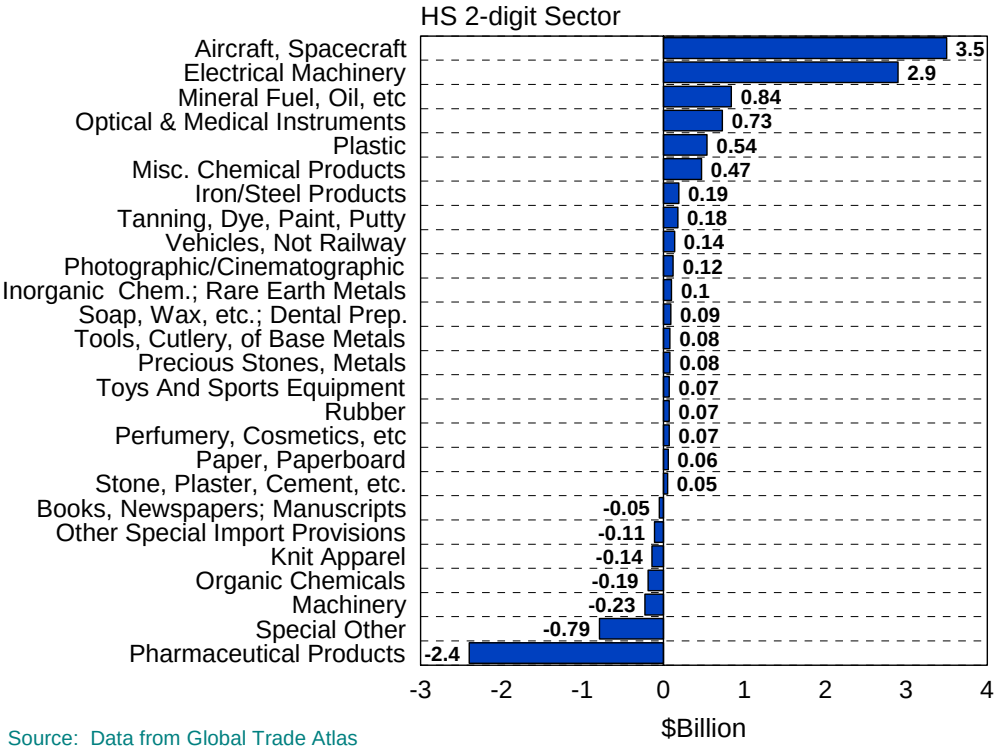
Source: Data from Global Trade Atlas

Balance of Trade by Sectors

In the modern globalized economy, much trade is intra-industry. The old economic model of trade in which each country specializes in certain products and exchanges them for others in which it has a comparative disadvantage only remotely resembles trade between industrialized economies populated by multinational enterprises. In many cases, the United States both imports and exports products in the same sector. Some of this trade may occur within a manufacturer's supply chain that may straddle several countries. For example, an electronic product may be designed and marketed in the United States, but final assembly may be in Singapore using components from the United States as well as from other economies in the region. The U.S. balance of trade in goods with Singapore is shown in **Figure 7** by two-digit Harmonized System codes.

The balance of trade by sectors also indicates how trade with Singapore may be affecting sectoral employment in the United States. The first observation is that the U.S. aerospace and electrical machinery producers are doing well relative to Singapore. Most other sectors also are experiencing either small surpluses or small deficits in bilateral trade — less than $1 billion. (The sectors not shown in **Figure 7** had balances with an absolute value of less than $50 million.) On the deficit side, the exceptional sector was pharmaceuticals, a deficit accounting for about 1.3% of the U.S. market. This industry in Singapore, however, is dominated by multinational drug companies, some headquartered in the United States. The effect on U.S. employment in the drug sector, therefore, is unclear, and so far relatively small.

Figure 7. U.S.-Singapore Balance of Trade by Sectors, 2006



Source: Data from Global Trade Atlas

Labor Issues

In the U.S.-Singapore FTA, labor obligations are part of the core text of the trade agreement. Both parties were to reaffirm their obligations as members of the International Labor Organization, and they are to strive to ensure that their domestic laws provide for labor standards consistent with internationally recognized labor principles. The agreement also contains language that it is inappropriate to weaken or reduce domestic labor protections to encourage trade or investment. The agreement further requires parties to effectively enforce their own domestic labor laws. This obligation is to be enforceable through the agreement's dispute settlement procedures.

Singapore has ratified 24 ILO Conventions (20 in force), including five Core Conventions that cover child labor (ratified in 2001); forced labor; collective bargaining, and equal remuneration (ratified in 2002). The country ratified the Minimum Age Convention in November 2005 after the FTA went into effect. Unless otherwise indicated, the other conventions were ratified in 1965. (The United States has ratified 14 ILO Conventions [12 in force] including 2 [Forced Labor and Child Labor] of the five Core Conventions.)[19]

In 2004 Singapore's national labor force was made up of approximately 2.18 million workers of which nearly 420,000 were unionized and represented by 68

[19] International Labour Organization. See website at [http://www.ilo.org].

unions. The number of unionized workers was up from 338,311 workers in 2002. Almost all of the unions (which represent virtually all of the union members) were affiliated with the National Trade Union Congress (NTUC), an umbrella organization with a close relationship with the government.

Environmental Issues

In the U.S.-Singapore FTA, both parties agreed to ensure that their domestic environmental laws provide for high levels of environmental protection and that they are to strive to continue to improve such laws. They are not to weaken or reduce domestic environmental protections to encourage trade or investment. The agreement also requires that parties effectively enforce their own domestic environmental laws. This obligation is to be enforceable through the agreement's dispute settlement procedures.

Since Singapore is an island (3.4 million population) the size of the Washington, DC, area inside the Beltway, it has virtually no natural resources. Its environmental issues are characteristic of a highly urbanized city. It has no problems associated with mining, forestry, or large-scale agriculture. Singapore touts itself as the "garden city of the East." It is relatively clean, ordered, and well-planned. Waste water is purified and recycled. The restricted space available in the country raises issues pertaining to industrial pollution (tightly regulated), urbanization, and the protection of the few natural areas still existing. Vehicular traffic is alleviated by charging special tolls to travel into the inner city during rush hours and by levying taxes and other fees on new or used cars.[20]

Cargo Security

The closer economic links established under the FTA appear to have assisted in areas such as cargo security. In December 2007, Singapore announced that it was to conduct a six-month trial project under the Secure Freight Initiative. Under this initiative, 100% of U.S.-bound shipping containers are to be scanned for nuclear or radiological materials before being loaded on ships. Singapore is to be one of seven ports participating in the trial.[21]

The Ports Command in Singapore already had been cooperating with the United States in various security initiatives. It now scans about 15% of the 24 million cargo containers that pass through its ports, and it is able to scan an incoming container

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[20] Tan, Alan K.J. "Preliminary Assessment of Singapore's Environmental Law." United Nations Online Network in Public Administration and Finance report. June 24, 2007.

[21] U.S. Embassy, Singapore. Singapore Participates in Six-month Trial Project to Scan Shipping Containers Bound for the United States under Secure Freight Initiative. Press Release. December 17, 2007.

truck in less than one minute. In March 2003, Singapore was the first country to sign on to the U.S.-sponsored Cargo Security Initiative.[22]

Other Effects

The U.S.-Singapore FTA also generated non-economic effects. At a time when many in Southeast Asia perceive that the United States is distracted by events in the Middle East and not paying enough attention to Asia, the FTA provides some degree of reassurance of U.S. interest in the region. It also created a bandwagon effect as Malaysia, Thailand, and South Korea soon followed with negotiations of their own for an FTA with the United States. Singapore has supported the U.S.-backed proposal to create a Free Trade Area of the Asia Pacific under the Asia Pacific Economic Cooperation forum. It also has aggressively been concluding other FTAs that eventually could form the basis for this proposed free trade area.

In addition, the closer economic ties under the U.S.-Singapore FTA contributed to more diplomatic and military cooperation with Singapore. In July 2005, the United States and Singapore signed a Strategic Framework Agreement that extended bilateral cooperation to defense and security. Located in the midst of several secular Muslim nations, Singapore has been active in cooperating with the United States in political and security cooperation in the global counterterrorism campaign.

Singapore has been at the forefront of cooperating with neighboring countries and the United States to enhance maritime security in nearby waters, especially in the Strait of Malacca where terrorist threats and piracy have been problems. Singapore also has cooperated extensively to ensure the security of cargo bound for the United States. Singapore also continues to welcome port visits by the U.S. Navy and allows U.S. aircraft carriers to use the special pier at its naval base built especially to accommodate such large ships.[23]

In 2007, when Buddhist-led demonstrations erupted in Burma, Singapore held the Chair of ASEAN, the Association of Southeast Asian Nations, of which Burma/Myanmar is a member. Despite the tradition of non-interference in domestic affairs of the member states, Singapore supported investigation of the protests in Burma by the Special U.N. Envoy to Myanmar Ibrahim Gambari. Singapore also continued its bilateral and multilateral intelligence and law enforcement cooperation

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[22] U.S. Customs and Border Protection. Singapore to Scan U.S.-Bound Cargo as Part of Secure Freight Initiative. Press Release, December 17, 2007. Maritime and Port Authority of Singapore. "A Port's Role," Presentation at the International Association of Ports and Harbors Asia/Oceania Regional Meeting, February 1-2, 2007.

[23] Although, Singapore did send some 191 troops — mostly sailors on a ship — to Iraq in 2003, it withdrew them in March 2005 because the small size of Singapore's Navy made the one ship critical in the rotation of duties at home.

to investigate terrorist groups with a focus on Jemaah Islamiya, a group that had plotted to carry out attacks in Singapore in the past.[24]

Table 2. Major U.S. Imports from Singapore, Customs Value by Two-Digit Harmonized System Commodity Codes
(million U.S. dollars)

HS	Commodity Description	2003	2004	2005	2006
	Total	15,137.7	15,370.4	15,110.1	17,768.1
84	Machinery	7,687.1	7,505.9	6,800.9	6,695.4
85	Electrical Machinery	2,282.4	2,818.6	2,841.5	3,332.5
30	Pharmaceutical Products	9.3	91.1	1,158.3	2,427.2
98	Special Other	949.8	1,055.9	1,070.0	1,550.9
29	Organic Chemicals	2,270.6	1,810.1	839.1	1,243.3
90	Optics, Not 8544; Medical Instr	795.2	941.6	996.0	1,044.0
27	Mineral Fuel, Oil, etc	93.5	83.5	264.7	249.3
39	Plastic	104.6	146.4	247.6	224.1
61	Knit Apparel	233.0	208.4	144.4	139.7
49	Books, Newspaper; Manuscript	129.2	134.2	142.7	136.9
99	Other Special Import Provisions	90.9	93.2	89.3	107.1
88	Aircraft, Spacecraft	64.1	74.1	80.6	81.7
38	Misc. Chemical Products	24.7	28.9	27.7	45.1
71	Precious Stones, Metals	20.0	22.3	43.6	43.2
87	Vehicles, Not Railway	28.6	42.5	44.2	37.9
18	Cocoa	45.2	18.4	19.6	37.2
03	Fish and Seafood	46.8	40.0	41.0	36.7
82	Tools, Cutlery, of Base Metals	10.0	12.6	18.0	28.8
89	Ships and Boats	48.6	18.7	26.5	27.3
73	Iron/Steel Products	18.0	14.9	19.4	24.1
32	Tanning, Dye, Paint, Putty	3.1	5.3	10.5	23.6
94	Furniture and Bedding	7.2	9.3	15.6	22.2

[24] U.S. Department of State, Office of the Coordinator for Counterterrorism. *Country Reports on Terrorism*, April 30, 2007.

HS	Commodity Description	2003	2004	2005	2006
40	Rubber	28.0	35.9	27.5	22.2
72	Iron and Steel	0.1	7.2	0.1	16.8
76	Aluminum	4.4	8.4	8.5	15.9
19	Baking Related	11.2	11.4	11.9	13.0
33	Perfumery, Cosmetics, etc.	5.5	9.1	8.2	12.9
80	Tin + Articles Thereof	0.1	0.4	1.6	12.3
48	Paper, Paperboard	8.4	4.5	12.4	11.1
95	Toys and Sports Equipment	7.1	12.1	12.6	10.3
44	Wood	4.9	4.0	6.7	9.0
83	Misc Art Of Base Metal	5.3	8.8	6.5	8.5
62	Woven Apparel	36.8	33.9	12.3	6.4
21	Miscellaneous Food	8.3	7.5	6.7	6.3
81	Other Base Metals, etc.	0.3	0.6	3.6	6.0
74	Copper+Articles Thereof	2.3	3.0	2.4	5.9
97	Art and Antiques	1.7	2.9	2.1	5.5
15	Fats And Oils	4.7	6.9	5.1	4.4
28	Inorganic Chem; Rare Earth Met	2.0	3.2	4.1	3.5
12	Misc Grain, Seed, Fruit	1.3	3.9	4.1	3.3
16	Prepared Meat, Fish, etc	2.1	1.6	2.0	3.0
91	Clocks And Watches	1.3	2.1	3.0	2.9
68	Stone, Plaster, Cement, etc.	0.7	0.8	1.2	2.8
41	Hides and Skins	2.0	3.2	4.5	2.8

Source: U.S. Dept. of Commerce, Bureau of Census

Table 3. Major U.S. Exports to Singapore, Customs Value by Two-digit Harmonized System Commodity Codes

(million U.S. dollars)

HS	Description	2003	2004	2005	2006
	Total	16,560.17	19,608.48	20,642.25	24,683.74
84	Machinery	4,306.83	5,332.21	5,637.14	6,437.63
85	Electrical Machinery	4,055.47	5,321.48	5,185.46	6,227.82
88	Aircraft, Spacecraft	2,615.12	2,349.14	2,656.92	3,570.66
90	Optics, not 8544; Medical Instr	1,190.56	1,540.26	1,428.79	1,774.39
27	Mineral Fuel, Oil, etc.	456.83	763.47	697.31	1,089.07
29	Organic Chemicals	462.51	598.64	680.82	1,051.83
39	Plastic	595.58	631.54	764.65	762.06
38	Misc. Chemical Products	333.95	409.85	464.85	515.60
73	Iron/Steel Products	129.73	128.28	141.82	218.86
32	Tanning, Dye, Paint, Putty	123.04	157.11	190.01	200.35
87	Vehicles, Not Railway	104.94	193.63	240.25	175.23
37	Photographic/Cinematogr	84.17	87.72	102.85	124.91
71	Precious Stones, Metals	71.27	129.43	143.18	121.69
82	Tools, Cutlery, Of Base Metls	45.18	52.02	60.10	109.57
28	Inorganic Chem; Rare Erth Mt	94.74	92.24	100.35	101.74
40	Rubber	79.48	72.08	76.83	91.93
49	Book+Newspaper; Manuscript	76.80	86.21	80.67	86.99
34	Soap, Wax, etc; Dental Prep	60.30	60.22	69.55	85.81
33	Perfumery, Cosmetics, etc	67.08	68.81	80.27	82.20
48	Paper, Paperboard	59.80	65.54	63.76	69.58
68	Stone, Plaster, Cement, etc	18.97	28.06	33.87	53.10
72	Iron and Steel	34.89	33.39	35.72	52.75
70	Glass and Glassware	24.39	33.09	30.16	49.02
21	Miscellaneous Food	57.00	48.23	50.50	44.75
83	Misc Art Of Base Metal	121.79	72.68	30.82	43.01
08	Edible Fruit and Nuts	56.99	47.79	41.78	39.23
76	Aluminum	109.19	29.29	32.08	39.15
30	Pharmaceutical Products	49.86	28.96	280.05	39.14
74	Copper+Articles Thereof	37.87	34.61	31.71	34.05
35	Albumins; Mod Starch; Glue	19.56	23.17	29.65	31.28
20	Preserved Food	22.20	25.96	26.80	29.57
41	Hides And Skins	7.71	8.25	12.42	23.24
02	Meat	21.05	13.24	19.10	20.73

HS	Description	2003	2004	2005	2006
75	Nickel+Articles Thereof	8.03	11.20	10.96	18.90
04	Dairy, Eggs, Honey, etc	5.01	12.58	15.75	18.89
81	Other Base Metals, etc.	14.27	17.94	14.25	18.16
22	Beverages	10.30	12.05	12.86	18.10
42	Leather Art; Saddlery; Bags	8.82	11.98	13.06	15.08
15	Fats and Oils	5.10	11.33	13.07	14.01
69	Ceramic Products	6.20	4.65	5.76	12.66
19	Baking Related	9.96	9.93	11.37	12.65
55	Manmade Staple Fibers	10.45	10.83	12.10	12.46
63	Misc Textile Articles	8.50	8.54	10.28	12.14
10	Cereals	11.70	20.42	12.80	10.90
09	Spices, Coffee and Tea	10.30	14.48	12.40	10.78
16	Prepared Meat, Fish, etc	5.23	6.08	6.17	10.53
62	Woven Apparel	7.35	6.79	9.55	10.28

Source: U.S. Dept. of Commerce, Bureau of Census