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China Bashing 2004

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Introduction

On April 26, 2004, Senator John Kerry released his six-point trade program, “Trade Enforcement: Asleep at the Wheel,” and conspicuously targeted China for violating worker rights, dumping, and supporting “illegal currency manipulation” (Kerry 2004). Five days earlier, senior Bush administration officials met with Chinese Vice Premier Wu Yi to settle a few trade disputes (e.g., WiFi) but did not resolve the most contentious ones (exchange rates, semiconductors, and labor rights).

US-China relations are often in the spotlight during presidential election years, and 2004 is no exception. Ever

since President Richard Nixon’s celebrated trip to Beijing in 1972, the party out of power has chastised the White House for being “soft on China”—in security terms, economic terms, or both. In turn, the administration insists that it is both tough and diplomatic. During the 2004 political season, the growing bilateral trade deficit (about \$125 billion in 2003) and the loss of US manufacturing jobs (2.8 million between 2000Q2 and 2003Q3) provide topical themes for the familiar drama.

Forces Larger Than China

The US bilateral deficit with China is only part of the United States’ external imbalance with the rest of the world. The US global trade deficit (goods and services) widened from \$375 billion in 2000 to an estimated \$575 billion in 2004 (seasonally adjusted annual rate, data from US Bureau of Economic Analysis, 2004). In macroeconomic terms, when a country spends beyond its income—as the United States has done on a large scale for several years—imports will exceed exports. The gap between imports and exports is necessary to absorb the difference between national spending and national income. The widening US trade deficit between 2000 and 2003 thus reflects lower household savings and higher federal budget deficits. The rest of the world willingly provides the dollars to finance US spending habits because the United States is an attractive place to invest (box 1). In fact, the United States is so attractive that the dollar actually strengthened in foreign exchange markets during 2000 to 2001 when the trade deficit was growing. Under these macroeconomic conditions, if the United

Box 1: US manufacturing and the US trade deficit

The main causes of the US trade deficit (more precisely, the US current account deficit, \$411 billion in 2000, rising to \$542 billion in 2003) are low national savings and a strong dollar. US household savings remain modest: 3 percent of household income in 2000 and 3.5 percent in 2003. Moreover, the federal budget surplus of \$230 billion in 2000 turned into a deficit of \$401 billion in 2003.¹ When the United States has a trade deficit, it is concentrated in manufactured goods, mainly because manufactures are the most readily traded sector of the economy. In 2003, the US trade deficit in manufactures was \$483 billion.

The trade deficit is not the main reason for job losses in the manufacturing industries. The main reasons for manufacturing job losses between 2000 and 2003 were the recession (a drop in quarterly US purchases of manufactured goods from \$479 billion to \$462 billion between 2000Q4 and 2003Q2), and rising manufacturing productivity (accelerating from 3.4 percent annually in 1990–95, to 4.2 percent annually in 1995–2000, to 4.7 percent annually since 2000). Net US manufactured imports increased from \$396 billion in 2000 to \$483 billion in 2003. Using a statistically estimated coefficient of 8,178 jobs per billion dollars of manufactures output, the increase in the annual manufactures trade deficit (between 2000 and 2003 of \$87 billion) might be blamed for 700,000 manufacturing job losses (see appendix table 8). Using a less mechanical methodology, Martin Baily and Robert Lawrence (2004) estimate that about 256,000 US manufacturing jobs (15 percent of the total) were lost due to rising net imports during 2000–03.

Both estimates assume that a US manufactures trade deficit *causes* a decline in US manufactures output. However, on a quarterly basis, between 1990 and 2003, larger US manufacturing trade deficits generally corresponded with *higher*, not *lower*, US manufacturing output. On average every \$1 billion increase in US manufacturing output was accompanied by an increase of \$240 million in the US manufacturing trade deficit. To summarize, the political arithmetic that equates trade deficits with job losses is either exaggerated or plain wrong (see appendix table 8).

Sources: Summers (2004), Baily and Lawrence (2004).

¹ Lawrence H. Summers (2004) calculates that more than 100 percent of the deterioration of the US current account position over the past four years can be explained by the drop in the US net national saving rate.

States did not have a growing bilateral trade deficit with China, it would have experienced even faster growth in its trade deficit with other countries.¹

Manufacturing job loss is part of an even longer trend, as the United States increasingly becomes a service economy. Since 1950, the proportion of US jobs in the manufacturing sector has dropped from about 31 to 12 percent. But the absolute decline between 2000 (17.3 million workers) and 2003 (14.5 million workers) was particularly brutal, and many firms and workers laid the blame squarely on China.²

China in Global Trade and Investment

Often overlooked is China's role in global trade. In 2003, China surpassed Japan as the world's third largest importer.³ In 2003, China became the world's fourth largest exporter, and two-way trade with China accounted for about 22 percent of the

increase in world trade that year.⁴ The emergence of China as an economic power has been a boon for commodity producers in particular. China is currently the second largest consumer and importer of oil, and its demand for crude oil is projected to grow by 4 percent annually over the next decade.⁵ A decade ago, Chinese nickel consumption was one-quarter of Japan's. By the end of 2004, China will overtake Japan as the biggest consumer of nickel.⁶ Natural resource-producing countries, such as Canada and Australia, clearly benefit from China's growing industrial output.⁷

Often not appreciated is the openness of the Chinese economy, measured by the trade-to-GDP ratio (imports plus exports divided by GDP). The current trade-to-GDP ratio for China is about 56 percent. By comparison, the Japanese and US trade openness ratios were about 22 percent in 2002.⁸ Another indication of Chinese openness is the ratio between the stock of foreign direct investment (FDI)

and GDP.⁹ The figure for China in 2002 was 35 percent, for Japan 2 percent, and for the United States 13 percent.

US-China Bilateral Trade Friction

Since its accession to the World Trade Organization (WTO), China has become the United States' third largest trading partner and the sixth largest market for US exports. Between 2000 and 2003, US imports from China rose from \$100 billion to \$152 billion, while US exports to China climbed from \$15 billion to \$27 billion.¹⁰ The steady reduction of Chinese trade barriers over the last two decades facilitated the growth of Chinese exports as well as imports.¹¹ The expansion of US-China commerce delivers lower prices to American consumers and producers and enables better use of resources in both countries. Despite benefits on both sides of the trade equation, most US politicians view the bilateral deficit in purely negative terms.

When evaluating the size and balance of US-China trade, several caveats deserve note. Even though China runs a large bilateral trade surplus with the United States (about \$125 billion in 2003, according to US statistics), it runs a trade deficit with the rest of the world, most notably with its Asian partners (about \$99 billion in 2003; see tables 1, 2a, and 2b).¹² In 2003, China's global trade surplus represented 2.5 percent of China's GDP.¹³ However, the US-China bilateral trade deficit may be overstated in official US figures because the US Department of Commerce (US DOC) includes entrepot trade through Hong Kong and is based on free-alongside-ship (FAS) calculations. The US-China trade deficit in 2003, expressed on a freight-on-board (FOB) basis,¹⁴ adjusted for reexports, totaled about \$95 billion, about 26 percent lower than official US estimates (tables 3, 4a, and 4b) (Fung and Lau 2003).

The comparison between China and Japan is instructive. Japan has run global current account surpluses since 1981, often very large. China has a shorter history of global current account surpluses, starting in 1993.¹⁵ Most of China's accumulation of foreign exchange reserves corresponds to inward flows of FDI and speculative capital inflows in anticipation of a revaluation, not trade surpluses. While Chinese exports accounted for nearly 6 percent of total world exports in 2003, they are still modest compared with Japan's record of 10 percent in 1986 (see table 5 for a comparison of China's export growth with other Asian economies).¹⁶

However, the US bilateral deficit with China is now greater than it was at its peak (in 2000) with Japan. In 2000, the US bilateral trade deficit with

Table 1: China's merchandise trade balance with selected partners, 2003 (Chinese statistics, unadjusted, billions of dollars)

Country/region	Exports	Imports	Merchandise trade balance
Latin America	12	15	-3
European Union	72	53	19
East Asia (excluding Japan)	138	151	-13
ASEAN	31	47	-16
Middle East	16	15	1
Africa	10	8	2
Japan	59	74	-15
United States	92	34	59
Total^a	438	413	26

ASEAN = Association of Southeast Asian Nations

a. Refers to total merchandise trade with the world.

Sources: *China Statistical Yearbook* (2003); China Ministry of Commerce data (2002).

Japan was \$85 billion, about 0.9 percent of US GDP. In 2003, the US bilateral trade deficit with China was \$125 billion, about 1.1 percent of US GDP. At the highest point (in 1986), the ratio between US imports from Japan and US exports to Japan was 3.0. The comparable ratio for US trade with China in 2003 was 5.7. A ratio of 5.7 implies that US exports to China must grow nearly six times as fast as US imports from China to narrow the gap in dollar terms. During 2000-03, US exports to China increased by 76 percent, while US imports from China grew by 52 percent.¹⁷ US exports grew a good deal faster than imports, but not fast enough to narrow the dollar gap.¹⁸

After China joined the WTO in December 2001, trade complaints were temporarily put on hold. The grace period is now over as US manufacturers, Congress members, and labor unions scramble to file complaints.¹⁹ The US Congress has also joined the fray, tabling 12 bills against Chinese practices in the past year (appendix table 1). The complaints range from the undervalued renminbi (RMB), to China's slow progress in meeting WTO commitments, to disputes over brassieres and furniture. This policy brief catalogues and evaluates the main complaints now on the table.

Overview of the Disputes

Table 6 summarizes, in a very rough way, the major trade frictions examined in this policy brief, the ones now preoccupying authorities in Washington and Beijing. The first two columns show the relevant trade coverage, expressed as a share of bilateral trade (using US trade statistics). An asterisk indicates whether the dispute is over US imports, US exports, or both. Figures in the last column of table 6 roughly estimate the impact of a favorable resolution (from the US standpoint) on the US bilateral trade deficit. However, for most of the disputes, the bilateral deficit is a background factor, not the immediate trigger.

The biggest dispute is over the renminbi exchange rate. This affects all US imports from China and all US exports to China. It also has repercussions throughout Asia. As a crude and probably high estimate, resolution of the dispute along the lines advocated by US officials might reduce the bilateral trade deficit by \$20 billion. If other Asian countries follow China by revaluing their pegged or managed currencies, the United States' trade balance could improve by \$56 billion. Even if this estimate exaggerates the adjustment, the exchange rate clearly dominates other disputes in terms of trade impact.

Textile and clothing disputes are so far limited to brassieres, but frictions over other items (starting with socks) could soon erupt. Assuming that cases brought in the next year restrain Chinese exports by five times the brassiere case, the total impact might be roughly \$1.4 billion. If the Multi-Fiber Arrange-

ment (MFA) expires as promised on January 1, 2005, and all quotas are lifted, Chinese exports might well face restraints of this magnitude or larger.

Antidumping duties on wooden bedroom furniture and color television sets may discourage up to \$3 billion of US imports from China, although this is probably a high estimate. If China ends its tax discrimination against semiconductors, US exports might increase by \$0.4 billion.

All told, the dollar value of active trade disputes, in trade balance terms, may be in the range of \$25 billion—dominated first and foremost by renminbi revaluation. We do not include the AFL-CIO labor rights petition in this count (or in table 6). However, the penalty tariffs sought by the AFL-CIO, if imposed, would raise the stakes by tens of billions of dollars.

The Revaluation Debate

Since 1995, China has fixed the renminbi at about 8.28 to the dollar.²⁰ This is widely seen as an undervalued rate because China has sharply increased the size of its current account surplus (\$45.9 billion in 2003), because of huge foreign exchange reserves (\$459 billion in May 2004), and because foreign investment (\$53 billion in 2003) is pouring into China.²¹ Additionally, a strong argument can be made that the Chinese economy was “overheating” in 2003, with 9 percent growth and a boom in real estate prices. Revaluation could usefully complement China's domestic policy measures designed to slow the economy to a sustainable pace.

Table 2a: US-China trade, 1999–2003 (US statistics, unadjusted, billions of dollars)

Year	Merchandise trade		Services trade		Goods and services trade balance
	US imports ^a	US exports ^b	US imports	US exports	
1999	82	13	3	4	-68
2000	100	15	3	5	-82
2001	102	18	4	6	-82
2002	125	21	4	6	-102
2003 ^c	152	27	5	7	-123

a. Imports for consumption.

b. Domestic exports.

c. Services trade estimated.

Sources: USITC Dataweb (2004); US Department of Commerce, BEA statistics (2004).

Whether undervalued by 10 percent, 25 percent, or 40 percent, the renminbi exchange rate has become the lightning rod for US-China trade relations.

Key Players

In September 2003, Treasury Secretary John Snow openly criticized China for a pegged renminbi and advocated a floating exchange rate with some liberalization of capital controls. Arguing that “exchange rates should reflect economic fundamentals,” Snow urged China to stop its official intervention in the exchange market (Snow 2003).²² To underline the extent of his concern, Snow emphasized the case for floating exchange rates during his visit to Beijing in September 2003. In February 2004, at Snow’s urging, G7 Finance Ministers at Boca Raton underscored the importance of flexible exchange rates. In April 2004, Snow appointed Ambassador Paul Speltz as his economic and financial emissary to China to advocate a flexible rate and liberalized capital flows (Snow 2004).

Subsequent to Snow’s initial statement, Federal Reserve Chairman Alan Greenspan weighed in. By contrast with Snow, Greenspan (2004b) advised against an immediate floating rate or ending capital controls. Greenspan emphasized the precarious nature of the Chinese banking system, which carries a huge volume of nonperforming loans (NPLs).²³ Greenspan argued that ending capital controls could trigger an outward flood of capital (in search of more secure banks). This in turn might destabilize the Chinese economy and drag down world growth.²⁴ Greenspan emphasized that continued

large purchases of dollars was inconsistent with internal economic balance in China, implying that the renminbi should be revalued.

Capitol Hill has added to executive branch voices calling for Chinese currency revaluation. Ten out of 12 China bills introduced over the past year highlight the alleged unfair trade advantage of an undervalued renminbi (appendix table 1). In March 2004, led by Senator Charles Schumer (D-NY), several senators from states hit by manufacturing job losses called for an “emergency” meeting with President Bush to discuss the impact of China’s foreign exchange rate policy on US factory workers.

So far, nothing has come of administration or congressional initiatives. However, it might be worth recalling a previous intersection between trade policy and currency values. In August 1971, President Nixon met with his top advisers at Camp David and agreed on a four-part plan to address the worsening US balance of payments (swinging from a surplus of 2.2 percent of GDP in 1970 to a deficit of 1.2 percent in 1971): a 90-day freeze on wages and prices; an investment tax credit of 10 percent; an import surcharge of 10 percent; and closing the gold window. Moreover, at President Nixon’s urging, the Revenue Act of 1971 created the Domestic International Sales Corporation (DISC), which provided a corporate tax break for US exporters. The aftermath of this package was the Smithsonian Agreement of December 1971, which initially realigned the fixed exchange rates of Bretton Woods vintage, and ultimately led to a system of floating rates (Solomon 1982). Circumstances in that era were vastly different from those today, but history suggests that—by

Table 2b: US trade with the world and current account balance, 1999–2003 (billions of dollars)

Year	Total merchandise trade		Total services trade		Goods and services trade balance	Current account balance
	US imports ^a	US exports ^b	US imports	US exports		
1999	1,017	642	181	265	-291	-291
2000	1,205	712	205	283	-414	-411
2001	1,133	666	202	275	-393	-394
2002	1,155	630	205	279	-451	-481
2003	1,250	651	246	305	-539	-542

a. US global trade deficit is different from global trade deficit calculated by BEA, cited on page one. BEA is based on total US imports and exports.

b. Domestic exports.

Sources: USITC Dataweb (2004); US Department of Commerce, BEA statistics (2004).

Table 3: Adjusted estimates of US-China merchandise trade, 1999–2003^a (billions of dollars)

Year	Imports	Exports	Adjusted bilateral trade balance
1999	65.1	17.7	–47.4
2000	80.3	21.4	–58.9
2001	83.5	24.7	–58.8
2002	104.0	27.4	–76.6
2003	129.3	33.9	–95.4

a. Estimates are adjusted for reexports through Hong Kong and markup margins.

Source: Fung and Lau (2003).

breaking enough crockery in the trade arena—the United States can force other countries to alter their exchange rate systems.²⁵

Section 301 Petition

The National Association of Manufacturers (NAM) and other members of the Fair Currency Alliance (FCA) have mounted a business campaign to force revaluation of the renminbi. On January 21, 2004, President Bush reiterated that “countries like China have got to deal with their currency.” Eight days later, FCA hired a Washington law firm (Collier Shannon Scott) to prepare a Section 301 petition to challenge the Chinese exchange rate.²⁶ FCA aspires to persuade the US Trade Representative (USTR) to file a petition in the WTO.

While privately pressuring China to float its currency, the Bush administration dismissed the substance of the Section 301 petition in April 2004, even before it was filed.²⁷ For now, the FCA has retreated; after the US presidential election in November 2004, it could decide to formally submit its petition.²⁸

Undervalued Renminbi and GATT Provisions. The FCA claims the renminbi is undervalued by 40 percent, thereby allowing Chinese firms to export goods to the United States at artificially low prices, resulting in US job losses (Collier Shannon Scott 2004, FCA 2004). Specifically, the FCA contends that the undervalued Chinese renminbi violates the intent of GATT Article 15, which states, “Contracting parties shall not, by exchange action, frustrate the intent of the provisions of the Agreement” (Primosch 2004,

GATT Article 15[4]). The FCA also contends that the undervalued exchange rate violates GATT Article 16 and the WTO Agreement on Subsidies and Countervailing Measures Agreement, which prohibits export subsidies. What are the prospects for these complaints, in the unlikely event that the next administration decides to use the WTO as a forum for challenging China’s exchange rate policy?

While no legal precedents are squarely on point, in our view this would be a losing case. According to its statistics, China is not running a significant surplus in traded goods and business services—the subject matter of the WTO. China can claim that its large accumulation of foreign exchange reserves (\$459 billion as of May 2004) reflects substantial inward flows of FDI and some net intake of portfolio capital (including “hot money”). Such financial flows are largely outside the purview of the WTO. Deferring to the realm of finance ministers and the International Monetary Fund (IMF), the WTO Appellate Body would be disinclined to read Article 15(4) so broadly as to condemn China’s exchange rate policy. While partner-country trade statistics (box 2) may show a persistent and large Chinese trade surplus, we think the WTO would give the benefit of any statistical doubt to China.

FCA also contends that the undervalued renminbi acts as a “prohibited export subsidy” that violates both Article 16 and Article 3 of the WTO

The dollar value of active trade disputes, in trade balance terms, may be in the range of \$25 billion—dominated first and foremost by renminbi revaluation.

Subsidies and Countervailing Measures Agreement (SCM Agreement). WTO Article 3 prohibits “subsidies contingent in law or in fact” on “export performance.”²⁹

Under the WTO, an “actionable” subsidy must satisfy three criteria: The subsidy must be “specific,” involve governmental “financial contribution,” and must provide “benefit” to the recipient. To be considered specific, the subsidy must be granted to a limited number of companies or be applied in a discriminatory manner to select sectors. Government policies deemed to provide a “financial contribution” include giving funds, loans, or tax concessions.³⁰ While “benefit” is not precisely defined, the context

Table 4a: Major US merchandise exports (FAS value) to China, 2002 (unadjusted, millions of dollars)

Product category	Exports
Aircraft and Associated Equipment	3,428
Thermionic, Cold Cathode, and Photocathode Valves	1,622
Telecommunications Equipment	1,026
Oil Seeds and Oleaginous Fruit	890
Measuring/Checking/Analysing Instruments	772
Automatic Data Process (ADP) Machines	739
Fertilizers (Except Crude)	667
Machinery Specialized for Particular Industries	620
Nonferrous Base Metal Waste and Scrap	459
Ferrous Waste and Scrap	455
Parts for Office Machines and ADP Machines	443
Pulp and Waste Paper	414
Heating and Cooling Equipment	414
Hides and Skins, Raw	390
Paper and Paperboard	326
Electrical Machinery and Apparatus	322
Pumps, Air, or Other Gas Compressors and Fans	313
Electrical Apparatus for Switching or Protecting	307
Civil Engineering and Contractors' Plant and Equipment	259
Plastics	254
All Other	7,933
Total	22,053

FAS = free alongside ship

Source: US Department of Commerce, International Trade Administration data (2004).

Table 4b: Major US merchandise imports (CIF value) from China, 2002 (unadjusted, millions of dollars)

Product category	Imports
Toys and Sporting Goods	14,869
Footwear	10,227
Automatic Data Process (ADP) Machines	9,145
Furniture and Bedding Accessories	6,957
Telecommunications Equipment	6,401
Parts For Office Machines and ADP Machines	5,216
Sound Recorders and TV Recorders	4,488
Household Type Electric and Nonelectric Equipment	3,232
Articles of Plastic	3,175
Lighting Fixtures and Fittings	2,887
Trunks, Suitcases, Vanity Cases, and Briefcases	2,773
Articles of Apparel of Textile Fabrics	2,767
Electrical Machinery and Apparatus	2,702
Radiobroadcast Receivers	2,525
Women/Girls Coats, Not Knit	2,469
Apparel and Accessories Except Textile; Headgear	2,467
Miscellaneous Manufactured Articles	2,377
Household Equipment of Base Metal	1,868
Manufactures of Base Metal	1,658
Made-Up Articles of Textile Materials	1,650
All Other	37,782
Total	125,168

CIF = customs, insurance, freight

Source: US Department of Commerce, International Trade Administration data (2004).

of the WTO SCM Agreement implies that an actionable subsidy must provide value to the recipient, whatever it may cost the government.

Taking these three tests in reverse order, an undervalued exchange rate, if it exists, surely benefits exporting firms. Far less clear is whether an undervalued exchange rate entails a “financial contribution” by the Chinese government. The hypothetical petition can argue that importers are paying too much renminbi for their purchases—in other words that the undervalued rate is taking money from importers and giving it to exporters. This argument, in the WTO judicial context, is not far-fetched but would break new legal ground. We think it is unlikely to prevail.

Finally, and most difficult for the hypothetical petition, is the specificity test. An undervalued exchange rate is probably the least specific of any benefit that a government might confer. WTO case law in other subsidy disputes runs strongly against the proposition that an undervalued exchange rate qualifies as a specific benefit.³¹ Public policy measures that are generally applicable to broad swaths of the economy are not viewed by the WTO as actionable subsidies; rather, for trade policy purposes, the focus is on sector-specific benefits.

Undervalued Renminbi and IMF Article IV. FCA alleges that China violated Article IV of the IMF. Article IV Section 1 (iii) states each Fund member should “avoid manipulating exchange rates or the international monetary system in order to prevent effective balance of payments adjustment or to gain an unfair competitive advantage over other members.”

Morris Goldstein at the Institute for International Economics argues that the IMF is obliged to invoke Article IV to prevent currency manipulation. IMF Article IV Section 3 states that the Fund should “exercise firm surveillance over the exchange rate policies of members, and shall adopt specific principles for the guidance of all members with respect to those policies.” A 1977 Fund Executive Board paper lists indicators for questioning exchange rate policies, including “protracted, large-scale intervention in one direction in the exchange market.” Under the principles of IMF Article IV and the 1977 Fund Executive Board paper, it can be argued that China violated IMF conditions by maintaining fixed exchange rates for a long period and by intervening on a large scale and in “one direction in the exchange market.”³² In these circumstances, Goldstein contends that the IMF should initiate special consultations with China.³³

The likelihood that the Executive Board of the Fund will chastise China for breaching its IMF ob-

Table 5: Comparison of China’s export growth with other Asian economies

Country	Period ^a	Number of years	Average annual real export growth rate (percent)
Japan	1954–81	27	14.2
Korea	1960–95	35	21.5
Malaysia	1968–96	28	10.2
China	1978–02	24	11.9
NIEs ^b	1966–97	31	13.1

a. Periods of sustained export expansion, ending when the three-year moving average export rate declined below 10 percent.

b. Newly industrialized economies: Hong Kong SAR, Korea, Singapore, and Taiwan.

Sources: IMF, *Direction of Trade Statistics 2004*; Prasad and Rumbaugh (2003).

ligations is very small or nonexistent.³⁴ If Managing Director Rodrigo Rato decides to address the Chinese currency issue, as we recommend, his deliberations will very likely be made informally behind closed doors. Moreover, unlike WTO disputes, the currency issue will be debated on economic rather than legal criteria. Deliberations in the Fund’s boardroom will only be one part of larger negotiations over the renminbi, involving bilateral talks between the United States, the European Union, China, and Japan, as well as G-8 finance minister meetings.

How Much to Revalue?

Most economists believe the renminbi is undervalued, although some do not. They differ widely on the extent of undervaluation. Appendix table 2 summarizes several opinions.

In the summer of 2003, Goldstein and Lardy at the Institute for International Economics advocated a revaluation of 15 to 25 percent, combined with a wider currency band and three-currency basket peg.³⁵ According to Ernest H. Preeg (2003), senior fellow at the Manufacturers Alliance (MAPI), the renminbi is undervalued by 40 percent and recommends a revaluation of at least 20 percent. Analysts at Goldman Sachs argue the renminbi is undervalued only between 10 and 15 percent.³⁶

Manufacturing Jobs and Revaluation

The charge that an undervalued Chinese currency has caused US manufacturing job losses is

substantially exaggerated. US manufacturing job losses over the past three years primarily reflect a weak economy (until August 2003),³⁷ a strong dollar against all currencies, and a US trade deficit in manufactures with the world, not just China. Moreover, US manufacturing job losses are concentrated in sectors that are export-intensive for the United States but where China plays a small role (Mankiw 2003). Finally, exchange rate relationships are not the key driver for sustained growth in Chinese exports.³⁸ Chinese exports are growing rapidly on a sustained basis to all major destinations, not just to the dollar area (Ahearne et al. 2003). Between 1995 and 2003, Chinese exports to the world increased from \$149 billion to \$438 billion, even though, during this period, China's peg to the dollar meant a nominal effective exchange rate appreciation of 21 percent in the renminbi.

While renminbi appreciation would not eliminate China's bilateral export surplus with the United States, nor solve the multiple competitive problems facing the US manufacturing sector, it would make a difference. The size of the difference depends on how many dollar-oriented Asian countries follow China in revaluing their currencies (see table 7).³⁹ Box 3 takes an optimistic look at the numbers and concludes that an improvement of \$56 billion in the US manufacturing trade balance represents an outside limit.

Evaluation

By pegging the renminbi to the dollar and pursuing export-led growth, China superficially seems to be following the strategy pioneered by Japan and subsequently adopted by South Korea, Taiwan, and other Asian economies. There are, however, important differences. Renminbi undervaluation is a fairly

recent phenomenon,⁴⁰ and unlike Japan and South Korea between the 1960s and 1980s, China has put out the welcome mat for foreign investment.

Unlike Japan, China does not have a long history of severe undervaluation and huge global trade surpluses. Nevertheless, over the past few years, the pegged renminbi has helped boost Chinese exports to the US market. While a renminbi appreciation will not reverse the fortunes of the US manufacturing sector, a revalued renminbi (along with other Asian currencies) will help. An optimistic estimate of Asian currency appreciation (including China) over the next two years is around 20 percent—about the same amount the euro, the yen, and a few other floating currencies have already appreciated. An outside estimate of the induced improvement in the US trade balance—assuming that the revaluation is accompanied by an improvement in the US saving/investment balance⁴¹—is around \$56 billion. Even the more realistic figure is a step in the right direction, but given the magnitude of US merchandise trade deficit (around \$599 billion in 2003), the White House and Congress will need to take many other steps also.

We conclude that the US Treasury should step up pressure, off-the-record, for China to revalue rather than float. We see no merit in a high-profile WTO case or high-decibel charges in the Fund's boardroom. We think a public battle would do more to stir a backlash within China than promote a reorientation of official Chinese policy toward the renminbi.

AFL-CIO Labor Rights Petition

On March 16, 2004, the AFL-CIO filed a lengthy petition against China under Sections 301 and 302 of the Trade Act of 1974. The AFL-CIO petition

Box 2: FCA petition and data manipulation

The Fair Currency Alliance (FCA) claims that Chinese trade statistics deliberately minimize the degree of renminbi undervaluation. The FCA claims that, during 1999–2002, the actual Chinese trade surplus (adjusted to account for Hong Kong reexports) was three to four times larger than China reported. For 1999–2002, FCA uses partner-country trade data for 43 countries to conclude that China underreported its exports by about \$443 billion. Accepting partner-country import statistics as more authoritative than Chinese export statistics, it is still possible that China's own trade *balance* figures are approximately correct. China's imports may have exceeded official figures thanks to undervaluation (to avoid customs duties) and outright smuggling.

A different possibility, suggested by the FCA, is that China has accumulated unreported foreign exchange reserves in the form of US currency. But do the numbers add up? Given that the amount of \$100 bills in circulation outside the United States in 2001 totaled about \$280 billion, it seems unlikely that the Chinese populace is holding more than \$50 billion of US currency. But the FCA numbers, at face value, suggest that China has unreported reserves upwards of \$400 billion.

Sources: US Secretary of the Treasury (2003); FCA (2004).

claims that Chinese repression of workers rights artificially depresses wages, giving a cost savings to manufacturing firms between 10 and 77 percent. In turn, the cost savings allegedly boosted Chinese exports of manufactured goods, leading to the loss of up to 727,000 US jobs.⁴² On April 26, 2004, Senator Kerry urged the Bush administration to accept the AFL-CIO Section 301 petition.

Labor Rights Denied

The AFL-CIO petition argues that the absence of freedom of association, the prevalence of forced labor, and the lax enforcement of national laws governing wage rates, hours, and occupational safety, all constitute a systemic violation of worker rights. Citing the Economic Policy Institute (EPI), the AFL-CIO estimates that labor costs account for about 13 percent of the total price for manufactured goods made in China and sold in the United States. The petition alleges that, if China ends its repression of workers rights, Chinese wages would increase between 90 and 595 percent, and the price of manufactured goods would thus increase between 12 and 77 percent.⁴³

Economic Arguments

A vast number of Chinese workers will enter the manufacturing labor force over the next three decades, and this prospect (with India added on) sparks apprehension worldwide. Viewing the prospect in another perspective, however, urbanization is a major source of Chinese economic growth (just as it was in Japan, Korea, and many other countries). The output of the average Chinese worker in industry and service activities is 4.6 times that of the average agriculture worker (Xie 2002). For now, the huge reservoir of rural labor (about 50 percent of the labor force, some 369 million persons)⁴⁴ limits the rate of gain in urban wages generally and manufacturing wages particularly. Manufacturing wages in China currently average about 88 cents per hour (including fringe benefits),⁴⁵ about 6 percent of the US average.⁴⁶ Because of fast productivity growth, Chinese unit labor costs have probably fallen in the past decade, even though nominal manufacturing wages have approximately doubled (table 8). While the petition claims real earnings of Chinese workers remained static or declined, real wages in China increased by 45 to 65 percent since 1993.⁴⁷ The AFL-

Table 6: Summary of current US-China trade disputes, 2003

Dispute	Share of US imports from China (percent)	Share of US exports to China (percent)	Current US-China trade balance (billions of dollars)	Potential reduction in US-China bilateral trade deficit (billions of dollars)
RMB revaluation (20 percent) ^a	100*	100*	-124.0	20.2
Textile and clothing ^c	15.0*	1.4	-11.4	1.4
Furniture ^b	39.8*	1.5	-11.7	2.8
Semiconductors ^d	3.2	5.4*	1.8	0.4
Color television sets ^b			-0.8	0.2
Total imports			152.4	134.5
Total exports			28.4	35.6
Total trade balance			-124.0	-98.9

* = indicates whether the dispute is over US imports, US exports, or both

a. See text for explanation. This is a high-end estimate and assumes a \$13.4 billion reduction in imports and a \$6.8 billion increase in exports. Nicholas Lardy estimates a 15 to 25 percent revaluation of the renminbi would decrease the bilateral deficit by about \$15 billion.

b. Assuming the highest penalty duties (24 percent) apply to all imports and US demand elasticity equals -1.0.

c. Assuming WTO Paragraph 241 safeguards are applied to clothing imports with five times the potential effect of limits already imposed on brasseire imports. This may be a low estimate of future restraints, when the MFA quotas are lifted in January 2005.

d. Assuming the 13 percent VAT preference for domestic semiconductors is eliminated and the Chinese demand elasticity for US semiconductors is -1.0.

Source: OTEXA, USITC Dataweb (2004); Lardy (2004a).

CIO petition claims that Chinese manufacturing wages stagnated as productivity increased, but the International Labor Organization (ILO) calculates that manufacturing wages in China (expressed in dollars) increased 179 percent from 1992 to 2002, or roughly 11 percent per year.⁴⁸

The AFL-CIO petition asserts that wages will increase once workers can form independent unions. However, average wages in China remain low (even though they are rising fast) mainly because the average productivity of Chinese workers—including rural workers—is low, not principally because the Chinese government encourages low wages by preventing workers from creating independent unions. Contrary to the petition's claims, an OECD study (1996) concludes that the freedom to form independent unions is not associated with real-wage growth and that the prices of US imports are not associated with enforcement of labor standards.⁴⁹

The petition recommends that China should raise average wages by 340 percent.⁵⁰ According to the petition, this boost would increase the price of

Chinese goods by an average 43 percent, thereby reducing US imports of Chinese goods and restoring US manufacturing jobs. However, few Chinese firms are profitable enough to raise wages by 340 percent. Among modern economies, there is no precedent for an abrupt rise of this magnitude, without runaway inflation.

The AFL-CIO petition relies on EPI calculations. The EPI claims that a higher bilateral trade deficit correlates with lower manufactures output and lost US jobs. However, each \$10 billion of bilateral trade deficit with China substitutes for nearly \$10 billion of collective trade deficits with other countries. In fact, while US imports from China increased from 5 percent of the total in 1992 to 12 percent in 2003, the share of US imports from other East Asian countries declined from 34 to 21 percent (Congressional Budget Office 2004b). Moreover, contrary to EPI assertions, a US manufacturing trade deficit generally corresponds with high, not low, US manufacturing output (see box 1 and appendix table 8).⁵¹ On average, US manufacturing output and the trade

Box 3: Impact of renminbi revaluation on US merchandise trade

Assuming that the Chinese renminbi appreciates by 20 percent and the price elasticities of US imports from and exports to China are both -1.2 (a coefficient far above empirical estimates), the bilateral merchandise trade deficit would decline by about \$20 billion. This is an outside estimate, both of the size of renminbi appreciation in the next year and the trade impact.¹ A renminbi appreciation of 20 percent, with an elasticity of -1.2 , would cut the value of US imports from China by about \$13 billion (versus the 2003 base level of \$152 billion). With the same elasticity, an appreciation of 20 percent would increase the value of US exports to China by about \$7 billion (versus the 2003 base level of \$28 billion).

A more significant effect than \$20 billion would depend on all of Asia following the Chinese revaluation path (table 6). A 20 percent appreciation of neighboring Asian currencies combined would reduce the bilateral trade deficit with all Asian partners (including China) by about \$56 billion—again assuming optimistically high demand elasticities for US imports and exports of -1.2 . US imports from Asian partners would decline by \$26 billion (versus the 2003 base level of \$296 billion), while US exports to Asian countries would increase by \$39 billion (versus the 2003 base level of \$116 billion).

Using a different approach, Morris Goldstein and Nicholas Lardy (2003) calculate that a 20 percent renminbi appreciation, combined with a 10 percent appreciation by other East Asian economies and Japan, would reduce the trade-weighted index (TWI) value of the dollar by 5 percent. As a result, the US current account deficit (\$540 billion in 2003) would improve by about \$50 billion. Given that the renminbi weight in the dollar index is less than 10 percent, a 20 percent renminbi appreciation by itself would reduce the TWI for the dollar by only 2 percent, improving the US current account deficit by \$20 billion.

Sources: Goldstein (2004); Goldstein and Lardy (2003).

¹ With a US import price elasticity of -1.2 , each 1 percent appreciation in the RMB would reduce the volume of US imports by 1.2 percent, while the unit price expressed in dollars would rise by 1 percent. With an export price elasticity of -1.2 , the volume of US exports to China would increase by 1.2 percent for each 1 percent appreciation in the RMB, while the unit price expressed in dollars would remain constant. These calculations assume that Chinese FOB export prices remain unchanged in RMB terms, and US FOB export prices remain unchanged in dollar terms.

Table 7: Current and prospective US bilateral trade with Asian partners, 2003
(billions of dollars)

Country	Current merchandise trade			Change in trade balance after appreciation
	US exports	US imports	Trade balance	
China	27	152	-125	20
Hong Kong	11	9	2	4
Korea	23	37	-14	9
Malaysia	10	25	-15	5
Philippines	8	10	-2	3
Singapore	17	15	1	5
Taiwan	16	31	-15	7
Thailand	5	15	-10	3
Total	116	296	-179	56

Note: Based on total US exports and imports. With a US import price elasticity of -1.2, each 1 percent appreciation in the renminbi would reduce the volume of US imports by 1.2 percent, while the unit price expressed in dollars would rise by 1 percent.

Source: USITC Dataweb (2004).

deficit both increase when the US economy is doing well, and both decline when the economy is doing poorly.

Finally, the argument that violation of worker rights strengthens China's advantage as a manufacturing hub ignores the importance of foreign affiliates. Foreign affiliates generally pay higher wages and adhere to better occupational safety, health, and environmental standards (table 8).⁵² The average foreign affiliate in China pays wages that are 30 percent higher than the average state-owned enterprise and twice the average level of collective firms. Moreover, they account for a growing share of Chinese exports, increasing from 1 percent in 1985 to 55 percent in 2003 (Lardy 2004b).

Legal Arguments

While the petition does not cite legal grounds for targeting China under GATT, there are two possible provisions for pursuing the petition under the GATT, Articles 20(b) and 20(e). Under GATT Article 20(b), WTO members can enforce "measures necessary to protect human, animal or plant life or health," and under Article 20 (e), WTO members can prevent imports "related to the products of prison labor."⁵³ Since the United States already bars imports made by prison labor, the real issue is Article 20(b).⁵⁴ In the past, when Article 20(b) was invoked, as in *EC Conditions for the Granting of Tariff Preferences to*

Developing Countries, the petitioner argued that human life or health in the importing country was at stake, and not human life or health in the *exporting* country.⁵⁵

Contrary to precedent, the AFL-CIO petition espouses the view that Article 20(b) can be used to bar imports on the grounds that they endanger human life or health in the exporting country (China). This is a far-reaching argument: The asserted interpretation would turn Article 20(b) into a hunting license against imports whenever an importing country objected to workplace or health standards in the exporting country. It seems unlikely that the WTO Appellate Body would accept this interpretation, even if the USTR espoused it.

Evaluation

On April 28, 2004, the Bush administration rejected the AFL-CIO petition.⁵⁶ USTR Robert B. Zoellick emphasized that the administration preferred to improve Chinese labor standards through the offices of the ILO. In addition, Ambassador Zoellick argued that penalty tariffs on Chinese imports would "jeopardize" growing US exports to China and preclude progress in opening Chinese markets to US goods and services through WTO negotiations. Instead, the administration prefers bilateral engagement to broaden cooperation on occupational safety and pension rights in China.⁵⁷

We subscribe to the administration's position. While current labor conditions in China are certainly grim by US standards, they are vastly improved since the rule of Mao Zedong. Many Americans espouse a humanitarian interest in raising Chinese labor standards, but this interest is distinct from immediate trade frictions or the bilateral trade deficit. Sweeping penalty duties, as advocated in the AFL-CIO petition, would trigger an equally sweeping backlash in China. In the end, the trade battle would have less practical effect on lifting labor standards than other approaches—recourse to the ILO, self-administered standards by multinational corporations, targeted measures aimed at identified firms, and most importantly continued fast growth in China.

Textiles and Clothing

Textile and clothing products are the most contentious of all Chinese exports, both because China has enormous competitive strength in this sector and because the MFA, which severely restricts the natural flow of trade, is scheduled to expire on January 1, 2005. This section first summarizes the brassiere case and then turns to the wider implications of ending MFA.

Brassiere Case

In July 2003, three leading US textile lobbying groups requested consultations with the US Committee for the Implementation of the Textile Agreements (CITA), an interagency group chaired by the US DOC.⁵⁸ As a result, the US DOC invoked special safeguard provisions to limit brassieres and kindred imports from China. In November 2003, the US DOC imposed a 7.5 percent quota limit on the growth of Chinese bra, knit fabric, dressing gown, and robe imports above the levels reached between September 2002 and September 2003.⁵⁹

CITA and the US DOC based their decision on rapidly rising imports of Chinese bras (from the sixth largest bra exporter in 2001 to the largest exporter in 2003) and declining US bra production. Chinese bra imports increased by 249 percent from \$120 million in 2001 to \$420 million in 2003, when they accounted for 27 percent of total US bra imports from the world (for further detail, see table 9, box 4, and appendix A).⁶⁰

Bras are symbolic of many textile and clothing imports from China. The brassiere case in particular symbolizes an overriding fear of the potential flood of Chinese textile and clothing exports once the MFA quotas expire in January 2005.⁶¹ During 2000–03, US imports of these products from China (mainly

clothing) increased from about \$8 billion to \$12 billion (table 9).⁶² The Chinese share of US textile and clothing imports from the world grew steadily from 11 percent in 2000 to 15 percent in 2003.

While US exports have no legal bearing on a safeguards case, it deserves note that China imports US fabrics and raw cotton. US textile exports to China increased from \$246 million in 2000 to \$1.1 billion in 2003, rising from 1 to 6 percent of US exports to the world (tables 9 and 10). US cotton exports to China increased from \$123 million in 1998 to \$764 million in 2003.

Under the terms of China's accession to the WTO (Paragraph 241 of the Accession Agreement), safeguard tariffs and quotas can be applied solely against Chinese products. After an evidentiary hearing and a finding of "material injury," WTO members can impose product-specific safeguards against any Chinese export (including textile and clothing) until December 2013.⁶³ In the special case of textiles and clothing (Paragraph 238), safeguards can be applied almost automatically until 2008 whenever imports create "market disruption" (a lower standard than "material injury"). Both provisions (Paragraphs 238 and 241) are at variance with the WTO's principle of nondiscrimination, which China agreed to waive as a condition of accession.

Table 8: Annual average Chinese nominal wages in manufacturing, 1993–2002
(in dollars)

Year	State-owned firms	Collective firms	Foreign-funded firms
1993	615	426	897
1994	528	360	713
1995	641	445	875
1996	697	482	968
1997	725	497	1,089
1998	843	606	1,243
1999	920	644	1,351
2000	1,033	691	1,482
2001	1,159	736	1,556
2002	1,316	817	1,696

Note: Wages do not include fringe benefits and are based on annual averages (unknown hours worked).

Sources: *China Statistical Yearbook* (2003); Lardy (2004).

ATMI Views

The American Textile Manufacturers Institute (ATMI 2003) is a leader among the lobbying groups that are seeking safeguard quotas. ATMI claims that the abundant supply of low-cost Chinese labor, the manipulated value of the renminbi, the poor enforcement of textile copyright regulations, and export tax rebates all give China an unfair trade advantage. ATMI recommends a new China-specific textile and clothing safeguard that would impose quota limits on virtually all imports when the MFA ends in 2005.

Textile and Clothing Job Losses and Wage Levels. Worldwide, the textile and clothing industries are shedding workers. Between 1997 and 2001, the US textile and clothing industry lost over 180,000 jobs, more workers than the entire steel industry employs today.⁶⁴ During the same period, the Chinese textile and clothing industry lost about 2.8 million jobs.⁶⁵ In the United States, two forces are at play: relatively slow demand growth and relatively rapid productivity growth.⁶⁶ In China, while demand is still growing fast, productivity is growing much faster.

In most countries, textile and clothing workers rank near the bottom in terms of hourly wages. The

The US Treasury should step up its pressure, off-the-record, for China to revalue. We see no merit in a high-profile WTO case or high-decible charges in the Fund's boardroom.

abundance of migrant workers from rural China helps keep hourly wages for clothing workers lower (roughly \$0.88, including fringe benefits) than in other developing countries (e.g., \$2.45 in Mexico).⁶⁷ By comparison, in the United States the average hourly wage (including fringe benefits) is \$9.89.⁶⁸

VAT Practices and State-Owned Enterprises. ATMI argues that the Chinese government subsidizes its domestic textile and clothing industry both through state-owned enterprises (SOEs) and an export tax rebate of 10 percent. According to ATMI, the Chinese government owns about 52 percent of the textile sector and 25 percent of the clothing manufacturing sector, and SOEs account for over a third of the industry's production. The Chinese

public sector subsidizes SOE output through directed bank loans and other means.

Currency Valuation. Based on estimates from the Manufacturers Alliance, ATMI alleges that an undervalued renminbi gives China a 30 to 40 percent price advantage in the US market. ATMI alleges that China has violated Article IV of the IMF, the article that states each Fund member should "avoid manipulating exchange rates." As mentioned in the earlier revaluation section, IMF Article IV has never been invoked against an undervalued currency, and formal action requires an 85 percent supermajority.

ATMI also claims that China has violated GATT Article 15, which states, "contracting parties shall not, by exchange action, frustrate the intent of the provisions of the Agreement" (see GATT Article 15 [4]). Like IMF Article IV, GATT Article 15 has never been invoked against a country that undervalued its currency. Whatever the legal merits, the Bush administration has not been willing to pursue either an IMF Article IV or a GATT Article 15 case against China.

End of MFA

Once the MFA comes to an end in 2005, the common perception is that China will dominate global textile and clothing production, displace exports from other developing countries, and cause further job loss in industrialized countries.⁶⁹ World Bank analysts estimate that roughly \$200 billion in clothing production for export markets will shift to China over the next few years, the main losers being non-Asian developing countries.⁷⁰ For reasons detailed in a moment, we think that the wave of Chinese clothing exports will be smaller and slower. However, if the World Bank is right, additional Chinese exports on the scale of \$100 billion or more could sharply enlarge China's global trade surplus and considerably augment pressures for renminbi revaluation.⁷¹

With the end of the MFA in sight, European textile and clothing associations have joined ATMI and other textile lobbying groups to sign the Istanbul Declaration, which called for an emergency meeting by July 2004 to reassess the textile quota phaseout. The declaration proposes to extend the MFA deadline to December 31, 2007, at which date WTO members would determine whether to finalize the phaseout in 2008 or develop an "alternative arrangement."⁷²

Sources of China's Comparative Advantage

The brassiere case is only the leading edge of US-China textile and clothing disputes. The average

Table 9: US-China brassiere and textile and clothing trade, 2000-03

Commodity	US exports to China (millions of dollars)				US imports from China (millions of dollars)				US imports from China as percent of total US imports			
	2000	2001	2002	2003	2000	2001	2002	2003	2000	2001	2002	2003
Brassieres ^a	1	0	0	0	134	120	290	420	9.6	8.6	18.1	27.4
Textiles and clothing ^b	246	287	461	1,122	8,006	8,250	9,551	11,992	10.7	11.2	12.7	14.9

a. Categories 349 and 649 as indicated in the CITA petition.

b. Based on HTS Codes 50 to 63. In 2003, US textile exports to China accounted for 99 percent of total US textile and clothing exports; US clothing imports from China accounted for 72 percent of total US textile and clothing imports from China.

Source: USITC Dataweb (2004).

unit price of Chinese bra imports (\$33.43 per dozen) is significantly lower than imports from the rest of the world (\$42.24 per dozen). Similar comparisons can be made for other clothing items.

China's trade advantage in clothing goes well beyond an undervalued exchange rate and public subsidies. China has a huge domestic market, which enables economies of scale and scope. In addition to abundant cheap labor (more on this later), China is well positioned for certain raw materials. Using

If all other costs were equal, workers in the US clothing industry would need to be roughly 11 times more productive than China to offset the labor cost advantage.

advanced technology, China is now the world's largest producer of manmade fibers.⁷³ China has large domestic supplies of ramie, silk, and angora rabbit hair, though it imports large volumes of cotton and wool.

Unlike other competitive textile and clothing exporters, such as India, the Chinese government invests heavily in infrastructure. Major highways link impoverished western provinces with industrialized coastal cities. With deep water ports, shipping times from China to the US west coast are faster than neighboring southeast Asian countries and India.⁷⁴ The government encourages quality production of high-value fabrics by organizing the 600 best mills into 24 groups with its "Fabrics China" campaign

and has taken other steps to strengthen the Chinese textile and clothing industries.⁷⁵

Above all, political and economic attention focuses on labor cost differences as a source of Chinese comparative advantage. In the clothing industry, the US hourly wage averages \$9.70 per hour (including fringe benefits) while the Chinese hourly wage averages \$0.88 per hour (including fringe benefits).⁷⁶ If all other costs were equal, workers in the US clothing industry would need to be roughly 11 times more productive than China to offset the labor cost advantage. While US clothing workers are substantially more productive than Chinese workers—thanks to better capital equipment, technology, and training—they are not 11 times more productive.⁷⁷ Other factors, such as proximity to markets (especially for "replenishment" items) and access to raw materials favor US production. However, for decades to come the Chinese clothing industry will have a dramatic labor cost advantage over the US industry.⁷⁸

Evaluation

The basic facts of comparative advantage pose the stark question: Will the US textile and clothing industry downsize to niches where it can compete with Chinese and other low-wage producers? Downsizing is a matter both of adjustment speed and ultimate industry size. The speed of the adjustment process is equally important as the ultimate extent. The Istanbul Declaration represents one effort to slow down the process.⁷⁹ While the declaration has little chance of ripening into a WTO agreement, policy measures will almost certainly be taken to slow the feared Chinese rush into world textile and clothing markets.⁸⁰ It seems likely that import pressures from China

will be moderated on an ad hoc basis, through the various safeguard and antidumping (AD) measures summarized in appendix A.⁸¹ “Moderated” does not mean “stopped.” Over the next decade, the textile and clothing industries in the United States, the European Union, and other industrialized countries will need to shed a substantial part of its workforce as China, India, and other emerging countries enlarge their market share.

In searching for niches where they can match Chinese competition, US clothing manufacturers will need to respond by emphasizing several factors: a) ultra-fast delivery of “replenishment” items; b) using high quality fabrics and the latest stitching methods; c) fashion items that are not price sensitive; d) higher value-added product markets that are less labor-intensive; and e) direct e-commerce sales to consumers, bypassing traditional retailers.⁸² Looking at the entire chain of clothing production and distribution, the US industry will need to migrate to the distribution end of the spectrum. Indeed, well-known US clothing producers, such as Sara Lee Corporation, Nike, Levi Strauss, and Disney, have already deemphasized production activities in favor of better marketing of their brand names and retail outlets (Gereffi 1999, US DOC 2004b).

The US government should not rely solely on safeguard measures and AD duties to protect US jobs. Instead it should assist the adjustment process with an improved Trade Adjustment Assistance (TAA) program that makes wage insurance and portable health insurance its centerpiece (Kletzer and Litan 2001). Unlike traditional unemployment insurance and TAA programs, wage insurance benefits (including portable health insurance) take effect once a person finds a new job, thereby encouraging displaced workers to find a new job as soon as possible.⁸³ While the worker is unemployed the government should provide minimal income support and basic health insurance. By ensuring a much better safety net, the US government can alleviate some of the embedded opposition to trade liberalization and encourage workers to seek on-the-job training in new jobs.

Nonmarket Economy Status

Since 1995, China has become the primary AD target worldwide.⁸⁴ On a worldwide basis, during 2003, Chinese exports were the subject of some 59 AD cases, covering some \$2.2 billion of trade (new AD cases initiated in 2003 covered \$330 million of trade).⁸⁵ The import coverage of US AD cases initiated against China in 2003–04 exceeded \$1 billion; since 2003, about half of all US AD cases have been targeted against China, about one new case a

month. Meanwhile China is aggressively pursuing its own AD cases against foreign companies—some 25 launched since 2001.⁸⁶

China is designated a nonmarket economy (NME) in US AD law, and this designation was carried into China’s accession agreement with the WTO. WTO members widely use the NME label to justify somewhat arbitrary calculations in AD cases against China. The NME designation implies that state intervention severely distorts Chinese costs and prices. Consequently, the importing country can use the costs and prices of “surrogate” countries to guesstimate the “true” costs and prices that would prevail if China had a market economy, and on that basis calculate AD margins. Under its WTO Accession Agreement, China agreed (at US insistence) that WTO members could continue to apply the NME methodology in Chinese AD cases until December 11, 2016.

China as NME Under US Trade Law

More than 60 countries now have AD laws. As Finger (1993), Messerlin (1996), and other trade experts have long argued, the AD laws have become the easy road for imposing trade safeguards, with the further advantage (from the petitioner’s standpoint) that the respondent bears the stigma of unfair trade practices. US AD law originated with the US Revenue Act of 1916 and was revised by the US Antidumping Act of 1921. The chances of winning an AD action were made substantially better for petitioners in the 1979 legislation that implemented the Tokyo Round of multilateral trade negotiations (Finger 1993, Laroski Jr. 1999). In brief, under the NME methodology codified in the 1979 legislation, the US DOC estimates the costs of production in

Table 10: China textile and apparel trade as share of total merchandise trade, 2002 (percent)

Commodity	Exports ^a	Imports ^b
Textile	4.7	5.9
Clothing	13.4	0.9
Textile and clothing	18.1	6.8

a. Exports of textiles and clothing as a share of total exports.

b. Imports of textile and clothing as a share of total imports.

Source: China Statistical Yearbook (2003).

any given NME country based on “surrogate country” prices.⁸⁷ India and Singapore are examples of “surrogate countries” used to estimate production costs in China.⁸⁸ The only favorable aspect of an NME designation, from the respondent country’s standpoint, is that NMEs are not currently subject to countervailing duties (CVD).⁸⁹

Chapter 4 of the US Tariff Act of 1930 (as amended in 1979) enumerates six criteria to determine whether a country merits NME status:⁹⁰ currency convertibility, wage rates determined by free bargaining between labor and management, joint ventures or foreign investments, government control over means of production, government control over allocation of resources and prices, and “such other factors as administering authority considers appropriate.”⁹¹

The alternative to NME status is market economy status (MES). Poland and Russia successfully made the transition from NME to MES in 1993 and 2000, respectively. The transition reflects a mix of political and economic criteria. In the case of China, graduation from NME status will be heavily influenced both by the fears of AD petitioners and by China’s concessions on other trade issues.

Issues Blocking MES for China

Two days after Senator Kerry’s trade speech on April 28, 2004, USTR Zoellick suggested the US government would “leverage” China’s interest in MES with US interests on “labor, currency, subsidy, and other issues.” US Commerce Secretary Donald Evans opined that China will “fail to meet Market Economy status until market forces set labor and currency rates.”⁹² Both the Zoellick and Evans statements were based on a mixture of politics and economics: the six criteria outlined in the statute plus sentiments in US Congress (expressed by the US-China Economic and Security Review Commission [USCC] and others). Out of this mix, the two primary hurdles are renminbi revaluation and labor standards.

MES and Revaluation. While the June 2004 US DOC hearing did not succeed in listing concrete steps that China needs to take to reach MES, the hearing was useful in underlining US concerns. Besides the sentiment that the renminbi is severely undervalued, speakers stressed restrictions on obtaining foreign currency from Chinese banks and the accumulation of official foreign exchange reserves.

Box 4: Limits to global textile and clothing liberalization: The WTO MFA quota phaseout

US textile and clothing quotas are not a new phenomenon. Since the US Agricultural Act of 1956, the US government has used quotas to limit textile and clothing imports. In the 1960s, industrialized countries, led by the United States and Europe, imposed short-term and long-term agreements to protect their own markets from cheaper foreign textile and clothing competitors. These were later consolidated, in 1974, under the General Agreement on Tariffs and Trade (GATT) as the Multi-Fiber Arrangement (MFA), which in turn was revised and extended three times. As an outcome of the Uruguay Round of Multilateral Trade Negotiations, the WTO Agreement on Textiles and Clothing (ATC) established a staged and back-loaded liberalization of MFA textile and clothing quotas. In 2005, all quotas are supposed to be eliminated and the MFA abolished. The stages are summarized below.

Year	Quota relaxation
1994	WTO members required to permit quota-free volume of textile and clothing imports to grow at 6 percent annually.
1995–97	WTO members required to remove quotas on 16 percent of the total volume of each WTO member’s 1990 textile and clothing imports.
1998–2001	WTO members required to remove quotas on an additional 17 percent of the total volume of each WTO member’s 1990 textile and clothing imports.
2002–04	WTO members required to remove quotas on an additional 18 percent of the total volume of each WTO member’s 1990 textile and clothing imports.
2005	WTO members required to remove all remaining quotas, usually the remaining 49 percent of the total volume of each WTO member’s 1990 textile and clothing imports.

Source: Gereffi and Memedovic (2003).

The political question is not the extent of renminbi convertibility, however, but the degree of revaluation. Since December 1996, China has met its IMF obligations for current account convertibility.⁹³ China is gradually moving toward capital account convertibility by allowing foreign banks to issue renminbi securities and allowing foreign investors to receive financing from Chinese banks. While full convertibility may be a desirable goal, it is a goal that many developing countries have yet to meet.⁹⁴ In any event, US business and trade union leaders and congressmen and women, are more concerned about revaluing the renminbi than capital account convertibility.

MES and Labor. The USTR *Foreign Trade Barrier Report* (2004) contends that China violates core labor standards, as defined by the ILO. By contrast, according to China's Ministry of Commerce, the Chinese government regulates minimum wages and social security requirements but otherwise "promotes collective bargaining through fair negotiation between labor and management."⁹⁵ Obviously a wide gap separates US and Chinese perceptions about labor practices and whether the government hand is heavy or light.

Significance of MES for China

To prevent future AD cases from following the ad hoc and often discriminatory NME methodology, China is actively courting key trade partners to obtain MES ahead of the 2016 WTO deadline. MES is obviously important when AD cases are litigated; it is also symbolic for China to be judged on an equal footing with Western industrialized countries. In April 2004, China made granting MES a precondition for concluding a free trade agreement (FTA) with New Zealand. Since New Zealand granted MES, several other countries have followed suit.⁹⁶ China is still working to get MES from Canada, the European Union, Japan, and the United States.

China's ability to receive MES from the European Union remains in doubt.⁹⁷ A preliminary report issued by the European Commission stated that the European Union "is committed to granting MES to China" but found that China has fulfilled only one of its five criteria—the criterion of "absence of barter trade" and "absence of State-induced distortions in the operations of enterprises linked to privatization." China did not meet the European Union's four other requirements: the degree of government influence, including through tax discrimination; adequate corporate governance, especially with accounting standards; transparent rule of law to ensure property rights and operation of a bankruptcy regime;

and a financial sector that operates independently from the state.⁹⁸

Evaluation

China's most important trading partner, for purposes of the MES designation, is clearly the United States. If achieving MES is important to China, the Chinese government will need to revalue the renminbi. However, once China revalues, MES could still remain a bargaining chip for other trade concessions sought by the United States.

Even though give-and-take is the essence of trade negotiations, we think that the MES issue should not be determined solely by backroom bargaining. Instead, as a first step, the US government should clarify measures required for meeting the "market economy" designation. If core labor standards are an essential criterion for granting MES, the same requirement should be applied equally to all countries. More broadly, all six statutory criteria should be evaluated, and a determination should be made through a public hearing process that enables a fair comparison between China and other countries that already have MES status (such as Russia, India, and Pakistan).

Furniture Case

In October 2003, the American Furniture Manufacturers Committee for Legal Trade (hereafter the "Committee") led 31 furniture makers and five unions to file a petition with the US DOC against Chinese furniture imports (US Federal Register 2003). The Committee asks for AD tariffs ranging from 150 to 440 percent on over \$1 billion worth of Chinese wooden bedroom furniture (WBF) imports sold by 135 Chinese furniture companies. The Committee claims Chinese WBF exports were sold at "less than fair value" leading to "material injury" in the domestic US furniture industry. According to the petition, Chinese imports accounted for 23 percent of the value of domestic consumption in 2002, while sales from petitioner firms declined by 23 percent during 2000–02. The Committee argues that lower Chinese prices and abundant labor are leading to job loss in the domestic furniture industry.⁹⁹ Citing US Bureau of Labor statistics, the petition argues that 34,700 jobs were lost since 2000, representing 28 percent of the furniture industry workforce.

In January 2004, the US International Trade Commission (USITC) determined the US domestic industry suffered material injury from Chinese WBF imports. In June 2004, the US DOC made a preliminary decision to impose relatively moderate duties, between 5 and 24 percent, on Chinese firms that

account for the majority of US furniture imports and 11 percent for all other Chinese firms. A final determination is expected in December 2004.

Unlike the bra case, in which the US government applied WTO safeguard remedies with no prior hearing, the furniture dispute is a generic AD investigation. Since China is considered an NME, the US DOC uses prices and costs from supposedly comparable market economies (like India) to guesstimate the cost of production in China.¹⁰⁰

The trend in the US furniture industry is away from manufacturing and toward distribution and marketing. In February 2004, one of the petitioners, Hooker Furniture, withdrew from the petition after calculating that the domestic US bedroom furniture market accounted for only 4 percent of its \$309 million sales in 2003. In fact, Hooker Furniture imports more than 40 percent of the furniture it sells, and Hooker is not alone. Several petitioners have negotiated low prices from Chinese companies in order to resell the imported furniture in the US market.

China should revalue the renminbi from time to time (and eventually adopt a floating rate) so that the Chinese “basic balance” (including inward direct investment) is approximately zero over the business cycle.

Among the 20 petitioners, imports from China accounted for 35 percent of their total imports in 2002 (USITC 2004b).

Many furniture retailers, including the largest furniture store chains, such as Bombay Company and Crate and Barrel, also import from China. They retaliated against the petition by creating a lobbying group, the Furniture Retailers of America (FRA). The FRA objects that even a 20 percent US DOC dumping margin would lead to average annual payouts, under the Byrd Amendment, to the domestic furniture industry of \$6.6 million per company.¹⁰¹ The prospect of banking this bounty could prolong the AD regime for years beyond its justified life. The FRA further argues that high AD tariffs would prompt furniture companies to source from countries such as Indonesia, Philippines, Malaysia, and Vietnam, rather than US manufacturers.

In response to the US DOC determination against Chinese furniture exports, the Chinese government initiated an investigation into imports

of US hydrazine hydrate, a chemical used in water treatment.¹⁰² US exports of hydrazine hydrate to China are far smaller than Chinese WBF exports to the United States (\$1.7 million versus \$1.4 billion in 2003). How far this “retaliation” case will go remains to be seen.¹⁰³

Background: Booming US and Chinese Housing Markets

The booming US housing market is partly fuelling demand for Chinese furniture. Record low mortgage rates (declining from average 7.7 percent in December 2000 to 5.8 percent in December 2003) helped feed into demand for furniture. As a result, US purchases of imported furniture nearly doubled from \$2.3 billion in 2000 to \$4.2 billion in 2003.¹⁰⁴ Rising mortgage rates, beginning in the spring of 2004, could slow the furniture boom.

Often overlooked is the growth in Chinese domestic demand for furniture.¹⁰⁵ While many Chinese furniture producers are export oriented, foreign companies are gearing for the moment when China completely liberalizes its retail furniture market in January 2005.¹⁰⁶ IKEA, one of the world’s leading furniture brands, will expand its presence to 10 Chinese outlets by 2009.¹⁰⁷ Ethan Allen Home Interiors, a leading high-end US furniture maker and retailer, recently opened its fourth store in China. Meanwhile, Chinese firms face increasing competition in the low-grade furniture market from neighboring Southeast Asian countries and competition in high-grade furniture from US and EU exporters (USITC 2004b).

China’s Role in World Furniture Trade

The Chinese furniture industry relies both on economies of scale and cheap labor to capture a growing share of the world furniture market.¹⁰⁸ According to the Chinese National Furniture Association, Chinese furniture production grew from \$13 billion in 1999 to \$20 billion in 2002, while Chinese furniture exports increased from about \$2 billion in 1999 to \$5 billion in 2002.¹⁰⁹

The Chinese furniture industry consists of about 30,000 firms employing 5 million workers; 1,000 of these firms are joint ventures with foreign investors. Government policies that encourage foreign investment support the export-oriented success of Chinese firms. Furniture production for export is concentrated in special economic zones.¹¹⁰ Within these zones, China has developed specialized industrial parks called “furniture towns,” which dominate furniture sales along the prosperous east coast. As a result, China is the world’s fourth largest furniture

exporter, and the United States is the top destination for Chinese furniture exports.¹¹¹ Chinese furniture exports to the United States increased from \$359 million in 2000 to \$1.2 billion in 2003. Often overlooked is that demand from US producers drives Chinese imports. From 2000 to the first half of 2003, Chinese furniture imports as share of US domestic producer shipments increased from 6 percent to nearly 27 percent (Ikenson 2004). By 2003, nearly one-half of US furniture imports were from China, and Chinese furniture exports to the United States accounted for about half of total Chinese furniture exports (table 11).¹¹²

Another side to the furniture story is China's increasing demand for solid wood used to manufacture furniture.¹¹³ In fact, China is the world's leading importer of logs, hardwood lumber, pulp,

China's semiconductor policy is only one aspect of a broad drive to become a world leader in information technology industries. Another aspect, equally worrisome to foreign suppliers, is China's drive to develop a domestic wireless industry.

and paper. In the wake of the Yangtze River flood of 1998, the Chinese government emphasized forestry conservation and imposed a harvesting ban. Partly as a result, Chinese imports of solid wood soared from \$5.3 billion in 2000 to \$11.2 billion in 2002.¹¹⁴ However, the United States supplies only a small fraction of China's solid wood market. During 2000–03, US wood exports to China more than doubled, to \$253 million; at the same time, US wood exports to the rest of the world declined 22 percent but were still around \$5 billion. Since US wood exports to China are only 5 percent of global exports, the main benefit to US producers would appear to be higher prices, not larger volume.

Evaluation

Restricting imports of Chinese furniture, by AD duties or other means, will not bring back US jobs. Instead, the main effect will be to curtail US household purchases of furniture and to shift sources of supply to southeast Asia. The reality is that US furniture producers and retailers will source basic furniture either from China or other low-cost developing countries. In fact, the United States is a net

importer in every furniture category, including office furniture.¹¹⁵

To tackle job losses in the domestic furniture industry as in the clothing industry, the US government should improve the existing TAA program, emphasizing wage insurance and health benefit provisions (Kletzer and Litan 2001). Meanwhile, several US furniture makers will survive by distributing imported furniture or by producing high-value crafted furniture. As a leading example, Ethan Allen has established a strong brand identified with elegance and high quality.¹¹⁶

Semiconductor Chips

On March 18, 2004, the Bush administration filed the first US complaint against China in the WTO. The US government alleges that China provides preferential tax treatment for domestic semiconductor producers and that the preferences violate China's national treatment obligations.¹¹⁷ China imposes a 17 percent value added tax (VAT) on semiconductors, both imported and domestic.¹¹⁸ Both foreign and domestic firms are eligible for various export tax rebates (see appendix table 4), and these rebates do not appear to discriminate between locally owned and foreign-owned manufacturers.

But China does appear to discriminate against imported semiconductors destined for use in the domestic market. If discrimination exists, it would violate the national treatment principle embodied in GATT Article 3.¹¹⁹ According to the USTR (2004b), domestic producers are refunded as much as 14 percent of the 17 percent VAT.

After the United States filed its WTO case, both Japan and Taiwan asked to join the WTO consultations (the first stage under the WTO dispute settlement mechanism).¹²⁰ The dispute was resolved a few days before the United States was prepared to initiate a WTO panel. Through bilateral negotiations, China agreed to eliminate VAT refunds for any new semiconductor products or manufacturers and will phase out semiconductor tax rebates by April 2005.¹²¹ While the dispute is resolved, similar disputes could well arise in the future as China seeks to strengthen its role as an information technology leader. An understanding of key issues in the semiconductor case is therefore still relevant.

SIA Role

The US Semiconductor Industry Association (SIA), representing about 85 percent of the US semiconductor industry, was the driving force behind the WTO case (Howell et al. 2003). The SIA attributes a substantial part of total investment in the Chinese

domestic integrated circuit (IC) industry, totaling \$3.6 billion during 2000–02, to the discriminatory VAT policy.¹²² In addition to its objections to the VAT rebate, the SIA claims that the Chinese government offers low-interest loans and cheap land to nurture its domestic semiconductor industry. The SIA fears that excessive investment will not only make China a serious rival in high-technology circuits but also create overcapacity and depress world semiconductor prices (Craib 2004). The SIA argued that China should either reduce its VAT to 3 percent for all semiconductors, regardless of origin, or eliminate them altogether.¹²³

China's Role in World Semiconductor Trade

Electronics and information industry products play a huge role in China's external trade, both as imports and exports (table 12). In 2003, these goods accounted for nearly half of China's merchandise exports. Semiconductors are an important part of the larger picture.

China already has the world's third largest domestic semiconductor market, closely following the United States and Japan (see tables 13a and 13b for a comparison of US semiconductor and electronics and information industry trade with China versus Japan). Within China, domestic semiconductor purchases are expected to rise by 16 percent per year and exceed Japan by 2010. Taken as a region, the western Asia-Pacific region has already become the largest semiconductor market in the world, surpassing the United States in 2001.¹²⁴

Underpinning the Chinese semiconductor market are booming domestic computer and telecommunications sectors.¹²⁵ The Chinese share of the world IC sales market jumped from under 3 percent in 1997 to 15 percent in 2002 (table 14).¹²⁶

To satisfy domestic demand, China currently imports at least 80 percent of the semiconductors used in electronics production (table 12). Domestic Chinese production is still concentrated on low-end technology. The Chinese government is trying to reduce its net import position and upgrade its domestic mix toward more sophisticated IC products between 2005 and 2010.¹²⁷ As part of its plan, the Chinese government offers incentives to domestic and foreign companies through about 500 specialized investment zones.¹²⁸ The results are noteworthy. Motorola, for example, established a \$1.9 billion fabrication facility in Tianjin.¹²⁹

Chinese Tax Incentives

Among the many tax and trade incentives the Chinese government offers, some are particularly ben-

eficial for foreign firms (see appendix table 4). Most foreign firms are exempt from import quotas. A foreign-owned firm with advanced technology production techniques and equipment may qualify for technologically advanced enterprise status (TAES). Benefits of TAES include an initial five-year exemption from taxes, then a further five-year 50 percent reduction in corporate income taxes (to a minimum 7.5 percent rate), and then an additional three-year 50 percent reduction (to a minimum 10 percent rate).

Another incentive is the research and development (R&D) tax deduction. If a foreign company establishes an R&D center and increases its R&D outlays by 10 percent or more in two consecutive years, it may deduct 150 percent of its R&D expenses for corporate tax purposes.

Local incentives are also available.¹³⁰ As an example, the Pudong New Area in Shanghai refunds land use fees and land grant fees for preapproved R&D centers and subsidizes property taxes under the Pudong Technology Development Fund up to a maximum \$145,000.

China's Legal Defenses

On its face, China's VAT policy violated the nondiscrimination principle embodied in GATT Article 3. Discrimination, if established, is a per se WTO violation; the petitioner does not need to demonstrate trade injury. The WTO precedent in *Japan Alcoholic Beverages II* appears to squarely confront China.¹³¹ If it defended the case in the WTO, China might have advanced three arguments: first, that domestic manufacturers are subject to requirements that do not apply to importers; second, that domestic and imported semiconductors are not like products; and third, that the Chinese system is merely a subsidy paid to domestic producers, not a means of tax discrimination.¹³² Neither of the first two arguments seems compelling: The requirements imposed on domestic firms are normal business practices (funding R&D, expanding plant capacity), and the legal decrees that establish the rebate do not differentiate between types of semiconductors.¹³³

The third argument is the strongest. Article 3 does not prevent payments to domestic producers from the proceeds of internal taxes, as long as tax discrimination is not used to protect domestic production (GATT Article 3 [8b]). In a future IT subsidy case, China might boost local capabilities with a nondiscriminatory R&D subsidy or an investment tax credit, exclusively paid to domestic producers. Foreign producers would face an uphill battle challenging these subsidies.¹³⁴

Table 11: US furniture trade with China and major partners, 2000–03 (millions of dollars)

Country	US exports ^a				US imports ^b			
	2000	2001	2002	2003	2000	2001	2002	2003
Canada	42	35	34	35	407	407	394	386
Indonesia	0	0	0	0	109	108	129	125
Italy	0	0	1	3	168	166	180	169
Mexico	6	7	5	5	166	143	125	96
China	0	0	0	1	359	477	817	1,163
World	105	104	89	78	1,508	1,640	2,058	2,413
US-China furniture trade as share of total furniture trade (percent)	0.2	0.3	0.2	1.2	23.8	29.1	39.7	48.2

a. Domestic exports.

b. Imports for consumption.

Source: USITC Dataweb (2004).

Evaluation

The United States won the battle but could still lose the war. China could shift to other forms of public support, particularly for high-end IC production. Since the domestic Chinese semiconductor market is booming, and since many foreign firms are participating in the boom, the SIA might have a hard time both in marshalling its members to oppose second-generation subsidies and in demonstrating trade injury. However, if the time comes (say five years hence), when Chinese semiconductor and other information technology (IT) firms sell large quantities on world markets and depress prices, it seems likely that safeguard and AD remedies will be invoked to slow the Chinese export push.

Other Pending Cases

WiFi Standard

China's semiconductor policy is only one aspect of a broad drive to become a world leader in IT industries. Another aspect, equally worrisome to foreign suppliers, is China's drive to develop a domestic wireless industry. In December 2003, invoking national security and the need for uniquely Chinese encryption methods, the Chinese government insisted on its own national wireless standards, to be launched in June 2004. The national standards are an alternative to existing WiFi (Wireless Fidelity) international

standards.¹³⁵ In response, Intel, the world's largest chipmaker, announced it would not sell its high-end Centrino chip in the Chinese market. Nokia stated it would stop shipping wireless products to China if the new national standard took effect.

In March 2004, US Secretary of State Colin Powell, Commerce Secretary Evans, and USTR Zoellick sent a joint letter urging China to withdraw plans for developing a domestic wireless local area networks, or WiFi, standard. In the wake of bilateral trade talks in April 2004, China agreed to delay indefinitely plans to launch its own WiFi standard.¹³⁶ This agreement does not, however, preclude China from resurrecting unique WiFi standards at a later date.

Television Case

In May 2003, one US firm and two labor unions filed an AD petition with the US DOC and USITC against imports of Chinese color televisions (CTVs). After determining that China is an NME, the US DOC used India as a surrogate country to impose preliminary AD duties ranging from 4.3 to 24.5 percent on 13 Chinese CTV companies.¹³⁷

After its hearing, the USITC found "material injury," based on the adverse impact that the rising volume of Chinese CTV imports exerts on US prices and producers (USITC 2003). The USITC claims that Chinese CTVs sold at prices between 10 and 30 percent lower than average US prices contributed to the decline in US production of CTVs from 5.6 mil-

lion units in 2000 to 1.1 million units in 2002, and industry job losses totaling 7,068 during the same period. However, US imports from China are only 9 percent of US imports of CTVs from all countries. (USITC Dataweb 2004).

On May 14, 2004, the USITC commissioners voted unanimously in favor of AD duties on US imports of Chinese CTVs. AD duties against the “big four” Chinese CTV makers, which account for 90 percent of all Chinese CTV exports to the United States, range from 4 to 26 percent.¹³⁸ All other Chinese CTV makers face duties of 78 percent.¹³⁹ The US DOC and USITC rulings will effectively block some Chinese CTVs from the US market, but it seems likely that CTV imports from Chinese firms facing lower AD duties will flourish. Moreover, CTV imports from alternative suppliers, such as Mexico and Korea, may quickly replace Chinese CTVs on the shelves of Wal-Mart and Best Buy. As in the clothing and furniture cases, the main result will not be to revive manufacturing activity in the United States but to shuffle the mix of foreign suppliers.

Intellectual Property Rights

Better Chinese enforcement of intellectual property rights (IPR) is listed in official US documents among the Bush administration’s priorities (USTR 2004b). Indeed, since 1991, China has been consistently blacklisted for IPR infringements (see appendix tables 5, 6, and 7). IPR was front and center in China’s WTO accession talks, conducted by USTR Charlene Barshefsky during the Clinton administration.

In response to IPR complaints, the Chinese government has significantly strengthened the rules governing protection and enforcement. China acceded to the Measures on Implementation of the Madrid Agreement on Trademark International Registration and Regulations on Customs Protection of IPR in October 1989, the Rules on Determination and Protection of Well-Known Trademarks in August 1996, and the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) in October 2001.¹⁴⁰ To facilitate coordination among 36 Chinese government departments with responsibilities for enforcing IPR protection, China created, in fall 2003, the “Leading Group” led by Vice Premier Wu Yi.

Despite considerable progress, China remains the principal exporter of counterfeit and pirated goods, both to the United States and the world.¹⁴¹ Counterfeiting and piracy pay, and some Chinese firms take advantage of their technical skills and marketing opportunities to pursue these activities.¹⁴² The International Intellectual Property Alli-

ance (IIPA), an influential lobbying group representing 1,300 US-based copyright companies, estimates Chinese piracy cost US firms \$2.6 billion in lost sales in 2003.¹⁴³ Poor enforcement of IPR is partly rooted in a weak legal system, coupled with provincial corruption and favoritism for Chinese firms. This section summarizes the significance of IPR protection for the US and Chinese economies, the scope of inadequate IPR enforcement, and bilateral efforts to bolster the IPR agenda.

Since Chinese IPR fines are based on prices charged for pirated goods, rather than the value of legitimate goods, and since punitive damages do not exist, the penalties for infringement can be light. Fines for retail piracy are reportedly as low as between \$6 and \$25. Another problem is the high monetary threshold (about \$6,000 in the Supreme People’s Court) before a criminal investigation for IPR theft can be initiated. Finally, opaque procedures hamper criminal enforcement. Time limits for criminal investigations are undefined, delays are commonplace, and local favoritism and corruption are routine.

Importance of Chinese IPR Enforcement

Significance for the US Economy. IPR issues of greatest concern to the United States are in the copyright area. US copyright industries contributed about \$535 billion to GDP in 2001. Between 1977 and 2001, US copyright industries grew twice as fast (7 percent annually) as the rest of the economy (3 percent annually). In the same period, US em-

Table 12: Chinese trade of electronics and information industry products, 1999–2003
(billions of dollars)

Year	Imports	Exports	Electronics and information industry exports as share of total Chinese exports
			(percent)
1999	51	39	33
2000	54	55	37
2001	59	65	37
2002	85	93	43
2003	128	142	49

Note: Semiconductors account for a significant share of electronics and information industry trade.

Source: China Ministry of Information Industry data (2004).

Table 13a: US semiconductor trade with China and Japan, 1997–2003 (billions of dollars)

Year	Imports ^a			Imports from China as share of total imports (percent)			Imports from Japan as share of total imports (percent)			Exports ^b			Exports to China as share of total exports (percent)			Exports to Japan as share of total exports (percent)		
	China	Japan	World	China	Japan	World	China	Japan	World	China	Japan	World	China	Japan	World	China	Japan	World
1997	0.3	10.0	40.6	1			0.3	3.8	36.2	10			0.3	3.8	36.2	1		
1998	0.5	7.7	36.5	1			0.5	3.1	34.5	9			0.5	3.1	34.5	1		
1999	0.7	8.1	40.5	2			0.7	3.8	43.5	20			0.7	3.8	43.5	2		
2000	0.7	10.8	52.3	1			0.9	5.0	55.5	21			0.9	5.0	55.5	2		
2001	0.6	7.2	34.7	2			1.2	3.5	39.5	21			1.2	3.5	39.5	3		
2002	0.8	4.9	29.9	3			1.6	2.9	36.8	17			1.6	2.9	36.8	4		
2003	0.9	4.2	27.9	3			2.3	2.7	40.2	15			2.3	2.7	40.2	7		

Table 13b: US electronics and information industry trade with China and Japan, 1997–2003 (billions of dollars)

Year	Imports ^a			Imports from China as share of total imports (percent)			Imports from Japan as share of total imports (percent)			Exports ^b			Exports to China as share of total exports (percent)			Exports to Japan as share of total exports (percent)		
	China	Japan	World	China	Japan	World	China	Japan	World	China	Japan	World	China	Japan	World	China	Japan	World
1997	13.2	53.5	239.6	6			3.6	16.6	196.2	8			3.6	16.6	196.2	2		
1998	16.4	54.6	261.3	6			3.9	17.0	226.1	21			3.9	17.0	226.1	2		
1999	20.2	52.4	275.7	7			4.3	14.7	219.8	19			4.3	14.7	219.8	2		
2000	25.1	56.7	308.2	8			4.2	15.2	229.8	18			4.2	15.2	229.8	2		
2001	32.7	65.6	364.4	9			5.5	18.7	265.5	18			5.5	18.7	265.5	2		
2002	33.3	49.8	313.7	11			6.7	15.6	229.5	16			6.7	15.6	229.5	3		
2003	44.5	44.2	311.7	14			7.0	12.2	204.5	14			7.0	12.2	204.5	6		

a. Imports for consumption.

b. Domestic exports.

Note: Semiconductors account for a significant share of electronics and information industry trade.

Source: USITC Dataweb (2004).

ployment in core copyright industries grew by 5 percent annually while economywide employment grew by only 1.5 percent annually. US copyright industry exports plus foreign sales, on a global basis, totaled \$89 billion in 2001, more than industries such as automobiles, aircraft, or agriculture (IIPA 2002). For the United States, copyright protection in China is important both as a bread-and-butter issue and as a precedent for other developing countries.

Significance for the Chinese Economy. Among scholars, there is a lively debate whether IPR protection helps or hinders growth in developing countries.¹⁴⁴ China, however, is rapidly graduating toward developed-country status, especially in its leading industries. As China climbs the economic ladder, the arguments for IPR protection become more persuasive.¹⁴⁵ To take the most immediate case, IPR protection is integral to the development of IT industries. Economywide, in 2001, China spent \$72 billion (measured in PPP terms) on R&D, positioned behind the United States (about \$280 billion), Japan (\$104 billion), and the European Union (\$187 billion) but ahead of individual EU member countries.¹⁴⁶ Despite a high level of R&D expenditure and numerous skilled researchers, China generates few innovations.¹⁴⁷ The negligible number of innovations has many causes, but one of them is the high incidence of piracy and counterfeit trade in China.¹⁴⁸

Key Piracy Concerns

IPR enforcement is still relatively new for China. China has, however, established a system for civil damages. As an example, the US recording industry obtained 26 judgments (out of over 40 cases) against copyright infringers through Chinese civil litigation in 2001 (IIPA 2003). Nevertheless, according to IIPA, China still accounted for \$2.6 billion or about 26 percent of worldwide US copyright sales losses in 2003. In 2003, China also accounted for 66 percent of all US Customs and Border Protection seizures of IPR-infringing goods (USTR 2004b). In five key copyright sectors—motion pictures, records and music, business software applications, entertainment software, and books—the piracy rate in China is said to exceed 90 percent.¹⁴⁹

Optical Disc Piracy. While the Chinese government seized over 75 million VCDs, CDs, CD-ROMs, and DVDs in 2002, an estimated 690 million unlicensed CDs, DVDs, and VCDs are created each year in China.¹⁵⁰ In 2002, music piracy in China was said to cost the US music industry nearly \$600 million in lost sales. Pirate DVDs in China sell for between \$0.76 and \$2.50 per disc, a fraction of DVD retail

Table 14: Chinese share of world integrated circuit market, 1997–2002

Year	China (billions of dollars)	World (billions of dollars)	China share of world total (percent)
1997	3.4	137.2	2.5
1998	4.3	125.6	3.4
1999	6.6	149.4	4.4
2000	11.7	204.4	5.7
2001	15.2	139.0	10.9
2002	17.8	119.0	15.0

Sources: Semiconductor Industry Association, *World Market Sales & Shares* (2003); Hatano (2003).

prices in the United States. VCDs, a video CD format invented by pirates in China, are sold at prices ranging from \$0.76 to \$1.92 per disc, and VCD players are sold for as low as \$43.

Internet Piracy. Internet piracy is a growing phenomenon. With over 58 million internet users in 2003, China has the second or third highest internet usage rates in the world. Currently over 7 million music files have been downloaded from over 1,000 active pirate music web sites. Piracy of videogames and business software are also persistent problems. To establish higher standards, the US government has urged China to sign two 1996 copyright treaties, the World Intellectual Property Organization (WIPO) Copyright Treaty (WCT) and the WIPO Performances and Phonograms Treaty (WPPT), together known as the WIPO Internet Treaties.

Evaluation

Whether the US-China Joint Commission on Commerce and Trade (JCCT) meeting between Vice Premier Wu Yi and USTR Zoellick, held on April 21, 2004, achieved more than lip service to IPR enforcement remains to be seen. Some agreed measures have a déjà vu flavor (e.g., IPR working groups to strengthen bilateral cooperation, consultations between trade, and judicial and law enforcement departments), but others are new and may be more effective. Following the April 2004 meeting, the US government promised to expand its program of technical training to include Chinese judges, prosecutors, and customs officials. The Chinese government agreed to lower thresholds for opening

criminal investigations against IPR violators. Other steps pledged by the Chinese government include expanding market access for imported audio-video products and a public education campaign to raise awareness of IPR protection.

Despite high piracy rates and repetitive bilateral talks over IPR issues, the United States has not brought WTO trade cases against China for IPR infringement. The absence of barking WTO cases does not ensure that the dog will stay sleeping.¹⁵¹ Trade history in the pre-WTO era is instructive. In November 1991, the USTR threatened to impose \$1.5 billion in trade sanctions if China did not reach an IPR agreement. By January 1992, China and the United States established a memorandum of understanding (MOU) on IPR. Similarly, in February 1995, the USTR announced 100 percent import tariffs unless China enforced its IPR obligations. By March 1995, another US-China MOU on IPR was signed. US patience over weak IPR protection could again wear thin. Recently, the US-China Economic and Security Review Commission Report (USCC 2004) strongly recommended to the US Congress that the USTR should pursue WTO disputes over “China’s failure to protect intellectual property rights.”

An assessment of Chinese IPR efforts will be the focus of US attention in mid- to late 2005, when the US government completes its out-of-cycle review of China’s “Special 301” investigation. Whether or not the United States initiates a WTO case, if China wishes to gain cooperation from the US government in other areas such as MES, China will need to demonstrate its IPR resolve through stronger enforcement actions.

Conclusion

The cases and complaints against China in 2003 and 2004 partly reflect election-year forces. If and when China revalues, pressures may temporarily ebb. However, the individual industry cases now in dispute are harbingers of additional cases as Chinese firms begin to compete in new industries and expand their world market share in established lines. Disputes cannot be avoided, but they can be managed.

From the US perspective, these complaints add up to widespread concern about the loss of manufacturing jobs and the pace of adjustment. But China has more than an export stake in settling disputes. More than a decade ago, under Chairman Deng Xiaoping, China decided to use WTO membership and globalization more broadly, as a lever to transform the economy from state-run to market-driven. Enormous progress has been made, but the task is far from complete. The Chinese leadership has a

major political investment in avoiding trade clashes with the United States, since acrimonious disputes could call into question China’s larger commitment to domestic reform.

Comparison with Japan

The history of US trade frictions with Japan (summarized in appendix B) may foreshadow the rocky path ahead with China. Postwar restraints on textile and clothing imports started in 1957 when President Dwight Eisenhower negotiated a “voluntary” restraint agreement (VRA) with Japan. The next big Japanese trade dispute was over steel: In 1968, President Lyndon Johnson negotiated a VRA. During the Tokyo Round of Multilateral Trade Negotiations (1974–79), Ambassador Robert Strauss held heated talks with his Japanese counterparts over access to beef and other agriculture markets. During the 1980s, under President Ronald Reagan, the United States imposed VRAs on semiconductors, steel, and autos and also initiated a round of mar-

China should announce the progressive phaseout of domestic subsidies and incentives for infant industries (such as semiconductors) and eliminate them altogether in industries that have demonstrated their prowess in export markets (textiles and clothing).

ket access negotiations. The intensity of US trade disputes with Japan only abated in the mid-1990s, as the US economy boomed and the Japanese economy slumped.¹⁵²

When comparing US-China frictions with the history of US-Japan trade, four key political and economic factors should be considered. One factor that does not augur well for managing future friction is the absence of a security alliance. The US-Japan postwar security alliance, cemented in the Treaty of Mutual Cooperation and Security (1960), dampened the decibel level of US trade complaints. Obviously no such alliance exists with China. In fact, future security tensions could serve to inflame trade disputes.

Another factor not in China’s favor is the import-to-export ratio. As table 15 shows, the bilateral ratio between US imports and US exports is significantly higher for China today than for Japan in 1986—a

ratio of 5.7 versus 3.0, respectively. To close the absolute dollar size of the bilateral trade gap, this means that US exports to China should grow more than six times as fast as imports, whereas the comparable benchmark for Japan was more than three times as fast. By implication, the absolute size of the US-China bilateral trade deficit will very likely expand for a considerable period.¹⁵³

The openness of the Chinese economy compared with Japan, however, is a key plus. A broad measure of openness is the ratio of external trade (imports plus exports) to GDP. As shown in table 15, China's trade ratio increased from 25 percent in 1986 to 56 percent in 2003. By comparison, Japan's trade ratio declined from 17 to 11 percent.¹⁵⁴ Another measure of China's openness is the ratio between the FDI stock and GDP.¹⁵⁵ The figure for China increased from less than 1 percent in 1986 to 35 percent in 2003. By comparison, the Japanese figure declined from a meager 3 percent in 1986 to only 2 percent in 2003. A third measure is the size and persistence of global trade surpluses. Japan has run large surpluses for more than 30 years; China has run smaller surpluses for less than 10 years.

A final factor is the size of Japan and China as players in global trade. Chinese exports still account for a relatively modest share of world exports. In 2003, the Chinese share was 6 percent; at the height of export-led growth, Japan reached 10 percent in 1986. In future years, China may surpass Japan's erstwhile share of world exports, but for now China is not shaking world markets to the same degree Japan did in the mid- and late 1980s.

Lessons from History

Based on the history of US-Japan trade friction, modulated by the four factors just discussed, we foresee decades of US-China trade friction but—if China revalues—at a lower intensity than US-Japan friction at its peak in the 1980s. China will continue its export push into foreign markets, adding higher-technology products to the familiar mix of textiles, clothing, toys, and furniture. At the same time, China's openness and rapid growth will ensure that China remains an exceedingly attractive market for FDI, commodity exports, and a wide range of manufactured and service exports. Taken together, we think these forces ensure a long drum roll of trade cases. Security alliances will not shelter Chinese exporters, but commercial considerations (foremost, the large stock of FDI in China) will dampen the excesses of trade protection. Against that background, we offer a few recommendations for managing disputes over the next few years.

Chinese Policies

Based on its huge domestic market, its high saving rate, its entrepreneurial skills, and its pool of cheap and often skilled labor, China has enormous competitive advantages. To realize the value of its competitive strengths, China needs an open world trading system that can not only absorb a growing volume of Chinese exports but also supply imports of raw materials (oil, copper, and soybeans) and manufactured goods (electrical equipment, aircraft

Table 15: Comparison between US-Japan and US-China trade, 1986 and 2003

Country	US imports from^a (billions of dollars)	US exports to^b (billions of dollars)	US import to export ratio	Trade to GDP ratio	Inward stock of FDI (billions of dollars)	FDI to GDP ratio	Share of world exports (percent)
China							
1986	4	4	1.0	0.25	0.1	0.00	1.4
2003	152	27	5.7	0.56	447.9	0.35	5.9
Japan							
1986	82	27	3.0	0.17	44.0	0.03	9.9
2003	118	49	2.4	0.11	59.6	0.02	6.4

a. Based on US imports from consumption.

b. Based on US domestic exports.

Sources: USITC Dataweb (2003) for US imports and exports; UNCTAD *World Investment Report* (2003) for inward stock of FDI; IMF *World Economic Outlook* (2004) for GDP in current prices; WTO Statistics Database (2004) for Japanese, Chinese, and world exports; and IMF Balance of Payments (2004) for trade to GDP ratio.

parts, and medical instruments) that China cannot produce at competitive costs.

In its best long-term interests, China should take several measures to foster an open world trading system in the years ahead:

- China should revalue the renminbi from time to time (and eventually adopt a floating rate) so that the Chinese “basic balance” (including inward direct investment) is approximately zero over the business cycle.¹⁵⁶
- China should not wait for lengthy WTO negotiations to liberalize access to its own markets. Instead, China should take the lead and launch its own program of unilateral liberalization and challenge other WTO members to invigorate the Doha Development Round.
- China should announce the progressive phaseout of domestic subsidies and incentives for infant industries (such as semiconductors) and eliminate them altogether in industries that have demonstrated their prowess in export markets (textiles and clothing).
- China should impose much higher civil damages for pirated and counterfeit goods. It should also use public criminal proceedings to discourage the worst instances of IPR theft.

US Policies

For their part, US leaders should publicly declare that expanding trade relations between the United States and China serve US economic interests, even when China has a bilateral trade surplus. Economic criticism leveled at Chinese policies should focus on China’s trade balance with the world, exchange rate equilibrium, market access barriers, unwarranted subsidies, and IPR issues—not China’s bilateral surplus with the United States.

In industries where Chinese imports are rising rapidly and genuinely injure domestic US firms, the United States should apply time-limited safeguards. WTO Paragraph 241 safeguards are preferable to Paragraph 238 safeguards. Both safeguards violate the WTO nondiscrimination principle in that they

can be imposed solely against Chinese exports. However, unlike the automatic process of Paragraph 238, Paragraph 241 safeguards require an initial investigation to determine whether Chinese exports inflict some degree of injury on domestic firms.

Ahead of the 2013 date for the expiration of WTO Paragraph 241 safeguard actions, the United States should shift to normal safeguards when domestic industries face trade injury. Normal safeguards, unlike Paragraph 241 safeguards, apply against all imports (except FTA partners): They cannot single out China for discriminatory trade restrictions.

Likewise, well ahead of the 2016 expiration of the NME designation, the United States (and other WTO members) should phase out the application of this discriminatory status against Chinese exports.

To effectively address the impact of imports on US manufacturing job losses, the US government should improve the TAA program, focusing on wage insurance and health benefit initiatives.

Joint China-US Policies

To manage trade frictions, and keep political temperatures within bounds, the US and Chinese governments should formalize senior-level semiannual meetings to complement subcabinet dialogue. The recent April 21, 2004, meeting between USTR Zoellick and Chinese Vice Premier Wu Yi was a constructive example. After the April 21, 2004, JCCT meeting, China agreed to “suspend indefinitely” its plans to develop a unique WiFi standard, accelerate the opening of its services sector, and more strictly enforce IPR.¹⁵⁷ For its part, the United States agreed to renew exports of certain high-technology items that have a national security dimension (e.g., machine tools). The meeting also created working groups aimed at trade remedies and China’s NME status.

Such semiannual meetings between the United States and China will be useful for addressing a rolling agenda of key issues. The next meeting should be scheduled to take place soon after the US presidential election. It should focus on the semiconductor dispute, pending termination of the WTO MFA, and constructive measures to improve Chinese labor standards.

Notes

¹ Marcus Noland (1996) estimated that up to 75 percent of Chinese exports to the United States in the early 1990s displaced exports of other developing countries, particularly in Asia.

² For an example of US concern over China's role as a manufacturing hub, see Ted C. Fishman, "The Chinese Century," *The New York Times Magazine*, July 4, 2004.

³ During 1993–2001, Chinese imports from the rest of the world increased from \$104 billion to \$413 billion. Since China joined the World Trade Organization (WTO) in 2001, Chinese imports increased by 70 percent. See Lardy (2004).

⁴ In 2003, China accounted for an overwhelming share of export growth in East Asian countries, including 70 percent of Japan's, 40 percent of South Korea, and 90 percent of Taiwan's export growth.

⁵ In 2003, China accounted for half of global consumption of cement, 36 percent of steel, and 30 percent of coal. See "The Commodities Bonanza from China," *Asiamoney*, February 1, 2004; also see John Heinzl, "China Feasts on Canada's Resources," *The Globe and Mail*, May 22, 2004, B6.

⁶ Based on work by Thomas Flynn, research assistant, Institute for International Economics.

⁷ Chinese demand for commodities is the key reason for a projected 14 percent increase in the value of Australian commodity exports (minerals, metal, energy, and farm products), forecast to reach a record high of A\$93 billion by fiscal year ending June 2005. See "China to Boost Australia Commodities Boom," Reuters, June 21, 2004.

⁸ Based on IMF *Balance of Payments Statistics* database (April 2004). See Huang (2003).

⁹ Based on GDP at current exchange rates, from the IMF *World Economic Outlook* database (April 2004) and UNCTAD *World Investment Report* (2003). Huang (2003) argues that the inefficiencies of the Chinese economy make China unusually open to foreign trade and FDI.

¹⁰ US merchandise exports to the rest of the world declined from \$697 billion in 2000 to \$625 billion in 2003 (USITC Dataweb April 2004). Nevertheless, US firms had significant export gains to China. During the 1995–2002 period, US exports to China of integrated circuits rose tenfold, soybeans increased 25-fold, and semiconductors gained 35-fold. See US DOC (2003a) and Jun (2004).

¹¹ Chinese tariffs declined, in unweighted average terms, from 55.6 percent in 1982 to 12.3 percent in 2002 (IMF *World Economic Outlook* 2004). In accordance with Abba Lerner's teaching (1936) that import tariffs act as export taxes, the progressive reduction of Chinese import duties facilitated the rapid growth of Chinese processing industries, using imported inputs.

¹² The rise in Chinese imports from the surrounding region reflects its growing importance as a manufacturing hub for reexports (IMF *World Economic Outlook* 2004).

¹³ "Is The Wakening Giant A Monster?" *The Economist*, February 13, 2003. The Fair Currency Alliance (FCA) claims that official Chinese statistics understate the trade surplus (see box 3). In 2003, based on official statistics from the Chinese Ministry of Commerce, China's trade surplus (excluding services) as a share of GDP was 1.8 percent.

¹⁴ FAS values are less than FOB values by the cost of loading goods onto cargo vessels at home ports. Fung and Lau (2003) increase China's official FOB merchandise import values by 10 percent to reflect insurance and freight charges.

¹⁵ While China has a trade surplus with the United States (\$125 billion in 2003) and runs a huge trade deficit with the rest of the world (\$95 billion in 2003), Japan has a large trade surplus both with the United States (\$69 billion in 2003) and the rest of the world (\$18 billion in 2002). See Lau (2003). When the Japanese economy was booming during the period 1984–1991, Japan's global current account surplus as a share of GDP averaged 2.8 percent. As a comparison, during the period 1994 to 2003, when the Chinese economy grew strongly, China's global current account surplus averaged 2.0 percent of GDP. In 2003, China's current account surplus reached 3.3 percent of GDP. Morris Goldstein and Nicholas Lardy argue that the "underlying" current account surplus is much larger, because the Chinese economy was overheating in 2003. See Goldstein (2004) and Lardy (2004a).

¹⁶ See "Is The Wakening Giant A Monster?" *The Economist*, February 13, 2003. Chinese exports based on China Ministry of Commerce statistics database (2004) and world exports based on IMF *World Economic Outlook* 2004.

¹⁷ It should be mentioned that, during 2000–03, US exports to rest of world fell by 10 percent.

¹⁸ In fact, during 2000–03, the US-China bilateral deficit increased from \$84 billion to \$125 billion. USTR *National Trade Estimate Report on Foreign Trade Barriers* (2004).

¹⁹ In April 2004, 13 House Democrats signed a letter urging President Bush to revive the "Super 301" statute that requires US Trade Representative (USTR) to take action within 60 days against countries with foreign market barriers to US products. House Democrats demanded a WTO challenge over Chinese, EU, Indian, Japanese, and Korean practices. Specifically, the letter targets "trading rights" to ship imports into China and "distribution rights" to sell imports within China, plus China-only technology product standards. See Rangel (2004).

²⁰ Small variations are allowed on both sides of the official rate of RMB8.28 to the dollar.

²¹ In 2003, China became the world's leading destination for FDI, surpassing the United States, \$53 billion versus \$40 billion. China was far ahead of other developing countries, such as Brazil with \$10 billion and Mexico with about \$11 billion. See UNCTAD *World Investment Report* (2003) and OECD, *Trends and Recent Developments in Foreign Direct Investment* (June 2004). Also see Michael R. Sesit, "China Overtakes US as Magnet for Foreign Direct Investment," *The Wall Street Journal*, June 28, 2004, A2.

²² China pegs its exchange rate to the dollar through official intervention in the foreign exchange market. The Chinese central bank uses renminbi to purchase US dollars in the currency market and then sterilizes part of the addition in renminbi base money by selling renminbi bonds.

²³ According to some estimates, 50 percent of Chinese bank loans, some \$500 billion, are nonperforming. See Nicholas Lardy's estimates in "Survey: China Money Worries," *The Economist*, June 13, 2002.

²⁴ As a result, capital liberalization would weaken the renminbi and worsen the US-China trade deficit.

²⁵ In the 1980s, as the dollar became more overvalued, the Reagan administration used selective import protection to quell demands from the US industrial community. See Hufbauer and Elliott (1994). However, unlike Treasury Secretary John Connally in the Nixon administration, Secretary James Baker did not have to deploy trade weapons to secure the Plaza Accord of September 1985. See Solomon (1999).

²⁶ Section 301 of the Trade Act of 1974 enables the president to take measures against "unjustified and unreasonable" foreign barriers. Following the Marrakesh Agreement that established the WTO, the USTR has channeled meritorious Section 301 petitions into the WTO dispute settlement mechanism.

²⁷ To encourage a flexible Chinese exchange rate, US Treasury Secretary John Snow contends "persistent engagement" is more effective than a trade petition. See Snow (2004a).

²⁸ In the meantime, the FCA continues to issue public statements criticizing the Chinese exchange rate regime. See, for example Fair Currency Alliance press release, "China's Exchange Rate Regime Violates WTO Obligations," August 5, 2004.

²⁹ See WTO Article 3, Subsidies and Countervailing Measures Agreement ("SCM Agreement"), available at www.wto.org/english/docs_e/legal_e/24-scm_01_e.htm (accessed June 2004). See also Benitah (2003).

³⁰ Other practices that qualify as government "financial contribution" include foregone government revenue (for example, fees for the exploitation of natural resources) and the government provision of goods and services (other than infrastructure) at bargain prices. See WTO Article 1 of the SCM Agreement, "Definition of a Subsidy," available at www.wto.org/english/docs_e/legal_e/24-scm_01_e.htm (accessed June 2004).

³¹ In the recent WTO *Softwood Lumber* ruling, Canada argued that Canadian stumpage programs are not targeted at lumber producers and claimed that the US Department of Commerce (US DOC) failed to meet the WTO specificity test. The WTO Appellate Body sidestepped the specificity issue and instead concluded there was insufficient "factual basis" for the US DOC to use a "benchmark other than private prices in Canada." See WTO (2004a). If the WTO Appellate Body is unwilling to find that concessionary stumpage fees confer a specific benefit, it seems highly unlikely that the Appellate Body would rule against an undervalued exchange rate. Also see Benitah (2003).

³² Goldstein observes that the reticence of the Fund and the United States to question Japan when it requested authorization to intervene in exchange markets exacerbates the problem with China. For further analysis of China and its IMF obligations, see Goldstein (2004).

³³ Other economists, such as Nobel laureate Robert Mundell (2004), point out that the IMF has never required a major coun-

try with an inconvertible currency to revalue. Mundell argues that a revaluation would delay convertibility indefinitely. In fact, Mundell questions whether a revaluation could run counter to IMF Article IV Section 1. Under IMF Article IV Section 1 (ii), member countries should "seek to promote stability by fostering orderly underlying economic and financial conditions and a monetary system that does not tend to produce erratic disruptions." Mundell contends that an appreciation would increase Chinese unemployment by raising the dollar cost of wages. With existing underemployment in China estimated at 200 million, he believes that a revaluation could create economic and financial instability that violates Article IV Section 1 (iii). Stephen Roach of Morgan Stanley underscores another of Mundell's concerns: the fear that dismantling the renminbi peg could destabilize world financial markets. See Mundell (2004) and Roach (2003).

³⁴ IMF Article XXVI enumerates reasons for the IMF to impose "compulsory withdrawal" of any member country. In a small number of cases, usually with political overtones, Article XXVI has been invoked for violations of Article VIII (the requirement to provide economic information). Articles XXVI and VIII have no application to current Chinese circumstances. In order to formally publish a criticism of a member country's exchange rate policies over the opposition of that member, a 70 percent majority of the Fund's Executive Board must approve. Based on the most recent IMF Article IV Consultations with China, the IMF fell short of advocating an immediate revaluation. Instead, "Many Directors considered that it would be advantageous for China to make an initial move toward greater exchange rate flexibility without undue delay." See IMF Article IV Consultation with People's Republic of China, August 25, 2004.

³⁵ See Morris Goldstein and Nicholas Lardy, "Two-Stage Currency Reform For China," *The Asian Wall Street Journal*, September 12, 2003. Since the summer of 2003, China's currency on a trade-weighted basis has appreciated about 5 percent, and the underlying current account position may have weakened. In light of the new circumstances, Goldstein and Lardy are reviewing their 15 to 25 percent range. Also see Goldstein (2004) and Bergsten (2004).

³⁶ See Ramoncito dela Cruz, "Goldman Sachs: China's Yuan Is Only 'Mildly Undervalued'," *Dow Jones International News*, September 15, 2003. See also Owen Brown, "Goldman Sachs Tips China to Revalue," *Dow Jones International News*, January 12, 2004. Morgan Stanley economists Andy Xie and Stephen Roach argue against revaluation. Xie (2004) claims that even a 5 percent appreciation would reduce export profits by 30 percent and entail a large adjustment that is nearly impossible for China. Roach (2003) argues that China's small trade surplus demonstrates that the renminbi is fairly valued. Mundell (2004) also argues against revaluation. As noted earlier, Mundell claims that a significant renminbi appreciation would "delay currency convertibility indefinitely," "choke off FDI," reduce growth rate to 4 percent, exacerbate the problem of NPLs, cause deflation in rural China, increase unemployment in China, and destabilize southeast Asia.

³⁷ According to NBER (2003), the recession officially ended in November 2001, indicating the recession lasted just eight months, one of the shortest since World War II. However, the economy did not bounce back until the third quarter of 2003, when real GDP growth reached 8.2 percent. See also US Bureau of Economic Analysis (BEA), National Income and Products Table (2004).

³⁸ According to economist Lawrence J. Lau (2003), the low domestic value-added content of Chinese exports implies a high import content (about 80 percent of total costs). Hence the

impact of renminbi appreciation on Chinese exports would be muted because imported components would also be cheaper in renminbi terms. Lau estimates that a 10 percent renminbi revaluation would only increase the dollar cost of Chinese exports by about 2 percent. As a caution, Lau notes that the appreciation of the Japanese yen by over 200 percent from the 1960s to 2003 did not reduce the Japanese trade surplus with the United States.

³⁹ Asian currencies that are pegged include the Chinese renminbi, Hong Kong dollar, and Malaysian ringgit. The Taiwanese new dollar, Thai baht, Filipino peso, Singapore dollar, and Korean won are all managed in ways that limit their fluctuation against the dollar—and, importantly, against the renminbi.

⁴⁰ By contrast, the Japanese yen was pegged to the US dollar for nearly a quarter of a century after World War II and was undervalued for most of the period. See Eichengreen (2004).

⁴¹ Lawrence Summers (2004) emphasizes US national saving (both at the household and government levels), as well as exchange rate adjustments, for reducing the US current account deficit.

⁴² The figure of 727,000 jobs lost is the approximate midpoint of an estimated range between 63,666 and 1.3 million jobs lost.

⁴³ The petition assumes that Chinese labor costs account for 13 percent of the weighted average of the total price for final manufactured goods and that Chinese suppression of workers rights dramatically lowers manufacturing wages. To offset the Chinese labor cost advantage, the petition recommends applying a tariff ranging from 10 to 77 percent on Chinese manufactured goods. See Sweeney, Trumka, and Barenberg (2004).

⁴⁴ In 2002, the total Chinese labor force was 737 million, some 369 million in rural areas and 369 million in urban areas. Based on *China Statistical Yearbook* (2003).

⁴⁵ Based on Gereffi (2004). Chinese manufacturing wages (excluding fringe benefits) currently average about 69 cents per hour; ten years ago the Chinese average wage (excluding fringe benefits) was 30 cents an hour. Based on 2002 figures, from the International Labor Organization (ILO) LABORSTA database. See Ashenfelter and Jurajda (2001).

⁴⁶ The US average wage in 2003, including fringe benefits, was \$14.96. Based on US Bureau of Labor Statistics (BLS), *Current National Employment Statistics Survey* (2004).

⁴⁷ Real per capita GDP in China is seven times greater in 2003 than the level in 1978, which reflected a significant improvement in Chinese real wages and living standards. The level of real urban per capita income in 2003 was double the level in 1993, and real rural per capita income in 2003 was 60 percent greater than a decade ago. Based on Lardy (2004).

⁴⁸ See Alan Reynolds, "Manufacturing Myths," *The Washington Times*, August 31, 2003. Based on the ILO LABORSTA database.

⁴⁹ According to economists Robert Stern and Katherine Terrell (2003), government policies that promote growth and eradicate poverty are more effective in improving labor standards than external enforcement. See also Griswold (2001) and Elliott and Freeman (2003).

⁵⁰ 340 percent is the midpoint of the 90 to 595 percent range.

⁵¹ EPI and others estimate that the United States loses about 760,000 jobs from trade with China. See Bronfenbrenner et al. (2001).

⁵² Mita Aggarwal (1995) concludes that core labor standards are often higher in export-oriented firms. This can be explained in terms of productivity differentials and the corresponding demand for better workers. For example, according to the UNCTAD *Trade and Development Report: China's Accession to the WTO* (2002), foreign enterprises generate about \$4,700 value-added per worker per year in the textiles industry, compared with just \$1,850 value-added per worker per year in Chinese state-owned enterprises. Also see Gresser (2004) and Lardy (2004).

⁵³ See GATT Article XX (b) and (e), 1947, available at www.wto.org/english/docs_e/legal_e/gatt47_02_e.htm (accessed May 2004). When a WTO member invokes either Article 20(b) or 20(e), it must do so on a nondiscriminatory basis as between foreign suppliers. In other words, China cannot be singled out for a practice that also exists in other countries.

⁵⁴ Prison labor is different than "forced labor," which the petition cites as the main outcome of labor violations in China. See Jackson et al. (2002).

⁵⁵ The WTO panel (ruling for India) interpreted Article 20(b) to require that the European Commission needed to prove that the drug policies in dispute were necessary to achieve the health policy objective of protecting human life or health within Europe. See WTO (2004b).

⁵⁶ See USTR (2004a). In rejecting the petitions, Ambassador Zoellick asserted that the United States would not "retreat into economic isolationism."

⁵⁷ In June 2004, US Secretary of Labor Elaine L. Chao signed four letters of understanding with the Chinese government to cooperate on wage and hour regulations and enforcement, oversight of pension programs, and occupational and mine safety. So far, the US government has funded a \$6.1 million grant for improving mine safety and health and promoting workers rights. See Chao (2004).

⁵⁸ The American Manufacturing Trade Action Coalition, the American Textile Manufacturers Institute (ATMI), and the National Textile Association filed the request on July 24, 2003. See CITA (2003).

⁵⁹ Paragraph 238 of China's WTO Accession Agreement established the China-specific Textile Safeguard mechanism, in effect until December 31, 2008. WTO members can request consultations with China if rising Chinese textile and clothing imports cause "market disruption." Unless both parties reach a different agreement, the quota limit will terminate one year after the consultation request. However, the United States could then invoke a new quota limit. See WTO (1995).

⁶⁰ US producers only sell synthetic fabric bras rather than cotton bras and have long since shifted bra assembly to Mexico and Central America.

⁶¹ The fear was a central issue in the 2004 South Carolina Republican senatorial primary. See *The Wall Street Journal*, May 18, 2004, A1.

⁶² In 2002, China had a trade deficit in textile products totaling \$2 billion and a trade surplus in clothing products of nearly \$41 billion. Based on *China Statistical Yearbook* (2003).

⁶³ The European textile lobbying group, the International Association of Users of Artificial and Synthetic Filament Yarns and Natural Silk (AIUFFAS), wants the European Union to impose this WTO safeguard mechanism (Paragraph 241) against Chinese fabric and fiber imports. See "European Group to Submit First China Textile Safeguard Petition," *Inside US Trade*, January 28, 2004. Also see Knappe (2003).

⁶⁴ See "Textile In The News," ATMI press release, March 6, 2002; "Tangled Up In Textiles," *The Economist*, March 28, 2002; and Kristi Ellis, "US Reviews China Economy," *Women's Wear Daily*, June 8, 2004. Since January 2001, the US textile and clothing industry combined lost 344,000 jobs. The US textile and clothing industry is the largest beneficiary of Trade Adjustment Assistance (TAA), receiving about 20 percent of the total. See Krantz, Di Natale, and Krolik (2004).

⁶⁵ The Chinese textile and clothing sector has over 21,000 firms and employs 7.9 million workers, accounting for nearly 15 percent of total Chinese industrial employment. See USITC (2004a). When Chinese workers lose their jobs, they get little if any assistance from the government.

⁶⁶ While US textile and clothing jobs declined by 35 and 50 percent, respectively, from 1980 to 2000, output per worker increased by 111 and 115 percent, respectively. See Ikenon (2003a).

⁶⁷ See Gereffi (2004). Hourly wages for Mexico also include fringe benefits (USITC 2004a).

⁶⁸ This is the average combined hourly wage for US textile and clothing industries, which includes benefits (see appendix table 3 for the underlying data). Based on US Bureau of Labor Statistics (BLS) *Textile, Apparel and Furnishing Occupations* (2003) and ATMI *Economic and Trade Data* (2003).

⁶⁹ As an example, a study by McKinsey concluded that China could account for half of the world's clothing exports by 2008. Preparing for the end of MFA quotas, US clothing manufacturer Liz Claiborne will increase China's share of overseas sourcing from about 15 to 50 percent. See Richard McGregor and Alexandra Harney, "China Gets Set to Clothe America When Quotas End," *Financial Times*, July 19, 2004.

⁷⁰ See Krantz, Di Natale, and Krolik (2004); World Bank Press Review, April 29, 2004. US production of textiles contracted in real terms each year from 2000 to 2003, while US clothing production declined each year from 1997 to 2003. See also Gereffi (1999); Nathan Associates (2002).

⁷¹ The WTO estimates that after MFA ends, China will account for more than half of the global textile and clothing market. See Nordas (2004).

⁷² In March 2004, sub-Saharan Africa joined the Istanbul Declaration to extend the MFA deadline to December 2007. However, Chiedu Osakwe, the WTO director of textiles, claims the Istanbul Declaration has no status in WTO negotiations. Based on Osakwe's speech at the Washington International Trade Association (WITA) sponsored event, "Textile and Clothing Quotas: The End Is Near or Is It?" April 28, 2004. See "Major European Textile and clothing Associations Agree to the Istanbul Declaration," ITKIB Association press release, March 12, 2004; UNIDO *United Nations International Yearbook of Industrial Statistics* (2003); and Rugaber (2004).

⁷³ USITC (2004a). In terms of quality, China is fast approaching the level of Korea and Taiwan.

⁷⁴ Shipping times from China to the US west coast average 12 to 18 days, while shipping times from Southeast Asian countries to the United States average about 45 days. See USITC (2004a).

⁷⁵ Since 1998, the Chinese government provided about \$5.6 billion in grants and loans to restructure the domestic textile and clothing industry, it opened large garment manufacturing parks, and it closed inefficient textile and clothing SOEs. As a result, the textile and clothing industry collectively shed about 1.5 million jobs, even as many small-scale clothing companies were launched and began to thrive. In addition, the Chinese textile and clothing industry benefits from foreign direct investment (FDI), roughly 80 percent from Taiwan and Hong Kong. Foreign textile and clothing companies generated \$30 billion in sales and \$1.3 billion in profit in 2000. See CITA (2003).

⁷⁶ Including fringe benefits, the average US clothing hourly wage is \$9.70, the average US textile hourly wage is \$10.08, and the combined average hourly wage for US textile and clothing is \$9.89.

⁷⁷ Using annual sales divided by the workforce as a very rough measure of productivity, the US textile and clothing industry generates about \$133,661 sales per employee. By comparison, at the market exchange rate of RMB8.28 to \$1.00, the Chinese textile and clothing industry generates about \$15,590 sales per employee. On these figures, US textile and clothing workers are about 8.6 times more productive than Chinese workers (see appendix table 3 for the underlying data).

⁷⁸ See Abernathy (2004). As long as Chinese clothing factories can draw on the vast rural labor pool, they will easily remain competitive with plants in India, Bangladesh, Pakistan, and similar countries. Chinese factories have the advantage of better infrastructure and faster delivery.

⁷⁹ Leading US textile lobbying groups hope to mitigate the perceived threat of Chinese clothing exports. While US textile lobbyists may urge US Congress to pass a bill that guarantees US companies a fixed share of US textile and clothing markets, the Bush administration seems less receptive to US textile industry demands. See Edward Alden, "Too Little too Late for US Garment Industry," *Financial Times*, July 20, 2004.

⁸⁰ In June 2004, for example, US socks producers requested WTO safeguards against Chinese socks exports. See Neil King Jr., "US Sock Makers Petition Bush to Halt Wave of Chinese Imports," *The Wall Street Journal*, June 29, 2004, B7.

⁸¹ In anticipation of these safeguards, some leading US clothing retailers have suggested China might adopt an internal quota system in response to the end of MFA. See Scott Malone and Kristi Ellis, "Importers Expect Some Barriers to China Imports in 2005," *Women's Wear Daily*, May 14, 2002. China is also considering another option, known as "plan B" of the Istanbul Declaration, which seeks to maintain existing import quotas until 2008. Under "plan B," China would agree to continuing quotas on textile and clothing, but with an annual increase of 20 to 25 percent. See Neil King Jr., "US Sock Makers Petition Bush to Halt Wave of Chinese Imports," *The Wall Street Journal*, June 29, 2004, B7; also see "US Silent on China Quota Deal," *Knitting International*, August 19, 2004.

⁸² Central American clothing producers are gearing up for the perceived tsunami of cheap Chinese apparel exports to the United States by taking advantage of their geographical proximity to the United States, betting that speed will win out over price. See "As US Quotas Fall, Latin Pants Makers Seek Leg Up on Asia," *The Wall Street Journal*, June 16, 2004.

⁸³ To be eligible, a worker must prove job displacement, earnings loss, and a minimum time of employment in his previous job (e.g., two years). Average annual payments would be capped (e.g., \$10,000 annually plus health benefits for up to two years). Economists Robert E. Litan and Lori G. Kletzer (2001) estimate that a wage insurance program for the entire economy at current levels of worker displacement would cost about \$5 billion per year. See also Steve Lohr, "Debate Over Exporting Jobs Raises Questions on Policies," *The New York Times*, February 23, 2004.

⁸⁴ During 1995–2003, China was subject to 254 antidumping (AD) cases under the WTO, accounting for about 17 percent of all WTO cases. Based on WTO (2004e).

⁸⁵ Based on data from China Ministry of Commerce, Bureau of Fair Trade for Import and Export (2004). Since 2002, the United States and the European Union filed 96 AD cases against China. During 1995–2001, there were 255 AD investigations against China, of which 27 percent were initiated by European Union and United States, and 36 percent were initiated by India, South Africa, Argentina, and Brazil. See Mao Yingchun, op-editorial "Status Problem Hampers Trade," *China Daily*, June 11, 2004; also see Charles Hutzler, "China: Trade-Status Battle Heats Up," *The Asian Wall Street Journal*, June 24, 2004, A5; and Yin (2003).

⁸⁶ "China Accuses Corning of 'Dumping,'" *The Wall Street Journal*, June 17, 2004.

⁸⁷ For further analysis of US DOC methodology and US AD laws, see Lindsey and Ikenson (2001).

⁸⁸ In the recent furniture AD case, the US DOC ignored evidence that some Chinese furniture companies operate on market terms without government interference. Instead, all Chinese firms were given a blanket NME status. Like the furniture AD case, the DOC used the NME designation to impose duties between 49 percent and 112 percent on more than \$1 billion of Chinese shrimp imports. See Edward Alden, "US Puts Tariffs on China Shrimps," *Financial Times*, July 6, 2004; also see "Shrimp Wars," *The Economist*, July 8, 2004. See Charles Hutzler, "China: Trade-Status Battle Heats Up," *The Asian Wall Street Journal*, June 24, 2004, A5.

⁸⁹ Since 1984, the US DOC has excluded NMEs from CVD investigations, because subsidies were seen as part and parcel of the distortions inherent in state-run economies. However, in January 2004, Phil English (R-PA) and Artur Davis (D-AL) introduced an amendment that would allow the US DOC to hear CVD cases against NMEs. See "An Examination of Commerce's Policy of Not Applying US Countervailing Duty Laws to NMEs, Particularly China: Time for Change," Stewart & Stewart Submission to the US-China Economic and Security Review Commission (USCC), February 26, 2004. Also see USCC (2004) and US DOC (2004).

⁹⁰ US DOC determination of NME status is not subject to judicial review. See Laroski Jr. (1999).

⁹¹ The statute defines an NME country as "any foreign country that . . . does not operate on market principles of cost or pricing structures, so that sales of merchandise in such country do not reflect the fair value of the merchandise." See US Tariff Act of 1930, Title 19, Chapter 4 (18) (b), available at http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=browse_usc&docid=Cite:+19USC1677 (accessed June 2004).

⁹² See USTR (2004a) and Evans (2004). During the April 21, 2004, US-China Joint Commission on Commerce and Trade (JCCT) meeting between the Chinese Vice Premier Wu Yi and

senior US trade officials, a tentative agreement was reached to consider China for "market" economy status for future AD investigations.

⁹³ IMF Article 8 stipulates that "no member shall . . . impose restrictions on the making of payments and transfers for current international transactions." See IMF Article 8—General Obligations of Members, available at www.imf.org/external/pubs/ft/aa/aa08.htm (accessed June 2004).

⁹⁴ US Deputy Assistant Treasury Secretary for Africa, Middle East, and Asia David Loevinger, for example, noted that even the United States has restrictions on FDI that prevent it from fully meeting the Fund's capital account convertibility standards. See his remarks at the JCCT hearing (US DOC 2004).

⁹⁵ Chinese academic studies estimate that in 2001, 85 percent of Chinese companies based wages paid to workers on "voluntary negotiations." Zhang Jin, "Report Supports Market Status," *China Daily*, June 9, 2004.

⁹⁶ So far, China has received MES from Egypt, India, Malaysia, Pakistan, South Africa, and Thailand. As a precursor to free trade agreement (FTA) negotiations with China, Australia will initiate AD cases based on costs incurred within China rather than use "surrogate country" costs or prices. Brazil has agreed to pursue a fast-track MES study for China. See Yin (2003); also see New Zealand government press release, "New Zealand and China to Work Towards FTA," April 14, 2004; and Australian government, Department of Foreign Affairs and Trade press release, "Australia and China Fast Track FTA Study," April 28, 2004.

⁹⁷ While the European Union does not exactly follow the NME methodology used by the United States, the European Union does apply a "third country market" (TCM) designation in Chinese AD cases, which amounts to about the same thing. During July 2003–December 2003, the average EU AD duty (about 46 percent), based on the TCM methodology, was lower than the average US AD duty (about 94 percent). See WTO (2004c, 2004d) and EU Council (1994).

⁹⁸ See Tobias Buck and Mure Dickie, "Europe to Snub China on Status of Economy," *Financial Times*, June 28, 2004.

⁹⁹ US furniture producers' share of the US market declined from 60 percent in 2000 to 49 percent in 2002, while the Chinese share of the US market increased from 19 percent in 2002 to 28 percent in 2003. These figures illustrate the period under review for the material injury finding by the USITC (2004b). See also "Chinese Furniture Faces US Tariffs," *The Wall Street Journal*, June 17, 2004, A2.

¹⁰⁰ See the previous section on nonmarket economy status.

¹⁰¹ The Continued Dumping and Subsidy Offset Act (CDSOA), widely known as the Byrd Amendment, mandates distribution of AD duties and CVD to companies that support the relevant petitions. To date, the US government has paid more than \$700 million to US companies. In January 2003, the WTO Appellate Body determined the Byrd Amendment violated WTO rules and distorts trade. In March 2004, the US Congressional Budget Office reported that the Byrd Amendment harms the US economy. See Congressional Budget Office (2004a).

¹⁰² The Chinese government also made a preliminary AD determination against imports of US optical-fiber products by Corning, Inc. However, in 2003 just 6 percent of Corning's \$760 million global sales were to China. See "China Accuses Corning of 'Dumping,'" *The Wall Street Journal*, June 17, 2004.

¹⁰³ The difference between WBF and hydrazine hydrate and optical fiber cases illustrates another point: The United States often pursues trade remedies to protect manufacturing jobs, while China pursues trade remedies to encourage its nascent high-tech firms.

¹⁰⁴ Based on mid-2003 US consumption figures. See USITC (2004b).

¹⁰⁵ Domestic demand is expected to increase between 10 to 15 percent annually over the next few years as home ownership grows. In 2003, Chinese furniture sales increased by a stunning 43 percent.

¹⁰⁶ Under the WTO Accession Agreement, China reduced import tariffs on furniture from 22 to 7.5 percent in 2003, and all tariffs will be eliminated by January 2005.

¹⁰⁷ To compete in the Chinese domestic market, IKEA lowered prices by 10 percent in 2003 and increased sales by 35 percent. See "IKEA Outlines Mainland Expansion Plan," *Xinhua News Agency*, April 23, 2004.

¹⁰⁸ Overall, Chinese furniture costs are about 10 to 40 percent less than US costs. See Cao, Hansen, and Xu (2002).

¹⁰⁹ According to the USITC (2004b), Chinese production increased from 1.8 million pieces of furniture and related products in 2000 to 4.5 million in 2002.

¹¹⁰ See CSIL (2003) and "Research Report on Furniture Industry and Market of China," All China Marketing Research Co. Ltd., 2001.

¹¹¹ See USITC (2004b). The value of Chinese WBF exports to the United States accounted for 95 percent of total Chinese WBF exports.

¹¹² Hong Kong purchased 13 percent and the European Union purchased 12 percent of Chinese furniture exports. While US imports from Canada (second largest US furniture supplier) and Mexico (fourth largest US furniture supplier) fell by \$91 million during 2000-03, US imports from China increased by \$804 million in the same period. Meanwhile, total US furniture exports declined from \$105 million in 2000 to \$78 million in 2003 (table 12). See *China National Furniture Association Annual Report 2003*.

¹¹³ Chinese furniture imports from the United States are small, about \$1 million in 2002.

¹¹⁴ See David Lague, "Felling Asia's Forests: China's Insatiable Appetite for Timber," *Far Eastern Economic Review*, December 25, 2003. See also Cossalter and Pye-Smith (2003).

¹¹⁵ In 2003, the United States exported about \$395 million of office furniture and imported about \$2.3 billion. Based on US DOC data on "Household and Office Furniture" exports and imports, available at www.ita.doc.gov/td/ocg/furniture.htm (accessed May 2004).

¹¹⁶ See Elizabeth Wine, "US Furniture Makers To Risk Lifting Prices," *Financial Times*, May 10, 2004.

¹¹⁷ Foreign concerns about the Chinese internal tax system were expressed in the October 2001 WTO Working Party Report on China's WTO Accession; see paragraphs 19 to 21 and 167.

¹¹⁸ According to the USTR, the VAT payments on imported chips cost US chipmakers about \$344 million in 2003. See Neil King

Jr., "US Fights China's Tax on Imported Chips," *The Asian Wall Street Journal*, March 19, 2004, A4.

¹¹⁹ GATT Article 3 states that each WTO member must provide foreign producers the same treatment given to domestic firms with respect to internal taxation and regulation. See "WTO Analytical Index: General Agreement on Tariffs and Trade 1994," available at www.wto.org/english/res_e/booksp_e/analytic_index_e/gatt1994_02_e.htm#articleIIIa (accessed April 2004).

¹²⁰ Japan threatened to file its own WTO complaint against China if it is not allowed to participate in talks. Highlighting the tangled national interests, some Japanese firms are lukewarm toward filing a WTO complaint, since they benefit from China's differential tax treatment. See David Philling, "Tokyo May Complain To WTO Over China Chips Tax," *Financial Times*, April 4, 2004.

¹²¹ See USTR Press Release, "US and China Resolve WTO Dispute Regarding China's Tax on Semiconductors," July 8, 2004.

¹²² Integrated circuits are an advanced version of semiconductors. The Chinese IC industry is expected to realize about \$12 billion in sales by 2013.

¹²³ In an effort to make this recommendation more palatable to China, the SIA points at the bright side of Chinese experience under the WTO's Information Technology Agreement (ITA, signed by WTO members in 1997). The ITA eliminated tariffs on many IT products; after China acceded to the WTO and the ITA in 2001, the Chinese smuggling rate on semiconductors declined.

¹²⁴ In 1997, the US semiconductor industry represented 33 percent of the world market and the Asia-Pacific region represented 22 percent. By 2001, Asia-Pacific countries, including China, represented close to 30 percent of the world market, while the United States dropped to about 25 percent. See Hatano (2003).

¹²⁵ China already has the world's largest mobile phone market and second largest personal computer market. China produces over 7 percent of global electronics equipment, and this volume is estimated to rise 11 percent annually. See Chao and Sussman (2003).

¹²⁶ Similarly, Chinese IC exports to the United States increased by 628 percent from \$59 million in 1995 to \$431 million in 2002, while US exports to China increased by 880 percent from \$165 million in 1995 to \$1.6 billion in 2002. Based on data from US DOC, International Trade Administration, Trade Compliance Center.

¹²⁷ Currently China adds only about 5 percent of the value of chips sold. For example, Intel's plant in Shanghai does not make chips but rather tests and assembles chips from silicon wafers made in US plants. See Andres Higgins, "Power and Peril: America's Supremacy and Its Limits," *The Wall Street Journal*, January 30, 2004.

¹²⁸ Special investment zones include five special economic zones, 32 economic and technological development zones, 52 high-technology zones, 260 coastal open-city zones, and various technology zones in major cities (e.g., Shanghai Pudong New Area and Beijing Zhongguancun Science and Technology Zone).

¹²⁹ Subsequently bought by Semiconductor Manufacturing International Corporation (SMIC) in January 2004.

¹³⁰ Chao and Sussman (2003). Similar tax incentives are given in the domestic car industry (see appendix table 4). See Richard

McGregor, "China Acts to Shut Out Car Entrants," *Financial Times*, June 2, 2004.

¹³¹ The WTO Appellate Body determined that shochu and vodka are like products and that preferential taxation of domestic shochu discriminated against imported vodka, contravening GATT Article 3 (2). See WTO (1996).

¹³² According to Larry Sussman (Chao and Sussman 2003), a Chinese tax expert at O'Melveny & Myers, the Chinese VAT rebate might be distinguished from the facts in previous WTO panel decisions. See Mure Dickie, "China Mulls Response to US Chip Tax Complaints," *Financial Times*, April 1, 2004.

¹³³ For WTO purposes, like semiconductors would be defined in terms of consumer willingness to substitute the imported semiconductor for a domestically manufactured one and the degree to which consumers perceive two semiconductors as functionally equivalent. See Hudec (2000).

¹³⁴ Such payments might be challenged under GATT Article 16 as domestic subsidies inconsistent with WTO rules—but then the challenger must show "adverse effects"—in other words, some degree of harm to its exports or domestic production. In its accession protocol, China waived several clauses in the SCM Code that provide flexibility to developing and transition economies. See Lardy (2002a, 89–91). However, the more rigorous standards applicable to developed countries and China have a much stronger bite when subsidized products are exported than when they are produced solely for the domestic market.

¹³⁵ South Korea is also developing a government-sponsored Wireless Internet Platform for Interoperability (WIPI) on new mobile phones. WIPI threatens to keep Qualcomm's BREW downloading software out of the market. See Judy Lee, "S. Korea Delays Mobile Standard Opposed By Qualcomm," *Reuters*, January 19, 2004.

¹³⁶ Edward Alden, "US and China Reach Deal on Trade Disputes" *Financial Times*, April 21, 2004. See "US Wins Major Trade Concessions From China At Senior Meeting," *Inside US Trade*, April 23, 2004.

¹³⁷ See US DOC's ruling in US Federal Register (2004). In response to the preliminary DOC ruling, the Chinese economic counselor, Tian Jun, noted that the Chinese government had not intervened in the Chinese TV market since 1984. See Jun (2004).

¹³⁸ The four leading Chinese CTV makers are Prima, Konka, TCL, and Changhong. Changhong faces the highest AD duties, 26.37 percent. In November, TCL merged with Thomson, a French maker of RCA brand TVs, creating the world's largest TV manufacturer with \$3.5 billion in annual sales. See "US Places Duties on TVs from China," *Los Angeles Times*, Home Edition, May 15, 2004, C3; also see US DOC, "Amended Final Determination of Sales at less than Fair Value: Certain Color Television Receivers from China," May 2004.

¹³⁹ The other producers did not submit cost information to the US DOC, so AD duties were based on "best information available."

¹⁴⁰ The WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), based on the Paris Convention for the Protection of Industrial Property (Paris Convention, 1883) and the Berne Convention for the Protection of Literary and Artistic Works (Berne Convention, 1886), is the minimum IPR standard for WTO members. The Madrid Agreement, based on the Madrid Agreement Concerning the International Registra-

tion of Marks (1891), updated by the Protocol Relating to the Madrid Agreement (1996), provides for international registration of trademarks.

¹⁴¹ According to the International Intellectual Property Alliance (IIPA), Chinese piracy accounted for about 25 percent of worldwide total lost sales by US firms in 2003. See IIPA (2004).

¹⁴² For example, in June 2004, US Commerce Secretary Donald Evans raised concerns about a Chinese car company, Chery, which pirated one of General Motor's (GM) designs. GM's China operations will earn an estimated \$800 million in 2004, but piracy is still a concern. See Richard McGregor, "Capacity Shortage Curbs GM Sales in China," *Financial Times*, June 23, 2004.

¹⁴³ According to economist Keith Maskus (2000), such estimates are probably exaggerated because they assume that current sales levels would not fall if prices rose as a result of eliminating piracy. See also IIPA (2003)

¹⁴⁴ Economist T.N. Srinivasan (2000) points out that patents and copyrights are essentially monopoly rights that allow IPR owners to charge higher prices. Srinivasan argues that the TRIPS agreement distorts trade by extending the system of monopoly rights to production in developing countries and that industrialized countries are the main beneficiaries. Maskus (2000) estimates that in 1995, rent transfers from global patent rights totaled about \$8.3 billion to six industrialized countries, of which the United States received the overwhelming share, some \$5.8 billion.

¹⁴⁵ Maskus (2000) estimates that stronger IPRs could increase Chinese total factor productivity by about 0.25 percentage points per year. However, one of his regression equations suggests that China needs to significantly increase its per capita income before patent rights can be enforced.

¹⁴⁶ China is ranked among the top ten countries worldwide in absolute level of R&D expenditure. See Schaaper (2004).

¹⁴⁷ Measured by patents applied for or granted by the US Patent and Trademark Office (USPTO) and European Patent Office (EPO). During 1995–2003, China accounted for about 0.3 percent of patent grants and applications. See OECD (2004).

¹⁴⁸ On the other hand, some economists like Srinivasan (2000) argue there is little evidence that patent protection spurs innovation.

¹⁴⁹ A growing area of concern is pharmaceutical piracy. In July 2004, China overturned Pfizer Inc.'s Chinese patent for Viagra. While Pfizer would not disclose sales in China, Viagra worldwide sales increased by 8 percent in 2003 to reach \$1.9 billion. See "China Voids Pfizer's Viagra Patent," *The Wall Street Journal*, July 8, 2004.

¹⁵⁰ It is estimated that 80 percent of all pirated VCDs, CDs, CD-ROMs, and DVDs are sold to satisfy growing domestic demand. See IIPA (2003).

¹⁵¹ Senator Max Baucus (D-MT), a ranking member of the Senate Finance Committee, noted the successful outcome of the WTO semiconductor case suggests the United States should initiate more WTO cases. Baucus targeted IPR as the next priority for WTO trade cases. Based on Baucus' remarks at the Global Business Dialogue, "Democrats and FTAs," July 13, 2004.

¹⁵² In 1988, Clyde Prestowitz published the classic book on the Japanese "threat" titled *Trading Places*. See also Bergsten and Noland (2001).

¹⁵³ See Bergsten (1998).

¹⁵⁴ The ratio of Chinese imports to GDP, known as the import ratio, is also significantly higher than Japan. In 2003, China's import ratio reached 30 percent while Japan's ratio was only 8 percent. See Lardy (2003).

¹⁵⁵ The large stock of FDI in China provides a degree of pro-Chinese support when trade disputes loom, much as in the case of US-EU relations where large FDI in both directions serves to moderate trade frictions.

¹⁵⁶ As long as FDI enters China, a zero "basic balance" means that China will incur a trade deficit.

¹⁵⁷ Under WTO regulations, by December 11, 2004, China will give all foreign-owned joint venture companies trading rights. China also ensured a market for US exports of biotech soybeans and promised to welcome US exports of wheat, cotton, corn, and other agricultural products. See "US Gets Array of Concessions from China," *Washington Trade Daily* 13, no. 81, April 22, 2004. See also Edward Alden, "US and China Reach Deal on Trade Disputes," *Financial Times*, April 21, 2004.

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Appendix A: Safeguard and antidumping remedies against textile and clothing imports

Several remedies are available if the US government (and other WTO members) decide that rapidly rising textile and clothing imports from China are too painful for the domestic industry.

Safeguard remedies

Under the WTO, the US government can apply the China-specific Textile Safeguard (Paragraph 238, which lasts until 2008) to limit the *growth* of Chinese textile and clothing exports to the United States to 7.5 percent of total exports during the 12-month period terminating two months before the consultation requests were made. The process of applying the Textile Safeguard is very easy. Once a WTO member “believes” that imports of textile and clothing from China cause “market disruption,” the growth cap is applied immediately and lasts for a maximum one-year period. Optional consultations begin after the cap is applied. The relatively effortless process explains why the WTO Textile Safeguard was used in the brassiere case.

Under the WTO, the US government can apply the Transitional Product Safeguard (Paragraph 241, which lasts until 2013) to restrict Chinese textile and clothing imports, with no time limit. Unlike the WTO Textile Safeguard, the Transitional Product Safeguard (TPS) is not automatic. The TPS requires a US International Trade Commission (USITC) investigation and public hearing to determine whether there is “material injury or threat of material injury to the domestic industry.” By comparison with the Textile Safeguard, this is a lengthy process.

Under regular safeguard rules in domestic law, the US government can apply a quota or tariff under Sections 421 and 422 of the Trade Act of 1974, to limit Chinese textile and clothing exports, if Chinese exports cause “market disruption” or “threaten to cause, a significant diversion of trade” into the domestic US market. Sections 421 and 422 were added to the Trade Act of 1974 in 2000 (as modifications to Section 406), when Congress ratified per-

manent normal trade relations (PNTR) with China. The quota or tariff limit requires an ITC hearing and has an unlimited duration at the discretion of the US president.

Under regular safeguard rules in domestic law, the US government can apply an “escape clause” tariff under Section 201 of the Trade Act of 1974, to limit Chinese textile and clothing exports upon finding that imports caused “serious injury” to domestic producers. Unlike other safeguards, Section 201 involves global safeguard investigations (except for specific countries with which the United States has free trade agreements, such as the North American Free Trade Agreement (NAFTA) partners, provided they are excluded from the injury investigations). The tariff limit lasts for up to four years, with the possibility of extension for a maximum of eight years at the discretion of the US president.

Antidumping remedies

Under China’s accession protocol to the WTO, China can be considered a nonmarket economy (NME) by the United States and other WTO members, which allows the US Department of Commerce (US DOC) to ignore domestic Chinese prices and costs when determining antidumping duties on Chinese exports. The NME status expires in 2015.

Under US domestic law, antidumping (AD) duty calculations, made by the US DOC, embody several arbitrary calculations. These can be slanted in favor of, or against, an AD target. The presence of “material injury” to the domestic industry (a low threshold of trade impact) is determined by the USITC. The AD duty is revoked after a fifth year review unless the US DOC and USITC determine that a revocation would lead to a recurrence of dumping and injury.

Sources: Lardy (2002b); Rumbaugh and Blancher (2004); Ian-chovichina and Martin (2003); Ikenson (2003b); WTO (2001); Finger (1993); and Lindsey and Ikenson (2002).

Appendix B: Short history of US-Japan trade frictions

Textiles and apparel

In January 1957, President Dwight Eisenhower established a five-year voluntary restraint agreement (VRA) to limit Japanese cotton textile exports. By July 1961, President John F. Kennedy evolved the textile VRA into the Short-term Arrangement on International Trade in Cotton Textiles (STA), signed by 19 countries. In October 1962, the STA became the Long-Term Arrangement (LTA). President Lyndon Johnson renewed the LTA; and in 1974, President Richard Nixon widened its scope to become the Multi-Fiber Arrangement (MFA). Japanese textile and clothing exports dropped significantly after the VRA and by the 1970s, other emerging countries, such as Hong Kong, India and Pakistan, replaced Japan as leading textile and clothing exporters.

Steel

As Japan shifted from textile and clothing exports to steel exports, the United States imposed restrictions. From January 1969 to December 1974, the United States established VRAs with Japan and the European Community (EC) to limit carbon steel imports. The United States periodically imposed VRAs, antidumping (AD) duties and safeguard measures (Section 201) against Japanese and other steel exporters throughout the 1980s, 1990s, and 2000s.

Autos

As Japan strengthened its presence as a leading auto exporter, the United States restricted Japanese auto exports. From April 1981 to March 1985, the United States imposed auto VRAs against Japanese auto exports, followed by Japanese export restraints throughout the 1980s until the early 1990s. Bilateral negotiations resulted in a Japanese agreement to purchase US auto parts between 1990 and 1995.

Motorcycles

When Japanese heavyweight motorcycle exports (mainly Kawasaki) captured a growing share of the US market, the United States imposed quotas on Japanese motorcycle imports between 1983 and 1988 to protect Harley Davidson.

Color TV receivers

To limit Japanese, as well as Korean and Taiwanese, exports of color TV receivers, President Jimmy

Carter established an Orderly Marketing Agreement during 1977–82.

Semiconductors

From September 1986 to July 1991, Japan agreed, at US insistence, to restrict its exports of semiconductors, mainly dynamic random access memory (DRAM) chips. The US-Japan Semiconductor Agreement established a price floor, or “fair market value,” on certain semiconductors and committed Japan to purchase more US semiconductors.

Machine tools

From January 1987 to December 1991, the United States limited imports of Japanese machine tool exports.

Other trade remedies

- In 1989, the United States launched the Super 301 process of the 1974 Trade Act (as amended by the 1988 Omnibus Trade and Competitiveness Act) and the Structural Impediments Initiative (SII) with Japan. Super 301 allowed the US Trade Representative (USTR) to target Japanese practices that limit US exports and impose trade sanctions against Japanese exports deemed to violate trade agreements (notably the GATT and WTO). SII provided a forum for the United States and Japan to discuss structural problems in both countries that impede trade and balance of payments adjustment.
- From 1984 to 1989, USTR Bill Brock led the US Market Opening Sector Specific (MOSS) talks with Japan. MOSS promoted deregulation and openness in the Japanese telecommunications, pharmaceuticals, electronics, forestry, and medical equipment sectors.
- Between the late 1960s and 1988, the United States and Japan had numerous citrus and beef disputes, which gradually led to the expansion of Japanese quota limits on citrus and beef trade. Other disputes on agricultural market access are still unresolved.

Source: Hufbauer, Berliner, and Elliott (1986).

Appendix table 1: US congressional bills concerning Chinese trade practices

Bill number	Date introduced	Issues addressed	Description
H.R. 851 Cong. Slaughter (D-NY)	Feb. 2003	Job loss, environment, and workers rights	No comment on revaluation. Proposes a "Trade Impact Review Commission" to assess the impact of China's accession to WTO on US jobs.
S. 1586 Sen. Schumer (D-NY)	Sept. 2003	Currency, trade deficit, and job loss	States RMB is undervalued by 15 to 40 percent. Authorizes tariff of 27.5 percent on US imports from China if negotiations to revalue are unsuccessful.
S. Res. 219 Sen. Graham (R-SC)	Sept. 2003	Currency, trade deficit, and job loss	Recommends a floating, market- based exchange rate. Asks China to stop manipulating its currency and instead fulfill its commitments to the WTO and IMF.
H.R. 3058 Cong. English (R-PA)	Sept. 2003	Currency and trade deficit	Recommends RMB revaluation. Requires US treasury secretary to analyze Chinese exchange rate policies and impose tariffs on Chinese products to offset the effect of "currency manipulation."
S. 1592 S. Lieberman (D-CT)	Sept. 2003	Currency, trade deficit, and job loss	States RMB undervalued by 15 to 40 percent. Requires US International Trade Commission to determine the scope of currency manipulation and trade barriers (e.g., VAT practices). If US and Chinese governments cannot reach an agreement, then recommends safeguards under Sections 301 and 406 of the Trade Act of 1974.
H. Con. Res. 285 Cong. Manzullo (R-IL)	Sept. 2003	Currency, trade deficit, and job loss	States undervalued RMB is responsible for 40 percent of the decline in US manufacturing jobs and production. Cites IMF recommendation that China adopt a floating exchange rate. Recommends Section 301 case against China.
H.R. 3228 Cong. Sanders (I-VT)	Oct. 2003	Trade	No comment on revaluation. Recommends withdrawal of normal trade relations (i.e., most-favored- nation treatment) for imports from China.

Appendix table 1: US congressional bills concerning Chinese trade practices (continued)

Bill number	Date introduced	Issues addressed	Description
H.R. 3269 Cong. Dingell (D-MI)	Oct. 2003	Currency	Asks the US secretary of commerce to assess whether currency manipulation affects the US manufacturing sector and evaluate whether reduced Chinese accumulation of US dollars would affect US monetary policy.
S. 1758 Sen. Voinovich (R-OH)	Oct. 2003	Currency and trade deficit	States RMB is undervalued by 40 percent. Requires US Treasury Secretary to analyze Chinese exchange rate policies and impose additional tariffs on Chinese products to offset "currency manipulation." Recommends retaliatory action under Sections 301 through 309 of the Trade Act of 1974.
H.R. 3364 Cong. Myrick (R-NC)	Oct. 2003	Currency and job loss	States exchange rate is undervalued 15 to 40 percent. If the United States cannot negotiate a revalued RMB, proposes 27.5 tariff on some or all Chinese products.
H. Res. 414 Cong. English (R-PA)	Oct. 2003	Currency and job loss	Recommends a floating exchange rate "determined by the market." Asks China to fulfill its international trade agreements, support the US manufacturing sector, and adopt free-market financial sector reforms.
S. Res. 262 Sen. Snowe (R-ME)	Nov. 2003	Currency and job loss	Recommends a floating, market-based RMB exchange rate. Asks US Treasury to expedite negotiations for a market-based currency reform in China.
H.R. 3716 Cong. English (R-PA)	Jan. 2004	Nonmarket economies	Recommends an amendment to allow the US Department of Commerce to hear countervailing duty cases against "nonmarket" economies such as China

Source: Thomas Legislative Information, Library of Congress, available at thomas.loc.gov/home/thomas.html (accessed March 2004).

Appendix table 2: Official and unofficial proposals for renminbi revaluation

Official/economist	Extent of revaluation	Reason
John Snow, US Secretary of the Treasury	Floating exchange rate, liberalize capital controls. No target specified for RMB.	Urges a floating RMB to boost US exports to China and reduce global macroeconomic imbalances.
Alan Greenspan, Chairman of the Federal Reserve	Revaluation. No target specified for RMB.	Currency intervention causes inflation and creates internal and external imbalances. China needs to resolve nonperforming loans problem before floating the RMB. To restore internal balance, China should revalue RMB.
Kenneth Rogoff and Horst Kohler, IMF	“Flexible” exchange rate rather than floating rate; maintain capital controls. Former IMF Chief Economist Kenneth Rogoff cautioned against a large appreciation.	Given the weak Chinese banking system, IMF recommends a “flexible” but not a floating exchange rate. Does not specify the degree or timing for revaluation.
US-China Economic and Security Review Commission	Substantial appreciation of RMB between 15 and 40 percent based on trade-weighted basket of currencies.	Manipulation of RMB exacerbates US trade deficit with China and hurts the US manufacturing sector in particular.
Morris Goldstein and Nicholas Lardy, Institute for International Economics	15 to 25 percent, followed by wider currency band and switch to three-currency basket peg.	China and the global economy cannot wait for liberalized capital controls before RMB revaluation. China should not adopt a floating exchange rate because of its weak financial system.
Ernest H. Preeg, Manufacturers Alliance (MAPI)	Immediate 20 percent revaluation, a new peg with a wider band and liberalized capital controls.	Chinese “currency manipulation” violates IMF and WTO commitments, increases the US trade deficit, and harms US manufacturing and defense sectors.
Franklin J. Vargo, National Association of Manufacturers (NAM)	Revaluation of at least 20 percent.	Undervalued RMB enlarges US-China trade deficit and encourages neighboring Asian countries to continue pegging their currencies.

Appendix table 2: Official and unofficial proposals for renminbi revaluation (continued)

Official/economist	Extent of revaluation	Reason
A. Benassy-Quere et al., University of Paris	25 to 51 percent.	Undervalued RMB magnifies the extent of adjustment by the euro and other currencies.
Haruhiko Kuroda, special adviser to Japan's Prime Minister Junichiro Koizumi	Crawling peg of 7 to 10 percent per year until 40 percent appreciation reached; maintain capital controls.	Undervalued RMB creates external imbalance with the US, Japanese, and global economies.
Barry Eichengreen, UC Berkeley	5 to 10 percent, followed by managed float.	Countering inflationary pressure and domestic overheating requires only a modest appreciation rather than big- step revaluation.
Tom Gallagher, ISI Group	Against immediate revaluation.	A revalued RMB would give the Chinese government less money to buy US debt and drive down US Treasury bond prices, thereby increasing US interest rates.
Stephen Roach and Andy Xie, Morgan Stanley	Against revaluation.	China does not compete based on an undervalued currency. RMB did not contribute to the US-China bilateral trade deficit. Removing the RMB peg could destabilize world financial markets.
Robert Mundell, Columbia University	Against revaluation.	Appreciation would exacerbate non- performing loans problem, stifle economic growth, reduce foreign investment, cause deflation, and increase unemployment.
Robert McKinnon, Stanford University	Against revaluation.	RMB appreciation could cause serious deflation ending with a zero interest liquidity trap.

Sources: Snow (2004a, b); Greenspan (2004a, b); Julie Ziegler, "IMF Backs China in Debate on Yuan Peg," *Bloomberg News*, July 23, 2003; US-China Economic and Security Review Commission Report (2004); Nicholas Lardy and Morris Goldstein, "A Modest Proposal for China's Renminbi," *Financial Times*, August 26, 2003; Preeg (2003); Vargo (2003); Benassy-Quere et al. (2004); Haruhiko Kuroda, "How to Help the Renminbi Find Its Own Level," *Financial Times*, October 17, 2003; Eichengreen (2004); Jon D. Markman, "Who Wins if China Devalues Its Currency?" *MSN MoneyCentral*; Mundell (2004); McKinnon (2004); Roach (2003); and Xie (2003).

Appendix table 3: Comparison of employment and labor costs in textile and clothing industries, 2001

Textile and clothing industry	United States^a	China^b
Textile		
Average hourly earnings (in dollars)	10.08	0.88
Total employees	293,930	4,775,000
Total compensation (in billions of dollars) ^c	10.0	4.7
Total value of shipments (in billions of dollars)	45.7	73.1
Total labor costs as share of total sales	0.22	0.11
Clothing		
Average hourly earnings (in dollars)	9.70	0.88
Total employees	456,471	2,027,000
Total compensation (in billions of dollars) ^c	11.0	2.2
Total annual sales (in billions of dollars)	54.6	33.0
Total labor costs as share of total sales	0.20	0.10

a. Includes fringe benefits.

b. Chinese clothing hourly wages are assumed to be the same as average Chinese textile wages (includes fringe benefits). According to UNCTAD, in 1998, Chinese textile wages averaged about 62 cents per hour and Chinese clothing wages averaged about 43 cents per hour.

c. Calculated as total employees times average hourly earnings times 1,920 hours per year.

Sources: *US Annual Survey of Manufacturers* (2003); *China Statistical Yearbook* (2003); Gereffi (2003); UNCTAD, "Trade and Development Report: China's Accession to WTO," 2002; and Nordas (2004).

Appendix table 4: Chinese tax incentives

Type of tax	Eligibility requirements	Benefits
Domestic VAT	Domestic Chinese firm that produces qualified IC products between 2002 and 2010.	Only subject to effective 3 percent VAT rate (after rebate of 14 percent), compared with general 17 percent VAT.
	Foreign firm that invests about \$1 billion and/or produces IC with line width less than 0.25 microns.	Exempt from import-related VAT on IC production. The result is a 3 percent effective VAT when investor sells finished ICs in the domestic market, compared with the normal rate of 17 percent.
	Foreign investment generally.	Competition between local governments and investment zones may lead to subsidies approximately equal to the VAT.
Import VAT	Export finished product.	VAT on inputs (domestic or imported) rebated on exports (standard practice under WTO rules).
Business income tax	Foreign firms that invest in semiconductor production or other high-technology industries.	Pay central income tax at a rate reduced from 30 percent to below 15 percent for a holiday period. Usually waive or reduce local tax of 3 percent.
	Foreign firm with advanced technology production techniques and equipment, involved in projects encouraged by the Chinese government.	Technologically Advanced Enterprise Status: 5-year full exemption, 5-year 50 percent reduction in income tax rate to minimum rate of 7.5 percent and 3-year 50 percent reduction to minimum rate of 10 percent.
Withholding tax	Foreign company that imports qualified advanced technology.	Exempt from withholding tax on outbound royalties rather than regular 14.5 percent rate.
R&D	Foreign company that establishes R&D center, if R&D expenses increase by 10 percent or more in two consecutive years.	Deduct 150 percent of R&D expenses for business income tax purposes.
Import quotas	Import equipment and technology under China's "High and New Technology Products Catalog"	Imported components and software exempt from import quotas.

R&D = research and development

VAT = value added tax

IC = integrated circuit

Source: Chao and Sussman (2003).

Appendix table 5: USTR ratings for IPR violations (ranked from least punitive to most punitive)

USTR IPR rating	Definition	Applicable sanctions
Watch List	USTR monitors IPR policies in countries with some IPR violations	Not subject to automatic sanctions. Cannot be used to initiate trade action or dispute settlement process.
Priority Watch List	USTR monitors IPR policies in countries with serious IPR violations.	Not subject to automatic sanctions. Can be used to initiate trade action or dispute settlement process.
Priority Foreign Country	USTR initiates trade remedies against countries with the most serious IPR violations.	Subject to either automatic Section 301 investigation ^a or bilateral or WTO consultations. If negotiations fail, USTR must decide whether to apply trade sanctions within 18 months after initiation of investigation or 30 days after conclusion of dispute settlement procedures, whichever comes first (or 12 months after initiation of an investigation in all other cases).

a. Under Section 301 of the Trade Act of 1974, the US government can impose trade sanctions against foreign countries that maintain policies that violate or deny US rights or benefits under trade agreements, or are discriminatory and restrict US commerce.

USTR = United States Trade Representative
IPR = intellectual property rights

Source: US State Department, "US-China Intellectual Property Rights Glossary of Terms," (2004).

Appendix table 6: US trade policy measures to enforce IPR (ranked from least punitive to most punitive)

USTR process or monitoring status	Definition	Requirements	Sanctions process
Section 306 Monitoring of Foreign Compliance (US Trade Act of 1974)	USTR monitoring to expedite resolution of Section 301 investigation or dispute settlement proceedings.	Does not require "Priority Foreign Country" status.	USTR must self-initiate Section 301 investigations by May 30. Or USTR must make determinations within six to nine months in cases where no trade agreement is involved. Affirmative Section 306 determination of poor IPR enforcement leads to USTR authorization for Section 301 trade sanctions.
Special 301 Process (Omnibus Trade and Competitiveness Act of 1988)	USTR monitoring to expedite Section 301 trade sanctions. Warns potential investors that their IPRs are not likely to be protected.	Requires "Priority Foreign Country" status.	USTR must self-initiate Section 301 investigations by May 30. Or USTR must make determinations within six to nine months in cases where no trade agreement is involved. Affirmative Special 301 determination of poor IPR enforcement leads to automatic Section 301 trade sanctions.
Section 337 (Tariff Act of 1930)	USITC investigation of patent or registered trademark infringement.	Requires hearing before USITC.	USITC must establish target date for final determination within 45 days after investigation initiated. US president can reject or approve USITC determination within 60 days after he receives it. Affirmative Section 337 determination of poor IPR enforcement leads to any of the following trade actions: temporary exclusion order, cease-and-desist order with civil penalty of at least \$100,000, or seizure and forfeiture of articles.

Sources: US State Department, "US-China Intellectual Property Rights Glossary of Terms," (2004); USITC, "Understanding Investigations of Intellectual Property Infringement and Other Unfair Practices in Import Trade," (2004).

Appendix table 7: History of China's USTR IPR ratings

Date	USTR rating	Reason
Apr-89	Special 301 Priority Watch List.	Poor IPR enforcement.
Apr-91	Special 301 Priority Foreign Country (PFC). First time PFC applied to a country under Special 301 investigation.	No administrative protection for pharmaceutical IPRs and other chemicals.
Jan-92	Terminated Special 301 investigation and Section 301 case.	Established US-China Memorandum of Understanding (MOU).
Apr-92	Watch List.	Surveillance of performance under January 1992 MOU.
Nov-93	Priority Watch List.	Weak law enforcement against IPR infringement.
Jun-94	PFC, Special 301 investigation.	Weak law enforcement against IPR infringement and insufficient criminal penalties for counterfeiting.
Mar-95	Terminated Special 301 investigation and Section 301 case.	Established another US-China MOU.
Apr-95	Watch List.	Surveillance of performance under February 1995 MOU.
Apr-96	PFC, Special 301 investigation.	Unsatisfactory implementation of 1995 MOU and continued high rates of piracy.
Apr-98	Section 306 monitoring.	Weak administrative protection for pharmaceutical IPR and high rates of piracy of computer software.
Apr-99	Section 306 monitoring.	Ensure compliance with bilateral IPR agreements.
Apr-01	Section 306 monitoring.	Ensure compliance with bilateral IPR agreements.
2005 (exact date unknown)	Out-of-cycle review.	Requires further monitoring.

Source: US State Department, "Timeline of US and China IPR Developments" (2004).

Appendix table 8: Statistical relations between US manufactures employment, output, and trade

Equation 1

Dependent variable = Number of manufacturing workers (thousands)

Explanatory variables	Coefficient	t-value
Manufactured output (billions of 2003 dollars)	8.178	16.68
Time trend (per quarter)	-41.87	-16.96
Constant	5,638	7.74

Adjusted R-squared = 0.89
Number of observations = 56

Equation 2

Dependent variable = Quarterly changes in manufactured output (billions of current dollars)

Explanatory variables	Coefficient	t-value
Manufactures trade deficit (billions of current dollars)	0.243	8.23
Nonmanufactures GDP (billions of current dollars)	0.099	20.44
Constant	149	17.16

Adjusted R-squared = 0.89
Number of observations = 56

Note: The statistical equations follow the method reported in Hufbauer and Rosen (2000), updated to cover 1990–2003.

Sources: US Department of Commerce, Bureau of Economic Analysis (2004); US Department of Labor, Bureau of Labor Statistics (2004); and Hufbauer and Rosen (2000).

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