

International Economics Policy Briefs

American Access to China's Market: The Congressional Vote on PNTR

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Introduction

This year's biggest trade battle is the congressional vote over Permanent Normal Trading Relations (PNTR) with China. PNTR is the key US action required to ensure American access to China's market when China joins the World Trade Organization (WTO).

Much is at stake both in symbolic and practical terms. If opponents of normalized relations prevail, US firms will be denied the benefits negotiated by the US Government over 13 years. More broadly, the backlash camp will claim another impressive victory against globalization, after derailing fast track in 1997, frustrating plans for a Multilateral Agreement on Investment (MAI) in 1998, and disrupting the Seattle WTO ministerial in 1999. They could also delay the WTO aspirations of Taiwan, which is waiting in the wings to accede after China.¹ If proponents carry the day, Ameri-

¹ Importantly, with both China and Taiwan in the WTO, for the first time in 50 years the institutional framework would exist for normal trade across the straits. Such a step toward peaceful resolution of the China-Taiwan question is a major, bipartisan goal of US foreign policy.

can firms will enjoy greatly enhanced export opportunities, and the global agenda of trade and investment liberalization will be reinvigorated.

In this policy brief we focus on the substance of PNTR, not its wider symbolic significance. A vote for PNTR will extend to China, on a *permanent basis*, the same trading rights that the United States grants every other WTO member. A vote against PNTR, or no vote at all, means that Congress will continue its annual review of Chinese policies, holding out the threat of imposing Smoot-Hawley tariffs on Chinese imports. As a consequence, the United States would miss out on the most valuable elements of China's concessions: the nontariff liberalization. Wrangling would be required even to extract the tariff benefits from jilted Chinese negotiators. Broader US-China relations would dip precipitously as well, with adverse implications for the security climate in Asia.

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China will become a full-fledged member of the WTO, once the remaining bilateral agreements are concluded, whatever Congress decides on PNTR. The United States gains nothing by postponing PNTR until the European Union (or any other) bilateral is negotiated. The EU and other bilaterals can only bring *additional* benefits to the United States. The EU is trying to obtain five main additional benefits in its bilateral accession agreement with China: 51 percent foreign ownership of certain

Box 1. The Package

The November 1999 US-China bilateral accession agreement produced an extensive package of Chinese commitments covering the full range of commercial issues addressed in the WTO. Included are tariff and nontariff commitments that will be "multilateralized" in the process of China's accession. This means that the bilateral agreements reached by every other country will be merged, along with the US-China agreement, to produce a consolidated Protocol of Accession. Concessions are ratcheted-up, so that every WTO member gets the most favorable terms any single country secured with China. The six key pieces are:

1. **Tariffs:** A complete schedule of tariff reductions covering traded goods, including industrial and agricultural products. Chinese tariffs fall on average from 24.6 percent to 9.4 percent overall, and they drop to 7.1 percent on US priority products.
2. **Non-tariff barriers (NTBs):** Extensive coverage of NTBs, for example, the phase-out of import quotas, phytosanitary standards, and licensing requirements. Most quotas are phased out by 2002, and the rest by 2005.
3. **Services:** The full schedule of service sector commitments includes import-export trading rights, distribution rights, banking, insurance, telecom, professional services (accountancy and legal), consulting, business and computer related services, motion pictures and sound recording services. China will join the WTO Basic Telecommunications and Financial Services Agreements.
4. **Investment and Intellectual Property:** China will comply with the WTO Agreements on Trade Related Intellectual Property Rights (TRIPs) and Trade Related Investment Measures (TRIMs). This means foreign exchange balancing re-

quirements, local content requirements, and technology transfer requirements will all be eliminated. China will not condition investment approvals or import licenses on local content requirements, offsets, transfer of technology, or requirements to conduct local R&D.

5. **Safeguards:** The US Bilateral Agreement contains China-specific provisions that rely on a nonmarket methodology for safeguard and dumping cases, plus special safeguards for the US textile and clothing industries. (See Box 3 for greater detail.)

6. **State Firms:** Anti-competitive behavior by state-owned enterprises (SOEs) becomes an actionable offense in many cases. SOE purchases are not to be treated as government procurement, which means they are subject to normal WTO rules.

If the bilateral accession agreement is so generous to the United States, then why did Chinese leaders agree to it?

The answer is somewhat surprising: China is using "competition-led growth" to augment traditional models of export-led, investment-led, and consumption-led growth. WTO membership can help lock in the strategy of using competition to spur productivity, boost profits, inspire investment, and channel scarce resources.

The "technocracy" now at the helm of Chinese policy is a very thin crowd, and the consensus supporting a western model of economic policymaking is tenuous—though strengthening with time. WTO provides a template for the deeper reach of market-oriented policies. Chinese leaders are prepared to put on the "golden handcuffs" of WTO membership, effectively constraining their own future actions in order to enlarge the scope of a market society and the prosperity that it generates.

telecom joint ventures; lower tariff rates on selected alcoholic beverages; majority foreign ownership of life insurance firms; tariffs on auto imports to be reduced below 25 percent; and majority foreign ownership of manufacturing firms.² Therefore the United States need not subordinate its PNTR vote to the negotiating timetables of other countries.

China's membership in the WTO will not automatically mean that China extends its WTO obligations to the United States, or vice versa. Benefits for the United States depend heavily on the US *choice* to mutually extend WTO obligations, and that in turn depends on the PNTR debate.

In June 1999, the Institute for International Economics published a *Balance Sheet* to identify the economic benefits for the United States of Chinese accession to WTO, as well as what motivated China to take this bold step.³ The *Balance Sheet* showed that US trade negotiators exceeded expectations, even in the April 1999 package that President Clinton erro-

neously rejected. It emphasized the critical role of WTO in continued Chinese reforms and the standing of pro-reform leaders. Since the full text of the November 1999 US-China bilateral accession agreement is now available (<http://www.uschina.org>), the US debate has shifted from the terms of the bilateral package to the terms of the PNTR debate. This policy brief updates our prior analysis.

We consider seven questions central to the PNTR debate. Some of these questions were discussed in the IIE *Balance Sheet*; others have only come to the spotlight in recent months:

- From a legal standpoint, is PNTR "optional"?
- What does PNTR mean for US exports, imports, and jobs?
- Will China comply with its sovereign trade obligations after PNTR? If not, how can American interests be protected?
- Will US firms and workers be protected from surging Chinese imports that threaten to destroy their livelihood?
- Will the US lose its "leverage" to link trade and finance with non-trade issues (human rights, environment and labor) following PNTR and China's accession to the WTO?

² See *Wall Street Journal*, April 3, 2000, p. A21

³ *China and the World Trade Organization: An Economic Balance Sheet*, Institute for International Economics Policy Brief 99-6, June 1999. Available on the web at <http://www.iie.com/NEWSLETR/news99-6.htm>.

- In broader terms, what are the environmental implications of China's membership in the WTO?
- What does recent evidence suggest about post-PNTR Chinese policy in the sensitive areas of high technology and telecommunications?

Legal Basis for Chinese PNTR

Under current US law, dating back to the Trade Act of 1974, the US President must grant an annual "waiver," certifying that China does not deny its citizens the right to emigrate, in order for Chinese imports to enter the US market at normal (also known as most-favored-nation) tariff rates. Congress, by a two-thirds vote of both the House and the Senate, can disapprove the President's waiver. In the event of congressional disapproval (which has never carried even by a majority vote), Chinese imports would pay Smoot-Hawley tariff rates. Since these Depression-era tariffs range up to 50 percent *ad valorem*, most Chinese imports would be excluded from the US market.

The Jackson-Vanik Amendment, as this process is known, was passed at the height of the Cold War, and was targeted at the repressive emigration policies of the Soviet Union. The amendment, however, applies to all nonmarket economies—unless excepted by a statutory waiver like PNTR (as Poland, Romania and Hungary have been). The annual review process has become an occasion for congressional criticism attacking a wide range of Chinese political and economic policies. Under PNTR, Congress would forego this annual review and the implicit threat of Smoot-Hawley tariffs.

Opponents of PNTR advance two legal scenarios by which the United States could continue its annual Jackson-Vanik review of Chinese policies, yet obtain all the market access benefits of Chinese liberalization following its accession to the WTO. Under the first scenario, the United States would simply rely on its rights under the 1979 US-China Trade Agreement—the agreement that paved the way to normal trading relations and presaged the first Jackson-Vanik waiver in 1980. Under the second scenario, the United States would assert that the annual Jackson-Vanik review was perfectly consistent with mutual WTO obligations between the United States and China.

US Rights under the 1979 Agreement. In July 1979, as a prelude to establishing normal trading relations, the United States and China reached a ten-page "framework" agreement with ten articles. By contrast, the US-China bilateral agreement negotiated in November 1999 as a prelude to China's entry to the WTO (<http://www.uschina.org>) runs to over 250 pages, and the WTO Protocol of Accession may swell to another 100 pages of detailed obligations.

The United States wasted a lot of negotiating ef-

fort if the short 1979 Agreement accomplishes as much as the detailed 1999 Agreement and Protocol language. No one who followed the 13 years of US-China accession negotiations believes that these agreements reach the same result. Professor Mark Barenberg of Columbia University Law School, however, contends that the 1979 Agreement guarantees US firms all the benefits that other firms might enjoy following China's accession to the WTO. Ambassador Charlene Barshefsky sharply disputes his position.⁴

Articles II and III of the 1979 Agreement are the most critical for the PNTR debate. Article II(D) requires the parties to avail each other of most-favored-nation treatment (i.e., normal trade relations) as to "All laws, regulations and requirements affecting all aspects of internal sale, purchase, transportation, distribution or use of imported products." Read broadly, the language suggests that the United States could comfortably enjoy any benefits that China conceded to other countries in the process of joining the WTO.

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However, there are two practical problems with a broad reading. First, the 1979 Agreement was negotiated in the context of the 1947 GATT. The word "products" in the 1947 GATT meant goods and ancillary services (such as transport facilities) but not the full range of business services, investment, and intellectual property. In other words, Article II(D) guarantees US merchandise exports the same tariff rates that China accords to merchandise imports from other countries. It probably doesn't provide much traction for US service firms, investors, or holders of intellectual property rights trying to do business in China.

Article III deals with business facilitation—matters such as visits by professional personnel, trade fairs, customs formalities, etc. With respect to these matters, Article III clearly affords US firms the same treatment as China grants third-country firms. It's doubtful that the most-favored-firm language of Article III(A) can be stretched, however, to cover the whole range of frictions that US firms encounter when doing business in China. For example, US firms might be denied the right to compete for a pro-

⁴ The opinion letters of Professor Barenberg and Ambassador Barshefsky appear in *Inside U.S. Trade*, March 17, 2000.

curement order from a state-owned firm, the right to bid in the privatization sale of that same firm, or the right to purchase land in order to build a factory or warehouse. None of these rights fell within the scope of business facilitation as it was understood in 1979, when communist principles permeated the entire Chinese economy.

It is a fantasy to suppose that the United States can conduct an annual Jackson-Vanik review and enjoy the full benefits of China's WTO obligations.

The United States might argue that the language in Articles II and III should be broadly interpreted to cover the complete ambit of China's accession commitments in the WTO. On this question, the United States and China could exchange legal briefs filling hundreds of pages. At the end of the day, the 1979 Agreement has no binding procedures or deadlines for resolving disputes. It simply provides that the parties "may have recourse" to arbitration. China might well choose not to submit disputes to arbitration. Reliance on the 1979 Agreement, without the force of the 1999 Agreement, the WTO Protocol, and the WTO dispute procedures, is a formula for prolonged and unsatisfactory litigation. Meanwhile, US agriculture, service, and industrial firms would operate at a disadvantage in the Chinese market.

On the 1979 Agreement, we conclude with a citation from Professor John Jackson's authoritative opinion:⁵

[The 1979 Agreement] would, in my opinion, not likely afford full treaty obligations or non-discrimination rights to all of the measures which the US and China tentatively agreed to in the context of China's application for WTO accession...

...I have read the opposing opinions of the US Trade Representative, Charlene Barshefsky, and of Professor Barenberg. This exchange reinforces my view that at the very least, the language, the institutional setting, and the broader US-China circumstances regarding application of the [1979 Agreement] ... would not be as advantageous to the US as a full WTO treaty relationship.

WTO without PNTR. Taking a different tack, Public Citizen (<http://www.citizen.org>) contends that the United States can, at the same time, accept China's membership in the WTO and continue its annual Jackson-Vanik review, once that review is stripped

⁵ Letter dated March 29, 2000, from Professor John Jackson to Representatives Jim Kolbe, Robert Matsui, Cal Dooley, and David Drier.

of emigration concerns or other specific conditions. According to Public Citizen, a quarterly or annual congressional review is fine, provided that the review is not conditioned on specific benchmarks, such as emigration. Yet, in the view of Public Citizen, congressional review can hold out the implicit threat of Smoot-Hawley tariffs (or a lesser penalty) if Chinese economic or political behavior flunks whatever standards might be enunciated by a future Congress. So long as Congress merely dangles the threat, but does not invoke the threat, the United States would remain in full compliance with the WTO obligation of unconditional most-favored-nation treatment—says Public Citizen.

In our judgment, and in the opinion of most scholars, Public Citizen's interpretation of the WTO has no foundation. Article I of the GATT-1994, carried from the GATT-1947, requires that members "immediately and unconditionally" grant one another most-favored-nation treatment not only with respect to "customs duties and charges of any kind," but also with respect to "all rules and formalities" and "any advantage, favor, privilege or immunity." China could persuasively argue that the annual Jackson-Vanik review, uniquely applied to China, throws doubt on China's long-term access to the US market, thereby undermining the value of WTO benefits.

Ambassador Barshefsky insists that, if Congress does not pass PNTR, the United States will invoke the "non-application" provision of WTO Article 13 in order to protect the annual Jackson-Vanik review against a Chinese legal challenge. Even if the United States did not invoke Article 13, China might—resulting in the same outcome: WTO treaty obligations would not apply between the United States and China.⁶

It is a fantasy to suppose that the United States can conduct an annual Jackson-Vanik review and enjoy the full benefits of China's WTO obligations. Even if China did not invoke Article 13, and even if China did not bring a WTO challenge, China could find myriad ways to retaliate against the annual review process. Appendix A lists leading US merchandise exports to China. Many of the goods are purchased by state-owned enterprises that could easily discriminate against US merchandise, citing performance, safety or phytosanitary concerns. China might decide to buy wheat from Canada, electric power plant boilers and turbines from Japan, and civil aircraft from Airbus rather than Boeing. The Chinese preference would wear the same cloak of deniability as the implied threat in the annual Jackson-Vanik review. The USTR might bring a WTO case, knowing that China could bring its own case on the annual review. One outcome is certain from

⁶ See the cited opinion letter by Professor John Jackson.

this preposterous legal carnival: every month the lawyers are fighting, US firms would be losing ground in the Chinese market.

Jobs, Exports, and Imports

China's large bilateral trade surplus with the United States—correctly measured at \$43 billion, not \$68 billion, in 1999 (see Appendix B)—represents neither a global pattern for China nor a net loss of production by the US economy.⁷ Unlike Japan, China does not run large and chronic global surpluses. China's bilateral surplus reflects China's ability to compete against and win business with the United States from third countries that had been exporting to the US market. China's bilateral surplus represents a shift of suppliers rather than an overall increase in US dependence on imports. Nonetheless, imports, exports, and job effects stand at the heart of the PNTR debate, where they have managed to confuse just about everyone.

WTO accession, coupled with PNTR, will commit China to dramatically reduce its tariff and nontariff barriers. Its imports will rise. In turn, liberalization will drive Chinese firms to cut costs, adopt new technology, and boost exports. The effect of WTO accession on total Chinese imports and exports, and US bilateral trade with China, can be estimated from the calculations carried out by the International Trade Commission (see Appendix B).

The estimated increase in global Chinese imports of goods and services is \$30 billion. The corresponding increase in global Chinese exports is \$26 billion. US exports to China are estimated to increase by \$5.4 billion, while US imports from China will expand by \$4.7 billion. These figures assume that China's accession to the WTO is accompanied by a favorable PNTR vote.

Without PNTR, US imports from China will still grow by about the same amount, because Chinese export gains are driven by greater Chinese efficiency, not by lower US trade barriers. On the other hand, US exports to China would increase much less. We estimate that, without PNTR, US *merchandise* exports would increase by \$1.9 billion rather than \$3.4 billion, because China would maintain many of its nontariff barriers on US exports. US *service* exports would expand very little, perhaps by \$0.5 billion rather than \$2.0 billion. Without PNTR, China would take a grudging stance against US service firms. Without PNTR, the United States would lose more than half the anticipated export gains, of goods and services combined, in the Chinese market. Small and medium-sized US firms that are trying to enlarge their foothold would be hard hit. According to the National

Association of Manufacturers, China is the third fastest-growing market for small and medium-sized US exporters, 7,600 of which already sell in China.

Opponents of PNTR commonly denounce China's bilateral trade surpluses with the United States.⁸ The deficit numbers used by the opponents (e.g. \$68 billion in 1999) are distorted because they miscount Chinese trade routed through Hong Kong (the corrected figure in 1999 was \$43 billion; see Appendix B). Even more, the logic of the PNTR opponents is bizarre. If the United States withholds PNTR, then China's bilateral surplus will grow larger because US exporters will be denied access that European, Japanese and other firms enjoy in the Chinese markets.

The Economic Policy Institute (<http://www.EPINET.org>) has advanced the most extravagant claims about the US bilateral trade deficit with China. Based on a count of 13,000 jobs *lost* per billion dollars of manufactured imports, the EPI asserts that current trade with China *already* costs the United States 880,000 high-wage manufacturing jobs.⁹ Then, extrapolating the US ITC's

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estimate of the *one-time* percentage import and export trade changes for 10 years, the EPI asserts another 817,000 US jobs will be eliminated through PNTR and Chinese membership in the WTO.

The EPI's calculations are built on an absurd extrapolation of an exaggerated bilateral trade deficit. Most basic of all, the job effects conjured by EPI have nothing to do with Chinese membership in the WTO. China's bilateral trade surplus, correctly measured, has grown from \$9 billion in 1992 to \$43 billion in 1999 with China *outside the WTO*. Moreover EPI's "forecasting" arithmetic has no connection with WTO membership.

Apart from these basic errors, the EPI's methodology is flawed four times over.

It's obviously true that US manufacturing output creates US manufacturing jobs (6,800 per bil-

⁷ Marcus Noland, "US-China Economic Relations," in Robert S. Ross, editor, *After the Cold War: Domestic Factors and US-China Relations*. Armonk, NY: M.E. Sharpe, 1998.

⁸ See Robert E. Scott, "The High Cost of the China-WTO Deal", EPI *Policy Brief*, February 16, 2000. It should be observed that China does not run chronic *global* trade surpluses in the manner of Japan. China's foreign exchange reserves are sizable, but they are only modestly, if at all, larger than the country's foreign debt; China is not a substantial creditor country.

⁹ The EPI analysis assumes that the US-China bilateral trade deficit was \$68 billion in 1999. On a corrected basis, the US bilateral trade deficit with China in 1999 was about \$43 billion (see Appendix B).

lion dollars of additional output, not 13,000). But it's *not true* that a larger US trade deficit in manufactured goods is associated with lower output of manufactures. And it's *not true* that more manufactured imports spell lower manufactures output. Finally, economic performance and Federal Reserve policy—not the merchandise trade deficit—determine overall US employment. Let's review the facts.

Taking these objections in order, a larger US trade deficit in manufactured goods is historically associated with *higher* manufacturing output, not the reverse. The correlation between the quarterly level of the manufactures trade deficit and the quarterly level of manufacturing output is a remarkable 0.93.¹⁰ Manufacturing output and the trade deficit both rise when the US economy is doing well, and both fall when the economy is doing poorly.

If the United States wants a Chinese government capable of enforcing the voluminous WTO accord on schedule, then it ought to allocate a little money for teaching Chinese bureaucrats how to do new, pro-competitive jobs.

Second, an analysis of manufactures output and manufactures employment, using quarterly data since 1990, shows that a billion dollars of extra output is associated with 6,800 additional manufacturing jobs (see Appendix C).¹¹ However, analysis of manufactures output and manufactures trade shows some surprising results. Manufactures output increases virtually dollar-for-dollar with manufactures exports (again, see Appendix C). However, contrary to the mercantilist thinking embodied in the *EPI Issue Brief*, US manufactures output is virtually unaffected by overall changes in manufactures imports. Why? Because many manufactured imports serve as inputs to US manufactured goods. These complementary imports enable higher domestic production. At the same time, other manufactured imports substitute for US production. In the overall composition of US manufactured imports, complements and substitutes seem to be approximately balanced. That's probably just as true for US trade with China as US trade with Mexico, Korea or most other emerging countries. As Appendix A shows, many imports from China

¹⁰ Estimate made by Erika Wada at the Institute for International Economics. The correlation coefficient is based on 38 quarterly observations since 1990.

¹¹ Because US firms are ever more efficient, however, manufacturing employment exhibits a time trend decline of about 119,000 workers every quarter. Because manufacturing output is rising, the adverse time trend impact on employment is largely offset by the need for new workers to produce more goods.

are producer goods that serve as equipment and intermediates for US industry.

Third, it makes no sense to focus on the US bilateral deficit with China, and forget US trade with the rest of the world. When the US economy is exceptionally strong (as it is now) the United States will have a larger trade deficit with the world. If the United States did not have a \$43 billion trade deficit with China, it would have a larger trade deficit with other countries, such as Mexico or Korea. Even if, contrary to evidence, the overall US manufactures trade deficit was associated with lower manufactured output, the bilateral China deficit would have no independent significance.

Fourth and finally, domestic economic performance and Federal Reserve monetary policy jointly determine the level of US employment. When the economy can grow fast without inflation—the story of the last 17 years—the Federal Reserve keeps interest rates moderate, and lets the unemployment rate decline. The connection between overall employment and trade is that import competition helps keep prices in check and inflation down, enabling the Fed to accommodate a higher level of employment. Equally important, an open economy enables the United States to create better jobs, since US exports embody more skills and higher wages (about 15 percent higher) than US imports.¹² US trade is a race to the top, not a race to the bottom.¹³

Compliance with Market Access Commitments

Hawks and doves alike agree that implementation of China's WTO package will be both difficult and critical. There is much for China to implement, the Chinese marketplace is gargantuan, and enforcement infrastructure is inchoate. Yet it is wrong to conclude that the difficulties are insurmountable, that China's enforcement record is far worse than that of other emerging trading nations, or that the challenges outweigh the benefits for the United States.

First, WTO commitments are sovereign commitments, accepted by the central government. A team of legal experts at Georgetown University Law Center has updated its assessment of Chinese compliance. The results, shown in box 2, indicate that Beijing treats sovereign obligations with care. In part this reflects the political value of rules for a somewhat shaky regime. Moreover, the cost of breaking rules can be high when governments and companies go to financial markets for money. China relies on foreign lending and direct investment for a significant part of its development. Broken rules

¹² J. David Richardson and Karin Rindal, *Why Exports Matter: More!*, Institute for International Economics and The Manufacturing Institute, Washington DC, February 1996.

¹³ George David, "Race to the Top", remarks delivered at the Council on Foreign Relations, New York, March 15, 2000.

Box 2. Chinese Compliance with International Agreements

While there is controversy about the degree of Chinese adherence to international agreements (treaties and other international obligations governed by public international law as well as private commercial contracts) it is clear that a mixed, and somewhat improving, picture is the norm. Notably, Chinese compliance with sovereign treaties and agreements is superior to enforcement of commercial agreements between private parties. The table below considers four areas relevant to China's WTO accession.

Area of Agreement	Compliance History	Score ^a
Environment	Appears to meet core obligations of each agreement. Implementing agencies designated to "increase contact with the international community" taking their duties seriously and implementing enforcement protocols. However, China limits actions to the strict letter of agreements rather than spirit while efforts are underfunded, subject to regional inconsistency, and hindered by poor technical skills. Particular weakness in observance of obligations to protect endangered species.	Fair
Intellectual property	Enacted first copyright law in 1991 and harmonized laws with international standards in 1992. Recent amendments to other IP legislation have closed some loopholes. Enforcement efforts have shown fruit, especially after initial failures of earlier U.S.-China "understandings," as seen by the closure of 15 of the 31 factories investigated following the 1995 U.S.-China memorandum of understanding on enforcement of intellectual property laws. However, the United States complains that China cracks down on distributors more than producers of counterfeit goods. Compensation for infringement is inconsistent due to dearth of specific provisions and judges' inexperience, although new specialized intellectual property tribunals have been established. Awards inadequate by international standards but increasing recently. Lengthy delays in registration processes disadvantage foreigners and may raise "national treatment" questions.	Good
Private agreements	China International Economic and Trade Arbitration Commission (CIETAC) dominates arbitration of foreign-related disputes inside China. Courts lack professionalism and independence, and are partial to local litigants, so foreign parties usually avoid them. CIETAC is known to ignore some evidence presented by foreign parties and sometimes favors Chinese parties. Procedural rules are sketchy and sometimes arbitrary. Outcomes of venture capital disputes are mixed, but even when favorable judgments for foreign parties are rendered, they are very difficult to enforce. Overall, far less dependable outcomes than when sovereign obligations are involved.	Poor to Fair
Nonproliferation	China acceded to the Nonproliferation Treaty (NPT) in 1992 and in 1995 supported efforts to make the NPT permanent. Currently, Chinese compliance appears to be fairly comprehensive, but a colorful history of noncompliance and negligent oversight exists as well. For example, as of 1998, China continued to export specialized nuclear equipment and technology, primarily to Pakistan and Iran. Rogue Chinese enterprises, as opposed to government agencies, were partly to blame. Subsequently, pledges to stop nuclear exports to Pakistan and Iran were extracted and seem to have been honored, but only in response to heavy pressure and compromise. As of 1999, China has terminated nuclear assistance to Iran, committed not to provide assistance to unsafeguarded nuclear facilities in Pakistan or elsewhere, and has strengthened internal export controls of nuclear weapons-related materials. Previous "leakages" of nuclear materials to Pakistan were occasioned by U.S. arms sales to Taiwan; it remains to be seen whether future increases of U.S. arms dealing with Taiwan will provide the pretext for PRC retaliation.	Fair

Source: Adapted from James V. Feinerman and Daniel Chang, Georgetown University Law Center, Washington. Based on research for Chinese Practice of International Law in the Post-Mao Era, forthcoming, Georgetown University.

a. The score assigned to Chinese compliance in each area is the author's, based on Feinerman and Chang's text.

Box 3. Safeguard Provisions : WTO Regular vs. China Special

	WTO Regular	China Special	Tougher or easier on China?
Applicable Agreements	GATT-1994 safeguards (Art. 19); antidumping and countervailing duties (Art. 6); and the interpretative agreements.	China Protocol of Accession, plus WTO regular measures.	Tougher
Regular Safeguards			
Injury Test for domestic harm caused by imports that are neither dumped nor subsidized	"Serious injury" or threat thereof, defined in Art. 4 of the Safeguard Agreement as "significant overall impairment in the position of a domestic industry."	"Material injury" or threat thereof, resulting from "market disruption," defined as in Sec. 406 of the US Trade Act of 1974: imports "increasing rapidly, either absolutely or relatively."	Tougher
Causal link between imports and injury	Under Art. 4 of the Safeguards Agreement, a causal link must be established "between <i>increased</i> imports of the product concerned and serious injury or threat thereof... factors other than increased imports shall not be attributed to increased imports."	Imports from China must be a "significant cause" of material injury, which "need not be equal to or greater than any other cause."	Tougher
Duration	Maximum term of 4 years, plus one 4-year extension, if justified by a review.	The "market disruption" provision ends 12 years after China's accession to the WTO. Until then, each safeguard measure may have an unlimited duration, if needed.	Tougher
Retaliation rights of exporting country	No retaliation rights for 3 years if safeguard action is due to an absolute increase in imports.	No retaliation right for 3 years if safeguard action follows an absolute increase in imports; no retaliation right for 2 years if safeguard action follows a relative increase in imports.	Tougher
Selectivity	Safeguards must cover imports from all countries of the relevant product.	Safeguards can selectively cover only imports from China.	Tougher
Antidumping and Countervailing duty cases			
Methodology to calculate dumping margins and/or subsidy benefits	Compare domestic and export prices; evaluate domestic costs; assess public subsidies.	"Constructed value" may be used—i.e., the extent of dumping and/or subsidization may be determined by reference to cost conditions in a third country. "Constructed value" may be used for 15 years, so long as the industry still operates on a non-market basis.	Tougher
Special Safeguards for Textiles and Clothing			
Applicable Agreement	WTO Agreement on Textiles and Clothing.	China WTO Protocol of Accession.	Tougher
Injury Test	"Serious damage" or threat thereof to the domestic industry.	"Material injury" or threat thereof to the domestic industry.	Tougher
Causal link between imports and injury	Serious damage must "demonstrably be caused by increased quantities in total imports and not by technological changes or changes in consumer preferences."	Material injury is caused by imports "increasing rapidly, either absolutely or relatively" so as to be a significant cause of market disruption.	Tougher
Duration	Maximum of 3 years, or until product is liberalized from MFA quotas (December 2004 at latest).	One year, with multiple annual extensions possible on all textile and clothing products until end of December, 2008.	Tougher
Severity of restrictions	For measures in force less than 1 year, no reduction in import volume below previous year level. For measures in force more than 1 year, 6 percent annual growth in volume required.	China administers the restriction, and may permit no more than 7.5 percent annual growth in exports (6 percent for wool products).	Easier

Source: Jeffrey J. Schott, Institute for International Economics, based on November 1999 US-China Agreement and the Final Texts of the Uruguay Round Agreement.

will add to borrowing costs and discourage investment.¹⁴

Second, there is the question of remedies when the commercial rights and privileges conferred by WTO are denied to trading partners (intentionally or otherwise).¹⁵ The compliance mechanisms activated by WTO accession are clearly superior to the present alternatives of unilateral or informal action.¹⁶ With China in the WTO and PNTR approved, the United States can no longer use unilateral trade remedies such as Section 301. However, accession will give the United States recourse to the effective WTO Dispute Settlement Mechanism (DSM). As of March 2000, the United States had won or settled favorably 23 of 25 cases it had brought to the DSM—a 92 percent success rate.¹⁷ (None of these cases involved China, because it is not yet a WTO member.) The

. . . increases in US textile and clothing imports from China will largely replace similar imports from other countries.

DSM can authorize legal retaliation by the United States and other countries against China, if China fails to make good on its commitments. This mechanism offers much greater leverage to compel good commercial behavior than unilateral US measures.

The DSM (and informal consultations before bringing a case) depends on hard evidence. Under its fiscal year 2001 budget requests, the US Department of Commerce will increase from 7 to 18 the number of full-time staff responsible for monitoring and ensuring Chinese compliance with its market access commitments. Additional personnel will handle safeguards cases involving disruptive Chi-

¹⁴ Over the coming decades, lower transaction and borrowing costs associated with a clean sovereign compliance record could amount to many billions in financial savings. When the Guangdong International Trust and Investment Company—GITIC, a firm that was only vaguely sovereign in its guarantees—failed in 1999, other ITICs and Chinese shares traded abroad promptly fell in value. And this reflects only the experience of broken *understandings*, not even rules.

¹⁵ China's WTO accession terms make actionable a tremendous range of practices that are not clearly covered by China's obligations today, including investment requirements, distribution system ownership, financing and others.

¹⁶ Foreign enterprises operating in China tend to resolve their difficulties in informal ways, for example by hiring a counterfeiter they cannot get the authorities to shut down, or providing vans for a monopoly distributor who cannot keep his fleet running well enough to make deliveries. Once China joins the WTO, foreign firms from countries with PNTR will have the additional possibility of invoking WTO rules.

¹⁷ "Breakdown of WTO Cases Involving the United States," updated March 23, 2000 and provided by the US Trade Representative's Office.

nese imports into the US market if they take place. The "spotlight" provided by the US monitoring efforts will be most effective if it is paired with greater US commitment to help China build regulatory capacity. If the United States wants a Chinese government capable of enforcing the voluminous WTO accord on schedule, then it ought to allocate a little money for teaching Chinese bureaucrats how to do new, pro-competitive jobs.¹⁸

Safeguarding the US Market

In addition to the challenge of assuring Chinese market access under the WTO, the United States faces the challenge of safeguarding its market from surging Chinese imports. This is a serious subject, and one that some economists too quickly dismiss.

There are three types of safeguard protection in the US-China package. First there are general safeguards applied to all fairly traded products. Second there are penalty provisions applied against dumped and subsidized imports. Third there are special provisions designed to protect the sensitive textile and clothing industries. Box 3 compares the special safeguards negotiated for China with the regular safeguards applied under the WTO to virtually all other members.¹⁹ The details are dense, but as the final column in box 3 indicates, safeguards against China are tougher almost across the board.

The special China safeguards echo a broader point. China's WTO commitments are much more extensive than those previously negotiated with other big emerging markets. To illustrate, a side-by-side assessment of Chinese and Indian commitments, originally made in our *Balance Sheet*, is updated and presented in Appendix D.

China's WTO commitments are much more extensive than those previously negotiated with other big emerging markets.

In evaluating the "threat" of Chinese imports, Americans should bear in mind that only a fraction of Chinese production sold in the US market *displaces US production*. Most imports from China displace the exports of other countries. In 1997, US imports from China exceeded a "constant market share" calculation by \$10.1 billion. Of this, the amount displacing *third-country* exports totaled \$7.6 billion, or about

¹⁸ US bilateral assistance to China for WTO implementation could be part of a broader technical assistance package to new WTO members.

¹⁹ Special safeguards are also applied to a few non-market economies in Eastern Europe, but none of those regimes is as comprehensive and tough as the safeguards applied to China.

three-quarters of the total.²⁰ US production displaced by the residual above-trend Chinese exports in 1997 stood at just \$2.5 billion—only 5 percent of adjusted total US imports of goods and services from China. Moreover, this “displacement” figure is far lower than US exports to China.

The sectors most in contention are textiles and clothing. The overriding point is the one just made: increases in US textile and clothing imports from China will largely replace similar imports from other countries. By the same token, special restrictions on Chinese sales will quickly lead to offsetting purchases from other suppliers.

Non-commercial Leverage

US leverage to shape China’s trade and commercial practices improves sharply with China’s WTO accession. This point is gaining wider acceptance as the PNTR showdown approaches.

More tangled is the question of US leverage to compel Chinese political behavior using the unilateral threat of commercial sanctions. Some opponents of PNTR fear that a WTO treaty relationship with China will curtail the US ability to use such policy tools. These opponents are especially eager to use trade sanctions to force better Chinese behavior on human rights, the environment, and labor standards.

The opponents conveniently forget that, under GATT-1994, Article 21, the United States can still invoke a national security exception to justify trade sanctions against China. Moreover, China’s membership in the WTO does not compel the United States to vote with China in the World Bank, the International Monetary Fund, or the UN Security Council.

But apart from US legal rights to impose a variety of sanctions, reality tells us that, in an increasingly interdependent world economy, it is more difficult for the United States to achieve its political goals with economic weapons. Sanctions have been most credible when the goals are modest, the pressure exerted on the target country is broadly based, and the target country is relatively weak.²¹ None of these conditions has worked to favor US unilateral sanctions aimed at altering Chinese policy. In fact, none of the four economic sanction cases targeted at China since 1949 has yielded a foreign policy success.²²

²⁰ See *Balance Sheet*, page 3; and Marcus Noland, “US-China Economic Relations,” in Robert S. Ross, editor, *After the Cold War: Domestic Factors and US-China Relations*. Armonk, NY: M.E. Sharpe, 1998.

²¹ Gary Clyde Hufbauer, Jeffrey J. Schott, and Kimberly Ann Elliott, *Economic Sanctions Reconsidered, 2nd Edition*, Institute for International Economics, 1990.

²² Hufbauer, Schott and Elliott, op.cit., updated in preparation for the 3rd Edition. The four sanctions episodes targeted at China are cases 49-1 (impair military potential), 49-1 (military disruption in the context of the Korean War); 89-2 (human rights in the wake of Tiananmen Square); and 91-2 (suspect nuclear proliferation).

Conversely, with China’s deeper integration into the world economy, more subtle means of exerting leverage will arise. As China seeks a larger voice in international economic affairs, and invites more foreign investment, it will pay more attention to the norms of good political behavior.

Anyone who knows the context, yet still insists on adding environmental standards be added to the US bilateral accession agreement, is simply seeking a pretext for stalling PNTR for an indefinite period.

Economic and political reforms are correlated, but the time dimension is uncertain. Market-orientation and broad property ownership have promoted varying degrees of political change in South Korea, Taiwan, Hong Kong, Singapore, Indonesia and Malaysia, as well as the Southern Cone of Latin America, and Southern and Eastern Europe. These examples don’t prove that China will follow the same path, and they don’t establish a time line. But they are highly suggestive. Already in more advanced areas of China such as Shanghai, Guangzhou, Tianjin and Beijing, US officials and congressional delegations have observed surprising changes in civil society arising in the wake of economic change.

China, the WTO, and the Environment

Some opponents argue that Chinese accession to the WTO will hamper environmental progress around the world. They fear that China will oppose environmental clauses in the WTO.

The opponents are half right: it is abundantly clear that neither China nor the 133 other members of WTO will accept special US labor and environmental “side-car” agreements in China’s WTO accession package. WTO members are allergic to new trade sanctions conditioned on US standards, and they oppose the backdoor introduction of sanctions via bilateral US-China language that might be inserted in a revised Protocol of Accession.

The “side-car” agreements built into NAFTA cannot be duplicated in China’s Protocol. NAFTA has three members: the US, Mexico and Canada. In broad terms, North Americans agree on the goals of environment and labor policy. This is simply not the case in the much larger and more diverse WTO.

An attempt to condition China’s accession to the WTO accession on explicit Chinese environmental and labor commitments would almost certainly fall flat. The reason is that Chinese commitments would launch the WTO on negotiations covering all 133 WTO members on these sensitive matters. The over-

whelming majority of WTO members disagree strongly with US suggestions that trade sanctions are an appropriate means of lifting labor and environmental conditions. Most WTO members prefer to address these issues in specialized labor and environmental bodies such as the International Labor Organization (ILO) and the Committee on International Trade in Endangered Species (CITES). China will not entertain the idea of putting its WTO accession on hold for several more years while contentious social issues are debated. Anyone who knows the context, yet still insists on adding environmental standards be added to the US bilateral accession agreement, is simply seeking a pretext for stalling PNTR for an indefinite period.

*Passing PNTR . . . costs the
United States practically nothing
in economic terms, while gaining it
much politically.*

These hard political facts *do not* equate to the proposition that China in the WTO spells bad news for the global environment. In broad terms, as per capita income rises, China will follow in the footsteps of Japan, Europe and the United States, insisting on a better environment at home and abroad. It should be remembered that the United States is a far larger source of greenhouse CO₂ than China. In terms of the global environment, the United States faces a bigger challenge than China.

Concretely, with China in the WTO, and with PNTR, US power plant manufacturers (such as GE) are much more likely to install China's new electric generating capacity. US technology is 10 times less polluting than the buy-China alternative.

With China in the WTO, US environmental service companies will extend their Chinese operations to cover sewage service, solid waste disposal, cleaner exhaust gases, noise abatement, and nature preservation. Foreign firms operating in China are currently obliged to deal with unproven Chinese waste disposal firms. To avoid mishandling, most foreign firms simply stockpile their toxic wastes.

Indicators of labor and environmental progress—such as worker training or waste stream disposal practices—already show that US firms in China improve the Chinese *status quo* significantly.²³ A “no” vote on PNTR will hamper US investment and slow China's progress.

²³ On the pro-labor and environmental effects of US firms in China, see Daniel Rosen, *Behind the Open Door*, Institute for International Economics and Council on Foreign Relations, January 1999. See also George David, *op. cit.*

High Tech

An area of extraordinary Chinese activity is high technology, especially telecommunications and internet development. The United States has a strong comparative advantage in these industries, and they have the potential to transform China at the level of independent small businesses and the macro-economy alike. Telecom and internet expansion enable the free flow of information that paces both economic and political reform.

Changes afoot include plans to break the state telecom provider (China Telecom) into four or more firms, fewer obstacles to foreign participation in the internet industry, and a retreat from the notion that firms should hand their encryption keys to the Chinese government. Revamped policies reflect an understanding by the Chinese technocracy about WTO accession: customer-oriented telecom and information technologies are the name of the game in 21st century competitiveness.

The November 1999 US-China bilateral Agreement provides for foreign telecom ownership up to 49 percent, and the EU bilateral Agreement may raise this figure to 50 percent.²⁴ China will be a full party to the February 1997 Information Technology Agreement (ITA) incorporated in the WTO, phasing out all its tariffs across a wide spectrum of high tech IT products between 2000 and 2005. Chinese leaders are clearly using WTO accession to promote their own high-tech agenda.

The flip side is that, if the United States fails to pass PNTR, US high-tech firms will be put at a disadvantage vis-à-vis Europe and Japan, because they will not enjoy the same nontariff commitments as their competitors. A sturdy in-country presence is essential to facilitate the flow and sale of US made high-tech in China.²⁵ The next three years are critical for Chinese uptake of foreign made telecom and internet technologies. Technical standards endorsed by China, and partnerships formed by major Chinese players, will have lasting significance. If US innovators are locked into a competitive disadvantage in Asia's linchpin market, they will become a case study on public destruction of private jobs.

²⁴ The percentage of foreign ownership permitted in telecom is one of a few areas where the US would have been even better off (51 percent in several value-added segments instead of 49) had it taken China's April 1999 bilateral offer during a visit by Zhu Rongji. See the *Wall Street Journal*, April 3, 2000, p. A21, for a description of open issues between the EU and China.

²⁵ The importance of a being close to market with a local presence is due to the fragmented and immature nature of the Chinese economy, quite apart from discriminatory practices related to actionable government policies. This is precisely why USTR spent so much time and energy negotiating trading and distribution rights in the bilateral agreement.

Conclusions

The Congress faces a PNTR vote of great practical and symbolic significance for the US economy and the larger course of US-China relations. Members of Congress should consider that without PNTR the United States:

- Certainly does not get nontariff obligations from China, and may have to arm-wrestle even to get tariff concessions;
- Puts its high-tech firms at a disadvantage compared to European and Japanese firms;
- Does not get access to WTO dispute settlement procedures in which we have won 23 of the 25 cases brought so far;

- Does not get heightened safeguard protection; and,
- Arouses vociferous anti-American sentiment among ordinary Chinese.

Passing PNTR, on the other hand, costs the United States practically nothing in economic terms, while gaining it much politically. Commercial friction between the US and China will not disappear after China's WTO accession. Our nations will continue to debate human rights, the environment, and labor accords. But the manner in which we relate to one another will be vastly improved once we are bound together by WTO treaty obligations.

Appendix A. Major US Exports to and Imports from China, 1999. (\$ millions)

Product category	Exports (FAS)	Imports (CIF)
Boilers, machinery, and mechanical appliances*	2,572	10,661
Aircraft, spacecraft, and parts*	2,317	29
Electrical machinery, equipment, and parts*	1,985	15,804
Fertilizers*	932	1
Optical, photographic, and precision instruments	792	2,397
Paper, paperboard, and pulp	541	524
Plastics and articles	522	2,736
Chemicals	478	1,110
Oil seeds, grains, and fruits*	371	88
Vehicles	213	1,190
Aluminum and articles	179	157
Iron and steel articles	140	1,563
Furniture, bedding, cushions, etc.	63	6,325
Footwear and the like	41	8,901
Toys, games, and sports equipment	38	12,074
Ceramic products	28	920
Apparel, clothing, and textiles	7	7,092
Leather, travel goods, handbags, and similar articles	4	3,217
Feather and down articles; artificial flowers; artificial human hair	2	947
All other products	1,488	12,050
TOTAL	13,118	87,787

Note : The totals in this Appendix differ from the totals in Appendix B because the tables in Appendix B correct the official US trade statistics for trade via Hong Kong.

* US exports especially at risk from Chinese retaliation in the event PNTR fails.

Source: International Trade Commission, U.S. Department of Commerce (<http://www.dataweb.usitc.gov>)

Appendix B. Estimated Impact of WTO Accession and PNTR on Total Chinese Trade and US-China Trade

Table B.1. Total value of Chinese exports f.o.b. and imports c.i.f., 1999 (\$ billions)^a

	Chinese exports	Chinese imports
Merchandise	\$193	\$163
Services, excluding freight and insurance on goods imports	25	34
Total	\$218	\$197

Table B.2. Projected step increase in Chinese exports and imports (\$ billions)^b

	Chinese exports	Chinese imports
Merchandise	\$23	\$23
Services, excluding freight and insurance on goods imports	3	7
Total	\$26	\$30

Table B.3. US-China Goods and Services Trade, 1992-99 (US\$ billions)^c

Year	US Goods		US Services (including freight and insurance)		US-China Bilateral Trade Balance
	Imports from China, f.o.b.	Exports to China, f.o.b.	Imports from China	Exports to China	Goods and Services
1992	18.7	9.5	1.1	1.6	-8.7
1993	22.6	11.6	1.4	2.0	-10.4
1994	28.4	12.6	1.6	2.1	-15.2
1995	33.9	16.1	1.8	2.6	-17.1
1996	38.5	17.2	2.1	3.2	-20.1
1997	47.9	18.1	2.3	3.7	-28.4
1998	55.8	18.9	2.5	4.0	-35.4
1999	64.1	19.3	2.7	4.3	-43.2

Table B.4. Projected step increase in US imports from and exports to China, with WTO and PNTR (\$US billions)

	Imports from China	Exports to China
Merchandise	\$4.5 ^d	\$3.4 ^d
Services, including freight and insurance	0.2 ^d	2.0 ^e
Total	\$4.7	\$5.4

Notes:

a. China's official f.o.b. merchandise import figures are increased by 10 percent to reflect insurance and freight charges, based on K.C. Fung and Lawrence Lau, "New Estimates of the United States-China Bilateral Trade Balances," Asia/Pacific Research Center, Stanford University, April 1999. A corresponding adjustment is made in the estimate for China's imports of services excluding freight and insurance. We extrapolated the Kung and Lau estimates to obtain the 1998 and 1999 values.

b. These figures are based on U.S. International Trade Commission, *Assessment of the Economic Effects on the United States of China's Accession to the WTO*, Publication 3228, August 1999. Including dynamic effects from larger investment, Chinese exports are projected to grow by 12 percent, and Chinese merchandise imports are projected to grow by 14 percent. These step increases would occur over a period of about three years. We assume that Chinese service exports will grow by 12 percent, but that Chinese service imports (other than freight and insurance) will grow by 20 percent (again over a period of three years). The 20 percent growth figure reflects the elimination of high non-tariff barriers on Chinese service imports. The ITC uses computable general equilibrium (CGE) models to arrive at its estimates of the effect of China's accession to the WTO. The CGE estimates for merchandise imports are similar to those calculated using the partial equilibrium coefficients estimated by Zhang et al. *Measuring the Costs of Protection in China*, Institute for International Economics, Washington, 1998. See the

appendix to Daniel Rosen, "China and the World Trade Organization: An Economic Balance Sheet", *International Economics Policy Briefs* Number 99-6, Institute for International Economics, Washington, June 1999.

c. These estimates are based on Fung and Lau, *op.cit.*, tables 4.3 and 6.1. Fung and Lau correct official data for re-exports through Hong Kong and markup margins. We extrapolated the Fung and Lau estimates to 1998 and 1999.

d. The US merchandise import and service import figures are based on the US ITC estimate that US imports will increase by 7 percent following Chinese accession to the WTO, taking account of direct and indirect effects. The US merchandise export figure is calculated assuming a 10 percent increase in US merchandise exports on account of lower Chinese tariffs (per U.S. International Trade Commission, *op. cit.*) plus an about additional 7.5 percent increase from the elimination of non-tariff barriers. Both figures require a period of about three years. The U.S. ITC found that the Chinese commitment to eliminate non-tariff barriers would "effectively double" the impact of tariff reductions for 25 important products accounting for 30 percent of Chinese imports. Conservatively, we estimate that the overall impact of NTB elimination works out to three-quarters of the effect of tariff reduction.

e. The service export figure is based on an estimate made by the U.S. Embassy in Beijing that Chinese barriers cost US service firms \$3 to \$5 billion a year in lost sales. We assume that Chinese WTO accession plus PNTR will cut the lost sales in half from the mid-point (\$4 billion) of the Embassy's estimate.

Appendix C. 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 1992 \$)	6.83	3.56
Time trend (per quarter)	-119.38	-3.17
Constant	11345.88	5.87

Adjusted R-squared = 0.24

Number of observations = 39

Durbin Watson statistic = 1.71

Equation 2.

Dependent variable = Quarterly changes in manufactured output (billions of 1992 \$)

Explanatory variables	coefficient	t value
Changes in manufactured imports (billions of current \$)	0.31	0.32
Changes in manufactured exports (billions of current \$)	1.12	1.38
Changes in personal expenditure on manufactured goods and changes in gross fixed investment (billions of 1996 \$)	0.20	3.29
Constant	2.92	0.83

Adjusted R-squared = 0.31

Number of observations = 38

Durbin Watson statistics = 2.2

Calculated by Erika Wada, Institute for International Economics.

Notes:

1. All figures are quarterly data from the first quarter of 1990 to the third quarter of 1999. Equation 1 is corrected for serial correlation using the Cochrane-Orcut method.
2. Manufactured output is calculated by applying the manufactures production index to the 1992 value of manufactured value added (billions of dollars).
3. Manufactured imports (or exports) are total goods imports (or exports) minus agriculture and petroleum imports (billions of current dollars).
4. Personal expenditure on manufactured goods is calculated as total personal consumption expenditure minus expenditure of services (billions of 1996 dollars). Gross fixed investment is the sum of private fixed investment and public fixed investment.

Sources:

Survey of Current Business, Department of Commerce.

The Board of Federal Reserve System (for production index).

Department of Labor (for number of manufacturing workers).

Appendix D. Scorecard on China vs. India

	India	China	Score
Accession to GATT	1947	1947; vacated 1950	
Population (1999)	987 million	1,267 million (including Hong Kong)	
GDP (1999) ^a	\$482 billion	\$1,206 billion (including Hong Kong)	
GDP per capita ^a	\$490	\$950 (including Hong Kong)	
Share of world merchandise trade ^b (1999): (excluding Hong Kong)			
Exports, f.o.b.	\$37 billion (0.9 percent)	\$193 billion (4.7 percent)	
Imports, c.i.f.	\$44 billion (1.1 percent)	\$163 billion (3.9 percent)	
Tariff bindings	By 2005, 40% for finished goods; 25 percent for intermediate. 67 percent of tariff lines bound. Weighted average tariff will be about 30 percent.	By 2005, average tariff about 9.44 percent (with a few exceptions). 7.1 percent for US priority products. All tariff lines bound.	Better
Agriculture	Tariffs in 0-300% range following WTO tariffication.	Average tariff of 17.5 percent by end 2004. 14 percent for US priority products. All tariff lines bound. No agricultural export subsidies. TRQs on soybean oil, wheat, corn, rice, wool, sugar, palm and rapeseed oils.	Better
Trade-Related Investment Measures	Notified and phased out nonconforming measures, except special auto local content requirement (under WTO dispute).	Fully comply upon accession; no transition measures.	Equal/Better
Information Technology Agreement	Zero tariffs on 95 tariff lines by 2000; 4 more by 2003; 2 more by 2004; and remaining 116 IT products tariff free by 2005.	Most tariff lines to zero by 2003; rest by 2005.	Equal
Quantitative Restrictions	Remain on 2,714 tariff lines, 32 percent of total (mostly consumer goods). India seeking 6-7 year phaseout period from 1997.	Most phased out by 2002; rest by 2005 (including autos).	Equal/Better
Services	Limited commitments in banking, non-life insurance, reinsurance with regard to commercial presence; 51 percent ceiling for foreign equity stakes. Telecom: committed to 25 percent foreign equity stake. Accept regulatory principles in basic telecom pact.	Financial services: Eliminate geographic restrictions within 3 years. Foreign insurers may offer group, health, pension insurance, phased over 5 years. 50 percent ownership for life insurance, 51 percent for non-life, 100 percent for reinsurance. Telecom: Up to 49 percent foreign stake and 50 percent in value-added and paging services after 2 years. Accept regulatory principles in basic telecom pact. Audio Visual: Foreign participation in distribution of video and sound recordings.	Equal
Trade-Related Intellectual Property	Implement fully by 2000, except for product patents on pharmaceuticals, chemicals, microorganisms.	Agreed in 1992 MOU with US to comply with TRIPs standards and give pipeline protection to pharmaceutical patents. Upon WTO accession, full compliance with TRIPs requirements.	Better
Subsidies	No industrial export subsidies.	No industrial export subsidies.	Equal

a. World Bank Atlas Method, using PPP exchange rates.

b. World merchandise trade data excludes intra-EU trade.

Source: Compiled by Jeffrey Schott and Hyun Koo Cho, Institute for International Economics, based on <http://www.chinapntr.gov> summary of Chinese commitments (for China), and Uruguay Round Final Texts. (USTR: Washington, 1994) (for India).

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