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US-Japan and US-PRC Trade Conflict: Export Growth, Reciprocity, and the International Trading System

Chad P. Bown and Rachel McCulloch

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Abstract

First Japan, and more recently the People's Republic of China, have pursued export-oriented growth strategies. While other Asian countries have done likewise, the cases of Japan and the People's Republic of China are of particular interest because their economies are so large and the size of the associated bilateral trade imbalances with the United States (US) so conspicuous. In this paper, we focus on the significant spillovers to the international trading system from US efforts to restore the reciprocal General Agreement on Trade and Tariffs (GATT) and the World Trade Organization (WTO) market-access bargain in the face of such large imbalances. The paper highlights similarities and differences in the two cases, including the role of explicit and implicit subsidies, foreign direct investment, technology transfer, and currency misalignment. We explore US attempts to reduce the bilateral imbalances through targeted trade policies intended to slow growth of US imports from these countries or increase growth of US exports to them. We then examine how these trade policy responses, as well as US efforts to address what were perceived as underlying causes of the imbalances, influenced the evolution of the international trading system. Finally, we compare the macroeconomic conditions associated with the bilateral trade imbalances and their implications for the conclusions of the two episodes.

JEL Classification: F13

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1. INTRODUCTION

Japan in the 1950s through the 1990s and the People's Republic of China (PRC) since the late 1970s have followed similar—and similarly successful—strategies of promoting economic growth through rapid acquisition of advanced foreign technology and expansion of manufactured exports. While other Asian countries have done likewise, in some cases with exports growing as rapidly and for as long, Japan and the PRC have presented special challenges to the General Agreement on Trade and Tariffs and the World Trade Organization (GATT/WTO) trading system because their shares of world exports have been so large and the associated bilateral trade imbalances with the United States (US) so conspicuous. In both political and economic terms, these large imbalances seem to contradict the GATT/WTO principle of reciprocity, which involves a balance of market-access concessions across major players in the system.

During their respective periods of rapid export growth, both Japan and the PRC accounted for a major share of total world exports. As of 2007, the PRC's share of world merchandise exports had soared to 8.9%, less than Germany's 9.7% share but topping the US share of 8.5% as well as Japan's 5.2%, in each of the latter three cases from a much larger economy (WTO 2008a). Given the sharp drop in global import demand following the 2008 onset of the global financial crisis, the PRC may not surpass Japan's 1980s peak of around 10%. However, US imports from the PRC in 2008 (US$337.8 billion) still exceeded their level in 2007 (US$321.5 billion); the 2008 bilateral trade imbalance (US$266.3 billion) also exceeded 2007's record figure, although only by US$10 billion (Morrison 2009; Table1).[1]

Unlike the principles of most favored nation treatment (Article I) and national treatment (Article III), there is no "Article" of the GATT 1947 clearly identifying reciprocity as a GATT principle. However, the Articles that govern how countries *renegotiate* concessions—in particular Articles XXVIII and XIX—do contain explicit language about reciprocity, and the GATT/WTO practice of reciprocity has typically resulted in a balance of market-opening concessions across the major players in the system.[2] But when large economies such as Japan and the PRC pursue an export-led growth strategy, the resulting increase in exports disturbs the initial "balance of concessions" (i.e., the reciprocal market-access outcome). The major trading partners that receive the increased exports then seek ways to rebalance the bargain.[3]

This paper examines the policy responses of the US to the export-led growth strategies of Japan and the PRC and the associated bilateral imbalances. We begin in Section 2 by considering some relevant features of the two episodes, identifying similarities and differences. We then examine how the US has responded to bilateral imbalances with Japan and the PRC, treating not only the "symptoms" (rapid import growth from the relevant partner and slow export growth to that partner), but also the underlying causes of the imbalances as perceived by US officials. In the face of a large bilateral trade deficit, the US has used trade policy to treat the symptoms directly (i.e., to slow the partner's export expansion into the US market and to speed up US exporters' expansion into the partner's market). Section 3 compares US policy measures intended to slow Japan's expanding exports to the US in the 1970s–1990s and the PRC's expanding exports since the 1990s. Section 4 describes US efforts during the same periods to promote US export expansion into the import markets of Japan and the PRC. Sections 3 and 4 also show how US efforts to treat the symptoms may

[1] These data refer to trade in goods only. Bilateral trade in both directions dropped sharply in early 2009 relative to the corresponding period in 2008.

[2] Economic analyses such as Bagwell and Staiger (1999, 2002) treated the GATT/WTO as a self-enforcing agreement and focus on outcomes sustained through each member's recognition that any country can seek to amend the initial bargain.

[3] The increased incentive to defect from the initial bargain can result from economic forces that are completely distinct from any political incentive to raise tariffs (e.g., to assist a preferred domestic industry or to redistribute income). Broda, Limão, and Weinstein (2008) provided recent empirical evidence that importers' market power does influence their trade policies.

have influenced the evolution of the rules of the international trading system under the GATT and WTO Agreements.

The second half of the paper examines underlying causes of the bilateral trade imbalances as perceived by US officials and the public, US policy approaches implemented with respect to Japan and the PRC to address some of these causes, and the resulting implications for the rules of the trading system. In Section 5, we examine the bilateral trade imbalances at the industry level; we focus on US policies based on the premise that such imbalances are due to a competitive advantage unfairly created by foreign (Japanese or PRC) policies (e.g., industrial policy, explicit and implicit government subsidies, and currency manipulation). In Section 6, we examine the bilateral trade imbalances from a broader macroeconomic perspective. This perspective helps to explain the end of the US-Japanese bilateral imbalance episode in the 1990s, and may also speak to the resolution of the US-PRC bilateral imbalance. Section 7 concludes the paper.

Our purpose in the paper is to describe actions taken by the US and interpret them in terms of the role played by reciprocity in theories of the GATT/WTO as a self-enforcing agreement. The paper is thus intended to be descriptive and analytical, not normative. While we characterize certain US policies as "targeting" Japanese or PRC exports, we do not attempt a systematic evaluation either of the effectiveness of these policies in achieving their objectives or their consistency with national laws and international agreements. Likewise, we do not attempt a systematic evaluation of the effectiveness of Japanese and PRC industrial and macroeconomic policies in promoting economic growth or their conformity with international agreements.

2. US-JAPAN AND US-PRC: SIMILARITIES AND DIFFERENCES IN THE TWO EPISODES

There are striking parallels and also important differences between the US-Japan frictions that peaked in the mid-1980s and the more recent US-PRC frictions that began in the late 1990s. The most salient common element is the huge size of the bilateral trade imbalances. To many, the imbalances themselves are convincing evidence of unfair trading practices.[4] In both cases, a large bilateral trade deficit has been linked in the public mind to the steady decline in the share of manufacturing in total US employment. Also similar are the allegations that the extraordinary export growth has been sustained by factors such as government subsidies and persistent currency undervaluation, rather than—or at least in addition to—comparative advantage. Both countries prevented currency appreciation, especially relative to the US dollar, through accumulation of dollar-denominated government securities.[5] Both countries also channeled capital to preferred sectors through the banking system, in both cases eventually resulting in an overhang of bad loans that complicated efforts to improve capital-market efficiency.[6] Table 1 summarizes many of these comparisons.

[4] Although the link has wide acceptance among US policy makers and the public, economic analysis indicates that bilateral imbalances have no particular significance in a multi-country world. Free trade based on comparative advantage would be expected to produce trade surpluses with some partners and trade deficits with others. Moreover, as we discuss in Section 6, an overall external imbalance cannot exist without a corresponding imbalance between domestic saving and domestic investment spending.

[5] On the use of currency undervaluation to protect the entire tradables sector, see Corden (1981), Freund and Pierola (2008), Rodrik (2008), and Staiger and Sykes (2008).

[6] According to Saxonhouse (1983), Japan's industrial policy in the 1970s should be viewed as a means to overcome distortions resulting from the country's poorly functioning capital market. The PRC uses industrial policy tools including taxation, indicative lending, and input pricing to provide firms with incentives intended to achieve desired modifications in the composition of economic activity (Bergsten et al. 2008; USITC 2007). The PRC categorizes its industries as "encouraged," "restricted," or "to be eliminated," with these classifications subject to frequent revision, and structures incentives accordingly. Although an ongoing goal of PRC industrial policy is to facilitate movement from a planned to a market economy, firms owned entirely or in part by government units continue to play a major role in the economy.

Table 1: Points of Comparison: Japan (1970s–1980s) and the PRC (1990s–2000s)

Similarities
High saving rate
Export-oriented growth strategy
Large domestic market
Large bilateral trade surplus with US
Large share of world exports
Allegations of unfair trade and dumping
Industrial policy, subsidies to preferred industries
Export concentration by industry
Exchange rate undervaluation
Large official and private holdings of US government securities
Host-country scrutiny of outward FDI
Lack of transparency
Differences
Per capita income (about US$3,000 for PRC in 2007; a substantial fraction of population living below US$2 per day)
Major role of agricultural reforms (PRC)
Openness to manufactured imports (PRC)
Special Economic Zones (PRC)
Large global trade surplus (Japan)
Key role of inward foreign direct investment (PRC)
Mode of technology transfer
Enforcement of intellectual property rights
Participation in vertical specialization
Centralization of industrial policy (Japan)
Industrial organization (Japan's *keiretsu*)
Direct competition with US exports (Japan)
Role in US security (Japan)

FDI = foreign direct investment, PRC = People's Republic of China, US = United States.

Source: Authors' research.

One last and very significant common element in the two episodes is the response from the US as well as other affected importing nations: the persistent use of discriminatory strategies to delay adjustment to growth of competing imports from the new sources. These strategies violate the spirit (as well as, occasionally, the letter of the GATT/WTO) principle of most favored nation (MFN) treatment (i.e., nondiscrimination among trading partners). The immediate result has been to protect established import suppliers as well as domestic producers from the full effects of surging imports from the new sources. The longer-term result has been to promote growth of imports from still newer sources. Protection targeted at Japan promoted export growth first in textiles and later in steel and semiconductors from the "newly industrializing economies" (Hong Kong, China; Singapore; Republic of Korea; and Taipei,China). Recent US and EU actions in textiles and apparel targeted at the PRC have benefited Viet Nam, India, and Bangladesh, along with US partners in various preferential trade agreements. The US also initiated bilateral negotiations with Japan and later the PRC to increase their purchases of US exports. We provide more details on US trade policies toward Japan and the PRC in Sections 3 and 4.

In addition, the US has sought to limit foreign acquisitions of US companies by both nations (as well as others) on "national security" grounds. The Committee on Foreign Investment in the United States was established in 1975 for the purpose of monitoring the effects of inward foreign direct investment (FDI). In 1988, the US Congress gave the President the power to

block a foreign takeover based on advice from the Committee on Foreign Investment in the United States (CFIUS) indicating a threat to national security. For example, US authorities prevented the acquisition of Fairchild Semiconductor by Japan's Fujitsu in 1987 and of Unocal, an oil producer, by the Chinese National Offshore Oil Corporation (CNOOC) in 2005. In contrast, greenfield investments, notably foreign-owned auto assembly plants, have been assiduously courted.

Along with these striking similarities, there are also fundamental differences between the two cases. Most important, Japan was already an established industrial nation in the 1980s. By the mid-1980s, Japan's per capita income was above that of most European nations; enrollment rates for secondary and higher education were likewise comparable to those of the richest nations (World Bank 1986*).* In contrast, the PRC is still poor, at least in terms of per capita income (around US$3,000 in 2007), despite a prolonged period of stellar growth performance. Thus, it is not surprising that earlier trade frictions between Japan and the US focused mainly on direct competition (i.e., Japan's increasing share of the US market and its displacement of US exports in third-country markets). Moreover, as a wealthy country, Japan consumed many of the same *types* of goods and services produced by the US, but imported too few of those from the US—at least in the view of US producers and policy makers.

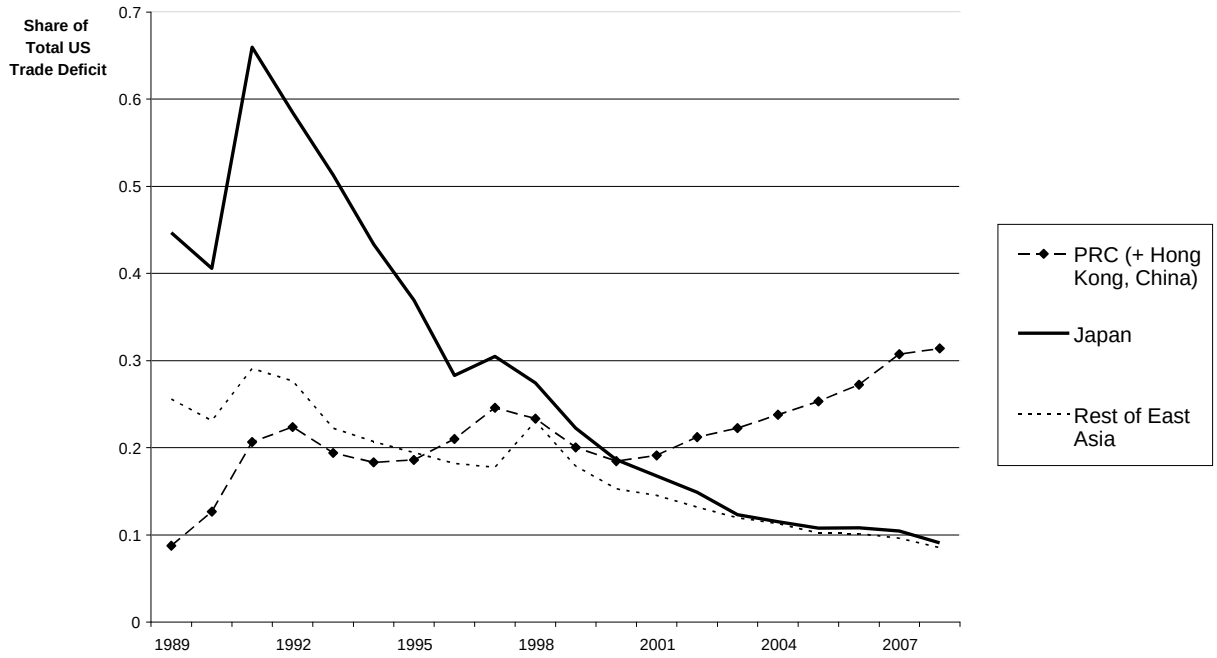
Given the PRC's much lower per capita income, only a small fraction of PRC consumers can yet afford the products that represent US comparative advantage (i.e., those supplied by intellectual property-intensive industries [films, music, software, pharmaceuticals]), when sold at prices that reflect full enforcement of US intellectual property rights. Moreover, PRC consumers' desire to acquire such goods at affordable prices feeds the demand for pirated and copycat goods produced locally, thereby adding to US complaints regarding the PRC's lax enforcement of intellectual property rights, but this consumption pattern also implies that the PRC's continued growth may help to increase even further the country's already large imports from the US. As of 2008, the PRC was already the third largest market for US merchandise exports, although a large share of those exports consisted of agricultural products and raw materials.

As a reflection of the large differences in relative factor abundance and productivity between the US and the PRC, direct competition with the PRC has been an important issue for only a few US industries, mainly for labor-intensive "sunset" industries like apparel. Rather, the PRC has displaced other established trading partners in supplying the US market. As Figure 1 illustrates, the PRC's share of the total US trade deficit has largely replaced the share of other East Asian countries over the period from 1989 through 2007.[7] In 1989, US trade with the PRC (including Hong Kong, China), accounted for less than 9% of total trade, with Japan accounting for about 45%, and other East Asian countries accounting for about 26%. By 2008, the PRC's share had soared to more than 31%, while those of Japan and the rest of East Asia had fallen to around 9% each. These shifts reflect the growth of the PRC's "processing trade" in which PRC subsidiaries of Japanese manufacturing firms import intermediate inputs from Japan and export final goods to the US. Similar supply chains link the PRC to other more advanced neighbors in East Asia, such as the Republic of Korea and Taipei,China (Dean, Lovely, and Mora forthcoming; Van Assche, Hong, and Ma forthcoming; Greaney and Li forthcoming).

Increased competition from the PRC has stimulated interest on the part of other nations in negotiating preferential trade agreements with the US as a means of getting better-than-MFN access to the lucrative US market (Bown and McCulloch 2007). However, the nature of competition from the PRC has been shifting rapidly. US officials have signaled their displeasure that the PRC is encouraging development in high-technology sectors, including some sectors that will offer direct competition comparable to that in the earlier US-Japan episode.

[7]We follow common practice in expressing national and regional bilateral imbalances as shares or fractions of the overall US imbalance. Note, however, that some US bilateral balances are positive. Moreover, this presentation may suggest that movements in individual bilateral balances are determined independently, while in fact they can be linked causally. In particular, the reduction over time in the shares of Japan and other East Asian countries reflects relocation via direct foreign investment of processing activities to the PRC.

Figure 1: Share of Total US Trade Deficit, 1989–2007: The PRC, Japan, and the Rest of East Asia



PRC = People's Republic of China, US = United States.

Note: Bilateral trade deficit defined from series US General Imports-US Total Exports.

Source: Constructed by the authors from USITC DataWeb (available http://dataweb.usitc.gov/).

In terms of overall trade patterns, there are similarities as well as differences. Like Japan, the PRC is a major importer of raw materials, and these imports have grown at a pace similar to that of its exports. However, the PRC is far more open to manufactured imports, both of final goods and intermediate inputs, the latter an indication of the PRC's much greater involvement in international vertical specialization. The PRC'S trade to GDP ratio (2005–2007) was 71.3%, an astonishing figure given the PRC's size and level of development. In contrast, the corresponding ratio for the US was 27.2% and for Japan 31.5% (WTO 2008b).[8] Another significant difference is the role played by FDI. The first of the PRC's export-oriented special economic zones, which opened in 1980, encouraged FDI through preferential treatment of foreign investors. One result may have been "round-tripping" of mainland capital—mainland investors routing funds through Hong Kong, China firms in order to qualify for the preferential treatment reserved for FDI. By 2004, the PRC's stock of inward FDI stood at US$702 billion, with an FDI to gross domestic product (GDP) ratio of 0.42, compared with Japan's 1986 stock of US$7 billion, a negligible share of GDP. Indeed, even by 2004, Japan's FDI stock was still only US$97 billion, and its FDI to GDP ratio was just 0.02 (Hufbauer, Wong, and Sheth 2006).[9] While Japan and the PRC both achieved rapid productivity improvement through adaptation of advanced technologies developed in richer countries, Japan acquired technology mainly through licensing agreements, while for the PRC, FDI has been a major channel for technology transfer.

[8]Data for the PRC do not include Hong Kong, China, with a ratio of 397%, nearly half of which represents exports to the mainland.

[9]Data for the PRC include inward FDI from Hong Kong, China, of which some portion is due to round-tripping from the mainland. With Hong Kong, China considered separately from the PRC, in 2008 Hong Kong, China ranked #3 worldwide in terms of FDI stock, after the US and the United Kingdom, while the PRC ranked #6, after France and Germany. Japan was #24 (US Central Intelligence Agency 2009).

Although industrial policy has played an important role in both Japan and the PRC, the dominant role of Japan's Ministry of International Trade and Industry and Ministry of Finance in the 1970s and 1980s has no close parallel in the PRC of today. Instead, much of the PRC's economic policy-making has been decentralized, with the direction of industrial development the result of input at many levels, from the national to the "village" (Perkins 2001; Bergsten et al. 2008; USITC 2007).[10] In this respect the PRC more closely resembles the US or the European Union, where individual sub-national units enjoy considerable scope for setting priorities and implementing policies. Finally, although moving from a planned toward a market economy, the PRC remains a communist state and has not made significant steps toward a democratic system of government at the national level. However, elections are routine at the village level and sometimes even mandatory. Japan's national government is an elected parliament, and economic policy making remains relatively centralized.

These political and economic differences have direct implications for the resolution of trade disputes, whether through bilateral negotiations or through actions taken in the GATT/WTO system. Officials of the PRC's national government may enjoy more freedom of action than their Japanese counterparts since the government does not need to satisfy a representative electorate. However, PRC officials believe that the country's political stability is highly dependent on continued economic growth. PRC policy makers were therefore aggressive in stimulating domestic demand as a means to offset the effects of the sharp drop in exports that the PRC experienced in early 2009.

The trade policy options available to the US and other trading partners in dealing with the PRC may be more circumscribed than in the case of Japan because of the PRC's extensive links to these economies via FDI and vertical specialization.[11] In the WTO, enforcement of a successful complaint is accomplished entirely through limited authorized retaliation, or at least the threat of retaliation. Given the important role of FDI and vertical specialization in most of the PRC's export sectors, finding suitable targets for authorized retaliation may prove difficult.[12] Nonetheless, the US has moved since 2006 toward greater reliance on the WTO in handling its trade conflicts with the PRC.

3. TREATING THE SYMPTOMS (1): US EFFORTS TO LIMIT EXPANSION OF FOREIGN EXPORTS INTO THE US MARKET

In the face of major bilateral trade imbalances with Japan beginning in the 1970s and with the PRC beginning in the 1990s, the US implemented policies intended to slow export expansion of these countries into the US market. In this section, we compare US attempts to slow imports from Japan and from the PRC, examining in turn voluntary export restraints, antidumping (AD), countervailing duties, safeguards, and formation of preferential trading arrangements with other sources of US imports.

3.1 Voluntary Export Restraints (VERs)

3.1.1 Japan: VER Proliferation across Industries, 1960s–1990s

Japan was admitted to the GATT in 1955 with strong support from the US. Fourteen other GATT contracting parties, fearing import competition based on low Japanese wages, initially limited their liberalization commitments by invoking Article XXXV. However, problems soon arose in the US-Japan relationship over Japanese textile exports. By 1957, the first orderly

[10] Bergsten et al. also note efforts in the early to mid-1990s to recentralize, particularly in the area of tax collection.

[11] On the other hand, security concerns may have shaped US policies toward Japan until 1975, given US reliance on Japanese bases during the Vietnam War.

[12] See, for example, the discussion in Bown (2009b).

marketing agreements between the US and Japan had been signed.[13] These agreements represented a US decision to forego GATT-sanctioned remedies in favor of a non-MFN, bilateral approach to handling trade frictions and set a pattern replicated for additional products and importing and exporting countries in subsequent decades in the form of negotiated "voluntary" export restraints. The market incentives created by the initial discriminatory form of protection eventually produced the worldwide Multi-Fiber Arrangement (MFA) in 1974. The MFA placed bilateral quantitative limits on textile and apparel trade between most pairs of importing and exporting countries until it was phased out as part of the package negotiated in the Uruguay Round of GATT negotiations concluded in 1994.

In part due to the "success" of agreements on textiles (which promoted growth of exports from other, not yet restricted, countries in Asia and elsewhere) and as Japan made a full recovery from the effects of World War II, Japan's exports and US-Japan trade frictions shifted toward a succession of more sophisticated products. For many products, rapid export growth resulted first in a US safeguard (Section 201) petition requesting relief from surging imports for an injured domestic industry and then a negotiated VER. Table 2 gives examples of US safeguard investigations resulting in such orderly marketing agreements during the 1970s and 1980s in Japanese export products such as footwear, steel, television receivers, and even autos.

Table 2: Examples of US Safeguard and Antidumping Petitions Resulting in VERs with Japan, 1975–1997

	US Law	Product	Petition Year	USITC Case No.	Initial Year of VER
1.	SG	Stainless steel and alloy tool steel	1975	201-TA-5	1976
2.	SG	Footwear	1975	201-TA-7	1976
3.	SG	Footwear	1976	201-TA-18	1977
4.	SG	Television receivers	1976	201-TA-19	1977
5.	SG	Certain motor vehicles and chassis/bodies thereof	1980	201-TA-44	1981
6.	SG	Carbon and certain alloy steel products	1984	201-TA-51	1984
7.	AD	Erasable programmable read-only memory-semiconductors (EPROMS)	1985	731-TA-288	1986
8.	AD	256K and above Dynamic random access memory-semiconductors (DRAMS)	1985	731-TA-300	1986
9.	AD	Photo paper and chemicals	1993	731-TA-661	1994
10.	AD	Sodium azide	1996	731-TA-740	1997

AD = antidumping, SG = safeguard, US = United States, USITC = United States International Trade Commission, VER = voluntary export restraints.

Notes: SG refers to a safeguard under the US Section 201 law; AD refers to antidumping under the US Section 731 law.

Source: Data collected by the authors from various USITC publications.

As Table 2 indicates, the safeguard law was not the only import-restricting policy that allowed US industries to seek new trade barriers and that ultimately resulted in bilaterally negotiated VERs limiting Japanese exports to the US.[14] US AD policy, which we discuss in more detail in Section 3.2, also resulted in a number of Japanese VERs. The most important of these was the semiconductor VER, negotiated after a pair of AD petitions filed in 1985. A 1993 petition under the US AD law also resulted in a VER over photo paper between the US firm Kodak and the Japanese firm Fuji. This dispute was a precursor to a high-profile WTO

[13]The US had already negotiated similar restrictions on Japanese textile exports prior to World War II.

[14]During this period, the US also negotiated VERs with Japan and other exporters outside the legal frameworks of the safeguard and AD laws.

dispute between Kodak and Fuji. A 1996 AD petition over sodium azide resulted in a negotiated VER with three Japanese chemical-producing firms.

3.1.2 The PRC: VERs in Textiles and Apparel, 2005–2008

The terms of the PRC's 2001 accession to the WTO in 2001 granted WTO members a number of the PRC-specific transitional safeguard mechanisms designed to cope with an anticipated increase in exports from the PRC, and especially textile and apparel exports following the scheduled end of the MFA. For the 2001–2008 period, a US safeguard program covering only US imports of textile and apparel products from the PRC was administered by the Office of Textiles and Apparel (OTEXA) in the US Department of Commerce.

Facing a surge in imports of textile and apparel products from the PRC following the expiration of the MFA at the end of 2004, the US negotiated a voluntary export restraint with the PRC for the 2005–2008 period (on the economic effects of the end of the MFA, see Brambilla, Khandelwal, and Schott forthcoming; Barrows and Harrigan 2009). Although the rules of the WTO preclude the use of VERs, as we describe in more detail below, this policy tool nonetheless returned in the context of one major player seeking to slow the export expansion of another major trading partner.[15]

3.2 US AD against Japan and the PRC

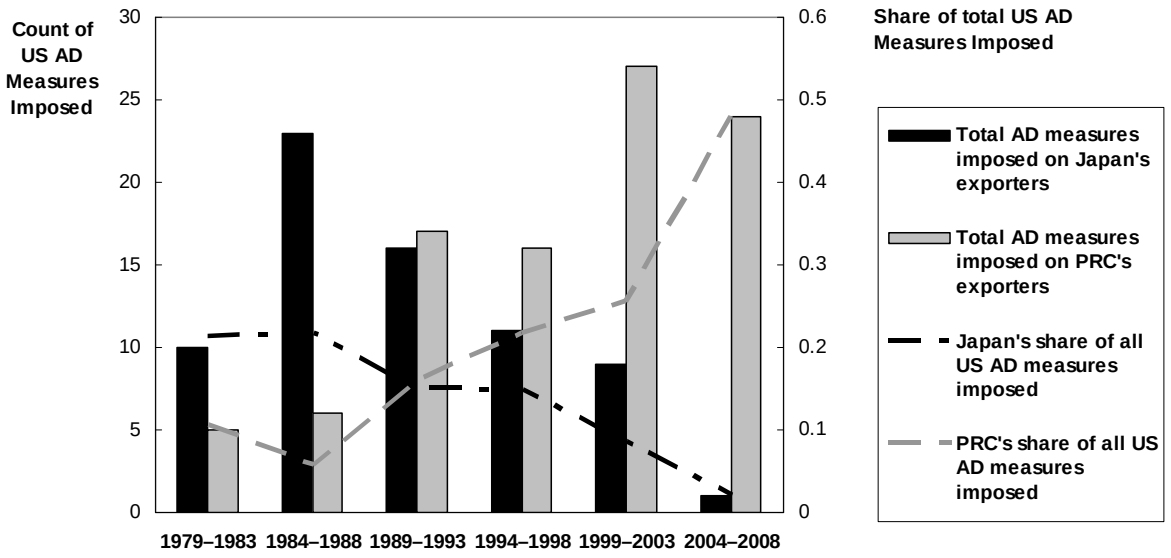
AD is a second policy tool the US has used to slow the expansion of Japanese and PRC exports into the US market. Japan and the PRC together faced a major share of all US AD activity over the 1979–2008 period; 25% of all US AD investigations targeted either Japanese or PRC producers, and 33% of all imposed US AD measures targeted either Japanese or PRC exports.[16]

However, as Figure 2 indicates, US use of AD over 1979–2008 is actually made up of two distinct episodes: the rise (1979–1988) and fall (1989–2008) of AD use to manage the growth of Japan's exports to the US, and increased use of AD (since 1989) to manage the growth of the PRC's exports to the US. In Figure 2, the bars indicate the number of US AD measures imposed during various sub-periods between 1979 and 2008. The lines indicate the respective shares of Japan and the PRC in total US AD measures imposed in each of the sub-periods. US targeting of Japan with AD reached its peak in the 1984–1988 period, when the US imposed more than 20 new import restrictions on Japanese exporting firms; measures restricting imports from Japan alone accounted for more than 20% of all new AD measures the US imposed during that period.

[15] Under the self-enforcing WTO system, the US and the PRC were free to choose this option as long as no country filed a complaint.

[16] Authors' estimates based on the data in Bown (2009a). Investigations naming firms in more than one European Union member country for the same product are combined as a single case.

Figure 2: US Antidumping Activity Against Japan and the PRC, 1979–2008



AD = antidumping, PRC = People's Republic of China, US = United States.

Note: Count is number of antidumping investigations initiated during those years that resulted in the imposition of final antidumping measures.

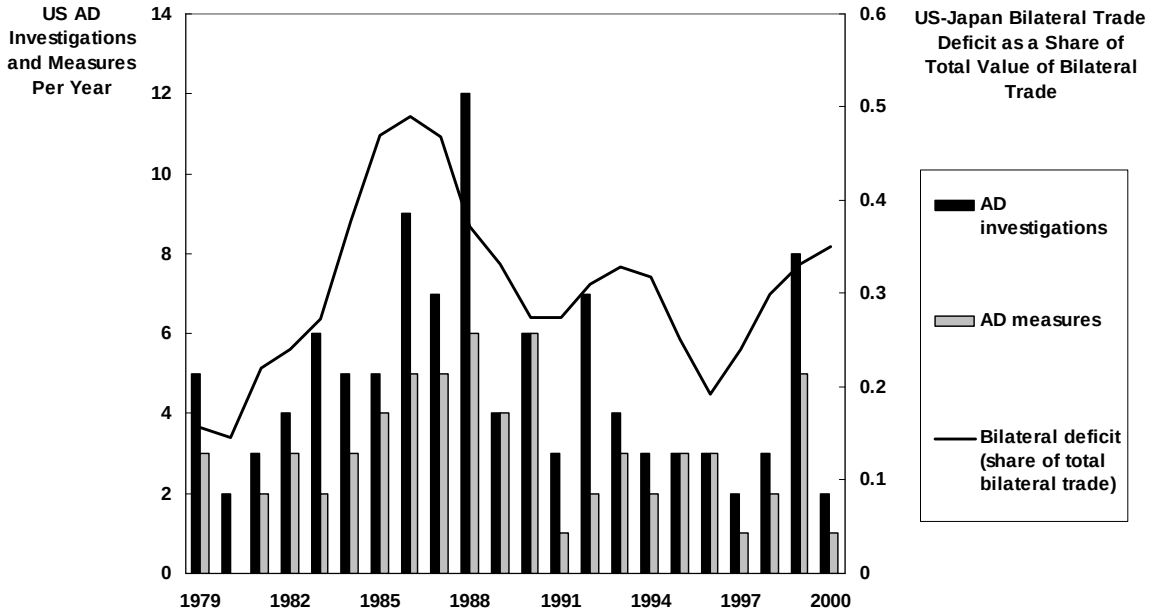
Source: Compiled by the authors from Bown (2009a).

After 1988, US use of AD against Japan slowly declined, whether measured by the number of new measures imposed on Japanese exporters or by Japan's share in total US use of AD. At the same time, US use of AD shifted dramatically toward imposition of new import restrictions against the PRC. During the second half of the period (1999–2008), the US imposed more than 50 new AD import restrictions on PRC exporters, and these restrictions were roughly a third of all AD measures the US imposed during this period.

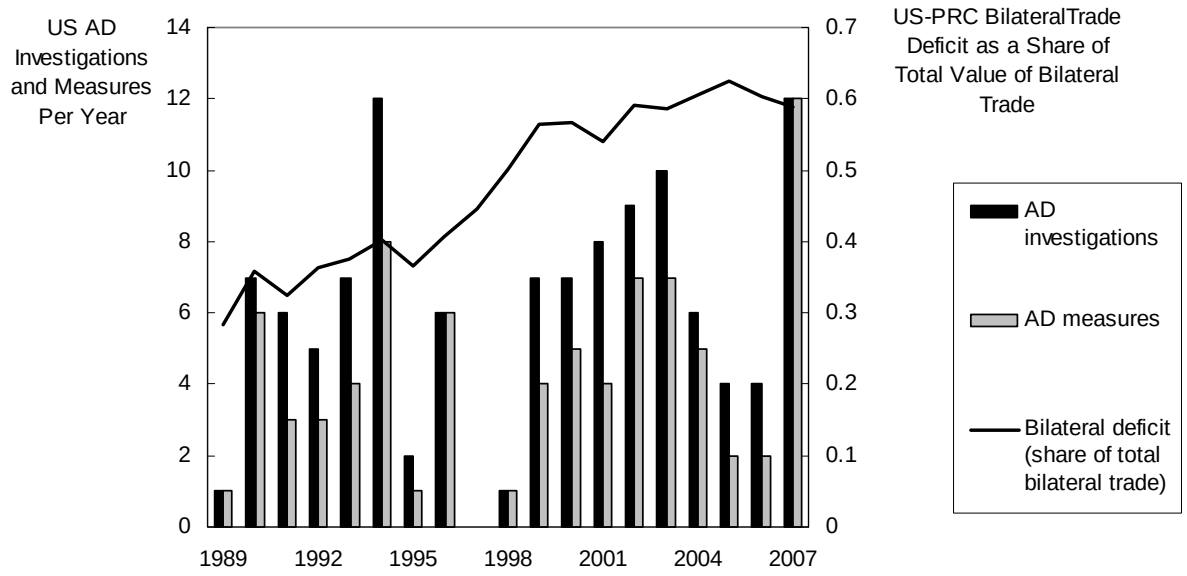
Figure 3 illustrates the time pattern of US AD investigations and measures imposed against Japan (Panel A, 1979–2000) and against the PRC (Panel A, 1989–2007) as compared with the growth of the US bilateral trade deficit (normalized as a share of the total value of bilateral trade) with each country. The data show a strong positive correlation over time between the size of the bilateral trade deficit and the frequency with which the partner has become a target of US AD to limit the trading partner's export expansion into the US market. However, while US AD activity against Japan began to decline as the yen rose in value relative to the US dollar in 1985, AD activity against the PRC continued unabated even after the yuan began to appreciate relative to the dollar in 2005.

Figure 3: The US Bilateral Trade Deficits and Use of Antidumping

3a: US-Japan, 1979–2000



3b: US-PRC, 1989–2007



AD = antidumping, PRC = People's Republic of China, US = United States.

Notes: Light bars indicate the number of antidumping investigations initiated during those years that resulted in the imposition of final antidumping measures. The PRC is defined as the PRC plus Hong Kong, China.

Sources: Antidumping data compiled by the authors from Bown (2009a). US-Japan bilateral trade data are from Feenstra et al. (2005).

3.3 Countervailing Duties and Country-Specific Safeguards

In the context of the differential response in US treatment of Japan and the PRC, two additional policies of contingent protection are countervailing duties and country-specific safeguards.

First, under the US countervailing duty or "anti-subsidy" law, officials can target imports believed to have been unfairly subsidized by foreign governments; such imports are then subject to an import tax equal in size to the foreign subsidy. Interestingly, the US never used its countervailing duty law to address imports from Japan over the entire 1979–2008 period.

From 1979 until 2006, the US also never used its countervailing duty law to impose new import restrictions on the PRC. A 1984 policy decision of the US Department of Commerce explicitly exempted the PRC cases from consideration under the countervailing duty statute. However, in November 2006, US producers of coated free sheet paper included the PRC in a petition they were filing against Indonesia and Korea over alleged subsidies. In March 2007, the Commerce Department opened the door for the US to begin imposing countervailing duties on imports from the PRC by reversing its earlier policy (Government of the US, Department of Commerce 2007). In December 2007, the US International Trade Commission (USITC) made a negative injury determination in the coated free sheet paper case, and no duties were imposed. However, the Commerce Department's 2007 policy reversal allowed *other* US industries to request import protection against the PRC under the countervailing duty law. As Table 3 indicates, thirteen additional investigations against the PRC had been initiated as of April 2009, and all cases that had reached the stage of a final decision resulted in the imposition of new countervailing duties, one as high as 226%.

Table 3: US Countervailing Duty Investigations of the PRC, 2006–2009[a]

No.	Product	Petition Year	Final CVD Imposed (%)
1.	Coated free sheet paper	2006	0.00 (no injury)
2.	Circular welded carbon quality steel pipe	2007	37.28
3.	Certain new pneumatic off-the-road tires	2007	5.62
4.	Light-walled rectangular pipe and tube	2007	15.28
5.	Laminated woven sacks	2007	226.85
6.	Lightweight thermal paper	2007	13.63
7.	Raw flexible magnets	2007	109.95
8.	Sodium nitrite	2007	169.01
9.	Circular welded austenitic stainless pressure pipe	2008	1.01
10.	Circular welded carbon quality steel line pipe	2008	35.67
11.	Citric acid and certain citrate salts	2008	na[b]
12.	Certain tow-behind lawn groomers and certain parts thereof	2008	na[b]
13.	Certain kitchen appliance shelving and racks	2008	na[b]
14.	Oil country tubular goods	2009	na

CVD = countervailing duty investigations, na = final determination not yet available, PRC = People's Republic of China, US = United States.

Notes:
[a] Data as of 15 April 2009.
[b] Indicates that a preliminary CVD was imposed after a preliminary determination of injury and subsidization.

Source: Bown (2009a).

Second, upon the PRC's accession to the WTO in 2001, the US implemented two separate the PRC safeguards in domestic legislation. The first safeguard, as discussed above, was limited to the 2001–2008 period, covered US textiles and apparel imports only, and was administered by the Office of Textiles and Apparel in the US Department of Commerce. Separately, under Section 421 of the US trade law, the US has access to a broader PRC-specific safeguard through 2014, one that is administered in much the same way as the US global safeguards (Section 201) law, with injury investigations taking place at the USITC and

the US President ultimately granted the discretionary authority to determine any policy response to the investigation.

Table 4 lists a number of the PRC-specific safeguard investigations initiated under the Section 421 law between 2002 and 2009. As of April 2009, none had yet resulted in the imposition of new import restrictions under the law, despite a number of USITC affirmative injury votes and recommendations to the President that new import restrictions be imposed. But the table also indicates that three of the six products investigated but denied import protection under the PRC safeguard did gain import protection under the US AD law within five years after the failed PRC-safeguard investigation.

Table 4: The PRC Safeguard Investigations by the United States under Section 421

ITC Case No.	Product	CSG Investigation Initiated	CSG Outcome	Subsequent Resort to AD or CVD?
TA-421-1	Pedestal actuators	2002	Affirmative ITC vote, no CSG remedy imposed	No[a]
TA-421-2	Steel wire garment hangers	2002	Affirmative ITC vote, no CSG remedy imposed	2007 AD investigation, 2008 definitive AD measures
TA-421-3	Brake drums and rotors	2003	Negative ITC vote	No[a]
TA-421-4	Ductile iron waterworks fittings	2003	Affirmative ITC vote, no CSG remedy imposed	No[a]
TA-421-5	Uncovered innerspring units	2004	Negative ITC vote	2008 AD investigation, 2009 definitive AD measures
TA-421-6	Circular welded non-alloy steel pipe	2005	Affirmative ITC vote, no CSG remedy imposed	2007 AD/CVD investigations, 2008 definitive AD/CVD measures
TA-421-7	Certain passenger vehicle and light truck tires	2009	Ongoing[a]	No[a]

AD = antidumping, CSG = China specific safeguards, CVD = countervailing duty, ITC = International Trade Center, PRC = People's Republic of China.

Note: [a] As of 28 April 2009.

Source: Information collected by the authors and compiled in Bown (2009a).

3.4 Improving the Relative Terms of Access to the US Market for other Exporters

US imposition of restrictions on imports from Japan and the PRC sometimes benefits producers in other (unrestricted) exporting nations in addition to, or rather than, competing US producers. This has been especially true for PRC textiles and apparel, where other developing countries share the PRC's comparative advantage relative to the US. In such cases, restrictions on Japan and the PRC have improved the *relative* terms of US import market access available to other exporters. However, in many cases, the US has created a

similar relative advantage for other exporters through a variety of preferential (discriminatory) trade arrangements. Most of these arrangements are permitted under GATT/WTO rules.

Trading partners that competed with Japan in the US market and benefited from formal preferential trade agreements with the US during this period include Israel (1985) and Canada (1987). With the growth of US imports from the PRC, the US entered into preferential deals with Mexico (North American Free Trade Agreement [NAFTA] in 1994), Central American countries and the Dominican Republic (Central American Free Trade Agreement-Dominican Republic [CAFTA-DR] in 2004), Bahrain (2006), and Morocco (2006). The US also offered various groups of developing countries further extensions of major preferential programs. These included the Generalized System of Preferences; for Caribbean nations, the Caribbean Basin Initiative (1983, substantially expanded in 2000 through the US-Caribbean Basin Trade Partnership Act); for Andean countries, the Andean Trade Preference Act (1992, expanded as the Andean Trade Promotion and Drug Eradication Act under the Trade Act of 2002); and for countries in sub-Saharan Africa, the African Growth and Opportunity Act (2000, revised in 2002, 2004, and 2006). While such special preferential arrangements may have been motivated primarily by US foreign-policy considerations rather than as a means to restore the market position of established suppliers to the US market, their result nonetheless is to improve the market access of firms in other countries relative to their rivals in the PRC (for a detailed description of US trade preferences for various groups of developing countries, see http://www.ustr.gov/trade-topics/trade-development/preference-programs).

4. TREATING THE SYMPTOMS (2): US EFFORTS TO IMPROVE ITS EXPORTERS' MARKET ACCESS IN JAPAN AND THE PRC

The second strategy a country facing a bilateral trade imbalance due to continued export expansion into its market can use to rebalance concessions is to expand its own exporters' access to the other country's market. The US has pursued this approach against Japan, and to a lesser extent more recently against the PRC, via a combination of formal trade disputes initiated under the multilateral auspices of the GATT (1955–1994) and WTO (1995 onward) dispute-settlement systems, as well as its unilateral Section 301 law (1974 onward). Under Section 301 of the 1974 US Trade Act, a US export industry can petition the US government to take up its concern that it has lost foreign market access because another country is not living up to a trade agreement it has signed with the US (Bhagwati and Patrick 1990; Bayard and Elliott 1994).[17] Section 301 was strengthened and revitalized in 1988.

4.1 US Formal Market-opening Actions against Japan

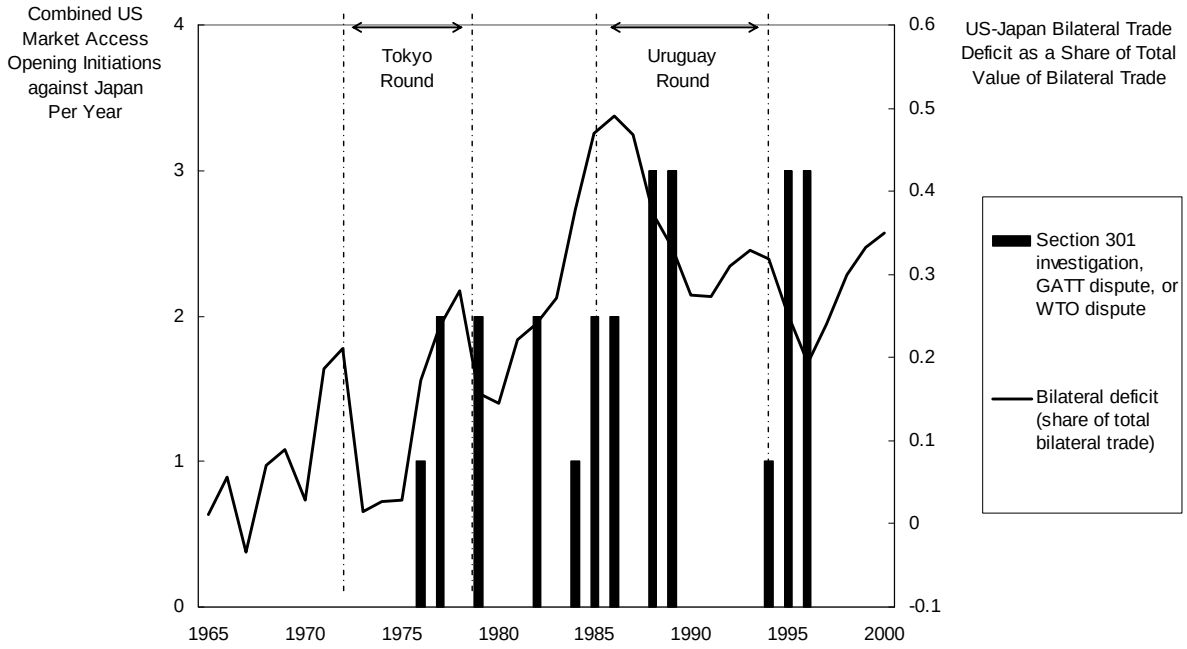
When Japan joined the GATT in 1955, the country was still very poor. The post-World War II occupation by the US had only ended in 1952, and Japan's domestic market was not yet attractive to US exporters of manufactured goods. Japan had relied heavily on food imports from the US and other countries in the immediate postwar period, but as Japanese farmers recovered from the war, the demand for imported food waned. Traditional policies of self-sufficiency began to be restored, and in some cases US food exports were excluded. Thus, early market-opening efforts focused on agricultural products.

By the mid-1970s, the US had adopted a more formal and legalistic approach to improving its exporters' access to the Japanese market through the combined use of GATT dispute settlement and its Section 301 policy. Over the next twenty years, US officials pursued at least 23 different formal actions against Japan in attempts to open up its market to US exports. Figure 4 shows formal US market-opening initiatives against Japan and the bilateral US-Japan trade deficit by year from 1965 through 2000. Similar to the US use of AD against

[17] For a discussion of Section 301, see Bhagwati and Patrick (1990) and Bayard and Elliott (1994).

imports from Japan as shown in Figure 3a, there is a strong positive correlation between the size of the bilateral trade deficit and these formal US actions attempting to open up Japan's markets to US exports.

Figure 4: The US-Japan Bilateral Trade Deficit and US Section 301, GATT, and WTO Formal Trade Dispute Activity against Japan, 1965–2000



GATT = General Agreement on Tariffs and Trade, PRC = People's Republic of China, US = United States, WTO = World Trade Organization.

Sources: Section 301, GATT, and WTO dispute initiation data compiled by the authors from WTO (1995, 2009), Bayard and Elliott (1994: 355–465), and USTR (2009, various years). US-Japan bilateral trade data from Feenstra et al. (2005).

Table 5 presents detailed information on 23 formal Section 301, GATT, and WTO trade disputes that the US initiated to open up Japan's market. While the US had begun using the GATT dispute-settlement provisions in 1948, it did not file its first formal trade dispute against Japan until 1977.[18] US use of GATT dispute settlement in the attempt to open up Japan's market to its firms was most frequent during the 1977–1988 period, when it filed a total of 11 formal disputes against Japan. Japan was clearly an important target for the US during this period, facing nearly a third of the 35 GATT trade disputes the US initiated. Beginning in 1989, partially out of frustration with the relatively toothless dispute-settlement provisions of the GATT and partially as a negotiating tactic to increase the pressure on the other GATT contracting parties to reform the dispute-settlement provisions, the US shifted away from using GATT dispute settlement and instead relied solely on its unilateral Section 301 policy tool to pursue cases against Japan. Whereas all but one of the Section 301 investigations against Japan during 1977–1988 resulted in the US bringing a formal GATT trade dispute, none of the next four Section 301 cases, initiated during 1989–1994, did so. The only Section 301 investigation of Japan during 1977–1988 that did not lead to a US-initiated GATT dispute was the semiconductor case initiated in 1985. In the WTO era that began in 1995, all US Section 301 investigations of Japan have been forwarded to WTO dispute settlement, along with two other disputes that were not initiated through the Section 301 channel.

[18]This section draws on data compiled by Hudec (1993). The US was not the first country to file a formal GATT trade dispute against Japan. Australia filed a formal dispute in 1974 over Japanese quantitative import restrictions on beef.

Table 5: US Section 301 Investigations Targeting Japan's Import Market Access, GATT and WTO Disputes, 1955–2008

	Product-Alleged Market Access Issue	Year[a]	Sect. 301	GATT/ WTO Dispute
1.	**Steel**–Japan/EC agreement "deflected" Japanese production to the US market	1976	Y	N
2.	**Thrown silk**–discriminatory market access agreement with Brazil, Republic of Korea, PRC	1977	Y	Y
3.	**Leather**–quantitative import restrictions and high tariffs	1977	Y	Y
4.	**Cigars**–import barriers and discriminatory internal taxes	1979	Y	Y
5.	**Pipe tobacco**–high import prices and limits on distribution and advertising	1979	Y	Y
6.	**Leather footwear**–quantitative import restrictions	1982	Y	Y
7.	**Metal softball bats**–technical barrier to trade of discriminatory testing/certification	1982	N	Y[b]
8.	**Single tendering procedures**–general practices of government procurement	1984	N	Y
9.	**Semiconductors**–domestic policies created "protective structure" and market access barrier	1985	Y	N[c]
10.	**Cigarettes**–high tariffs, domestic monopoly, distribution restrictions	1985	Y	N
11.	**Certain agricultural products**–quantitative import restrictions on dairy, legumes, starches, sugars, groundnuts, preserved beef, fruit pastes and juices, pineapples, tomatoes	1986	N	Y
12.	**Herring, pollack, and surimi**–quantitative import restriction on fish	1986	N	Y
13.	**Citrus**-import quotas on fresh oranges and juice, domestic content requirements	1988	Y	Y
14.	**Construction services**–barriers to foreign architectural, engineering, consulting services	1988	Y	N
15.	**Beef**–quantitative restrictions on imports	1988	N	Y
16.	**Satellites**–ban on government procurement of imports	1989	Y	N
17.	**Supercomputers**–restrictive government procurement practices of imports	1989	Y	N
18.	**Wood products**–technical barriers to trade (product standards, building codes, testing, and certification) affecting imports	1989	Y	N
19.	**Auto parts**–policies that restrict foreign access to replacement parts market	1994	Y	N[c]
20.	**Alcoholic beverages**–Japanese *shochu* taxed internally at a lower rate than comparable imported products (vodka, liqueurs, gin, *genever*, rum, whisky, brandy)	1995	N	Y
21.	**Sound recording measures**–copyright law provides insufficient duration of intellectual property rights protection for past performances and sound recordings	1995	N	Y
22.	**Consumer photographic film and paper**–discriminatory policies inhibit sale and distribution of foreign products	1995	Y	Y
23.	**Agricultural products**–"codling moth" testing requirement results in import ban of apricots, cherries, plums, pears, quince, peaches, nectarines, apples, walnuts	1997	Y	Y
24.	**Apples**–import restrictions due to risk of transmitting "fire blight" bacterium	2002	N	Y

EC = European Commission, GATT = General Agreement on Tariffs and Trade, PRC = People's Republic of China, US = United States, WTO = World Trade Organization.

Notes:

[a] Earliest year of initiation of formal Section 301 petition or GATT/WTO dispute.

[b] Not a GATT dispute initiated under Article XXIII, but a dispute documented in Hudec (1993).

[c] US retaliation or threatened retaliation led to Japan filing a GATT/WTO trade dispute against the US.

Sources: Compiled by the authors from WTO (1995, 2009), Bayard and Elliott (1994: 355–465), and USTR (2009, various years).

As the products in Table 5 indicate, US use of these formal channels to seek additional Japanese market access for its exporters has spanned a considerable range of sectors and issues. In the 1970s, desired market access was primarily in agriculture-based products (tobacco and leather) and lower value-added manufacturing (silk, cigars, cigarettes, footwear, and bats). In the mid-1980s, while there were continued pressures to obtain Japanese market access for US agricultural products (dairy, legumes, starches, sugars, groundnuts, pineapple, tomato, fish, citrus, and beef) and also wood products, there were new issues of importance to U.S exporters as well. Some of this involved intellectual-property-intensive export products where the US had a strong comparative advantage (semiconductors, supercomputers, satellites, auto parts), but also involved were issue-areas and disciplines where the GATT rules were only slowly becoming responsive (e.g., trade in services [construction, architectural, engineering], as well as three separate disputes over Japan's government-procurement procedures).

4.2 US Formal Market-opening Actions against the PRC

Moreover, the US and other WTO members demanded many more import market-access commitments than had previously been the case with new arrivals when they negotiated the terms of the PRC's accession to the WTO.[19] When the PRC acceded to the WTO in 2001, it had cut tariffs significantly on a broad range of products, making its applied tariffs both relatively low and quite close to the bound rates. As Table 6 indicates, the PRC's applied and bound tariffs in 2007 were only slightly higher than those of the US and Japan overall and actually lower than Japan's in certain areas (e.g., agriculture). The PRC's tariffs were also much lower on average than those of other major emerging economies such as India and Brazil, countries that have been part of the GATT/WTO system for decades longer than the PRC.

Table 6: Applied Tariffs and Bindings for Selected WTO Members, 2007

WTO Member Country	Product Category	Binding coverage (%)	Average Bound Tariff (%)	Average Applied Tariff (%)
United States	All	100	3.5	3.5
	Agriculture	na	5.0	5.5
	Non-agriculture	100	3.3	3.2
	Clothing	100	11.4	11.7
Japan	All	99.6	5.1	5.1
	Agriculture	na	22.7	21.8
	Non-agriculture	99.6	2.4	2.6
	Clothing	100	9.2	9.2
PRC	All	100	10.0	9.9
	Agriculture	na	15.8	15.8
	Non-agriculture	100	9.1	9.0
	Clothing	100	16.2	16.0
Brazil	All	100	31.4	12.2
	Agriculture	na	35.5	10.3
	Non-agriculture	100	30.8	12.5
	Clothing	100	35.0	20.0
India	All	73.8	50.2	14.5
	Agriculture	na	114.2	34.4
	Non-agriculture	69.8	38.2	11.5
	Clothing	54.9	43.5	22.2

HS = harmonized system, na = not available, PRC = People's Republic of China, WTO = World Trade Organization.

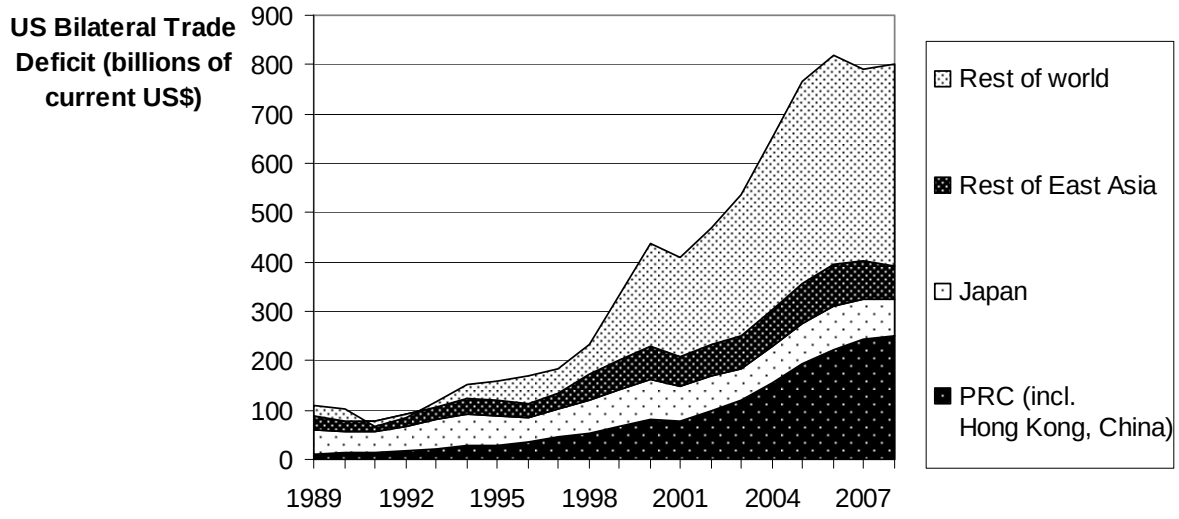
Notes: Binding coverage is defined as share of HS six-digit subheadings containing at least one bound tariff line. Simple averages are of the ad valorem (ad valorem equivalent) six-digit HS duty averages.

Source: Compiled by the authors from WTO (2008c).

[19] When the WTO was created in the Uruguay Round, many less-developed countries were permitted to join without special conditions. The PRC's "special" treatment was presumably a consequence of its already evident potential for significant global impact as an exporter.

However, as Figure 5 shows, the US bilateral trade deficit has nonetheless been expanding rapidly, with no sign of decline after the PRC's accession to the WTO in 2001.[20] Thus, beginning in 2004, the US began efforts similar to the formal actions taken against Japan beginning in the late 1970s to get the PRC to open up its market to US exports. Table 7 documents the formal trade disputes the US has initiated against the PRC through 2008, in which it alleges that the PRC has not sufficiently (quickly or in depth) lived up to its import market-access commitments. The domestic industries behind US initiation of formal disputes included both dominant export interests in areas of US comparative advantage (intellectual property-intensive goods and services like information technology, Hollywood movies, and other media, and financial information service providers) and traditional capital-intensive industries (auto parts). Like the WTO disputes involving the US and Japan discussed earlier, many of the issue-areas are relatively new and/or involve somewhat new disciplines, including the Agreement on Trade and Related Aspects of Intellectual Property Rights and the Agreement on Subsidies (TRIPS) and countervailing measures (SCM), where the PRC is particularly vulnerable given its history of state-owned enterprises and its still incomplete transition to a more market-oriented economy.[21]

Figure 5: Composition of US Trade Deficit, 1989–2007, by Region



PRC = People's Republic of China, US = United States.

Note: Bilateral trade deficit defined from series US General Imports-US Total Exports.

Source: Constructed by the authors from USITC Dataweb (available http://dataweb.usitc.gov/).

[20]For a number of years prior to 2001, the US had given the PRC's exports MFN treatment (Normal Trade Relations in US law) even though the PRC was not yet a member of the WTO. Thus, the PRC's 2001 entry did not substantially reduce the US applied tariffs faced by PRC exporters, although it did increase the certainty of that treatment.

[21]Indeed, the shift toward US use of countervailing duty policy against the PRC described above and illustrated in Table 3 may reflect the US desire to speed the elimination of the PRC's domestic subsidy programs, which increase the PRC's ability to export while reducing foreign access to the PRC's domestic market.

Table 7: US-Initiated WTO Trade Disputes over Access to the PRC's Import Market, 2001–2008

No.	Product/Policy-Complainant(s) and Issue	Year
1.	**Integrated circuits**–US alleged that the PRC's domestic value-added tax and rebate scheme violated national treatment thus discriminating against imports	2004
2.	**Automobile parts**–US, EC, and Canada alleged that the PRC's policies violated rules on national treatment and subsidies and created disincentives for domestic auto manufactures to use imported parts	2006
3.	**Refunds, reductions or exemptions from taxes and other payments–**US and Mexico alleged that the PRC's policies granted WTO-inconsistent subsidies granted if firms purchased domestic over imported goods or on the condition that firms meet export criterion	2007
4.	**Movies, music, publications (IPR Enforcement)**–US alleged that the PRC was in violation of TRIPS because its laws failed to sufficiently enforce the intellectual property rights of foreign-produced movies, sound recordings, and other publications	2007
5.	**Movies, music, publications (Distribution)**–US alleged that the PRC was in violation of GATS for barriers to the distribution of foreign-produced movies (theatrical release or home entertainment), sound recordings, and other publications	2007
6.	**Financial information services and foreign financial information suppliers–** US, EC, and Canada alleged that the PRC's policies which require foreign financial information suppliers (e.g., Bloomberg, Thomson-Reuters, Dow-Jones, Pearson) to supply their services through an entity designated by Xinhua News Agency discriminates against imports	2008
7.	**"Famous Brands** –US, Mexico, and Guatemala alleged that policies such as "China World Top Brand Programme" and the "Chinese Famous Export Brand Programme" allocate subsidies based on export performance criterion and are thus in violation of the SCM Agreement	2008

EC = European Commission, GATS = General Agreement on Trade in Services, IPR = intellectual property rights, PRC = People's Republic of China, TRIPS = Agreement on Trade-Related Aspects of Intellectual Property Rights, US = United States, WTO = World Trade Organization.

Source: Compiled by the authors from WTO (2009).

In considering the formal WTO disputes that the US has chosen to initiate to address the bilateral imbalance with the PRC, it is worth noting a path that the US has *not* yet undertaken (i.e., resumption of the unilateral Section 301 actions that were criticized by US trading partners during the GATT era; see Bayard and Elliott 1994, 355-465 and appendix). The absence of unilateral actions is especially significant given that the US Trade Representative (USTR) has received a number of petitions to investigate the PRC under Section 301. In each year between 2004 and 2007, the USTR received at least one petition requesting the use of Section 301 to investigate the PRC's exchange rate or manufacturing labor rights, alleging that undervaluation of the PRC's currency constitutes a WTO-inconsistent subsidy or that its mistreatment of manufacturing workers affects US market access. In each instance, the USTR has declined to investigate the issue of the petition.

5. ATTEMPTS TO ADDRESS SYSTEMIC ISSUES THROUGH NEW GATT/WTO DISCIPLINES

In addition to efforts to provide "symptomatic relief" for the large bilateral imbalances via US import restrictions and export promotion, US policy makers also undertook actions to address what they perceived as important underlying causes of the persistent imbalances. In

this section we describe these underlying causes (as portrayed by US officials and the US public at large) and the consequences for the international trading system of US efforts to address those causes.

As we describe in Sections 5.1 and 5.2, a common view in the US during both episodes was that inappropriate foreign government interference with market forces lay at the root of the imbalances. This perception led naturally to US efforts to use (and modify) the rules-based trading system to address the troubling imbalances in a systematic way. The differences in the bilateral imbalance that the US faced with Japan versus its bilateral problem with the PRC are found in the details. Finally, Section 5.3 discusses some unintended consequences of the evolution of the trading system from the perspective of the US—in particular, how Japan and the PRC have used the WTO dispute settlement process to self-enforce their exporters' access to the US market.

5.1 US-Japan Conflict and the Reach of WTO Disciplines

US priorities in the Uruguay Round were shaped by dissatisfaction arising from US exporters' inability over several decades to access certain export markets, especially that of Japan. This is clearly reflected in Table 5, which lists the exported products and disciplines at the heart of the formal actions (Section 301 and GATT disputes) the US initiated against Japan during the 1977–1994 period.

In the Uruguay Round, the US sought to negotiate more rules and greater transparency, as well as extending disciplines in areas such as "standards" (including the Agreements on Sanitary and Phytosanitary Measures and Technical Barriers to Trade), government procurement, trade in services (General Agreement on Trade in Services [GATS]), subsidies (SCM Agreement), and intellectual property rights protection (TRIPS). All countries also had to accept new disciplines over trade in agriculture (subsidies and domestic support) as well as clothing and textiles through the phase-out of the MFA.

We have already seen some of the results in the context of our discussion of WTO disputes brought by the US against Japan since 1995 (see Table 5), which put the new rules to the test. One example is a 1995 WTO dispute under the new TRIPS agreement, in which the US alleged that Japan was not sufficiently protecting the copyrights of US musical artists for their past performances and sound recordings. The US also quickly tested the reach of the new GATS in the highly publicized 1995 Kodak-Fuji dispute, in which it alleged that Japanese government policies were the cause of Kodak's inability to gain access to the Japanese market for photographic film and paper. Finally, US agricultural interests continued to play a role as the US pursued standards cases under the new Agreement on Sanitary and Phytosanitary Measures. The US demanded that Japan remove burdensome import restrictions and testing requirements for various US fruit exports, arguing that such trade barriers could not be justified on the basis of scientific risk assessments as required under the new WTO disciplines.

5.2 US-PRC Conflict and the Reach of WTO Disciplines

Perhaps the most fundamental issue raised by the PRC's entry is its legacy as a centrally planned economy. Although industrial policy has now been decentralized to a significant extent, explicit and implicit subsidies remain an integral part of the nation's industrial policy. Under the terms of its accession agreement it is still accorded non-market-economy status, which in practice has translated into huge dumping margins and AD duties. Along with remaining cash subsidies and tax rebates, the PRC continues to provide financial support to state-owned enterprises (SOEs), easy access to loans for preferred companies and sectors, and administrative guidance favoring FDI in preferred sectors, as well as persistent exchange-rate undervaluation (with the effect of protecting all domestic producers from competing imports and subsidizing all exporters).

Current trade rules cover explicit cash subsidies and some tax rebates, but the protected status of SOEs and governmental discretion in the allocation of financial capital have

parallels in the policies and practice of many other member countries. WTO disciplines regarding trade-related investment are weak at best, and the WTO has no explicit (actionable) mechanisms for dealing with a country's manipulation of its exchange rate as an implicit means of favoring national firms over their foreign rivals in domestic or export markets.

With the opportunity to negotiate the terms of the PRC's entry into the WTO, countries that had already attained membership were able to extract massive accession commitments from the PRC. These included commitments by the PRC to scaling back explicit subsidies to SOEs and reforming the banking sector. However, given the self-enforcing nature of the WTO system, other members must enforce the PRC's commitment to reining in subsidies by initiating formal WTO complaints under the WTO's dispute settlement understanding (DSU). Moreover, since there is no explicit WTO mechanism for dealing with the issue of implicit subsidization via currency undervaluation, even countries seeking to contest the PRC's explicit subsides through the DSU must resort to other policy options to confront the currency issue.

WTO members have used two approaches to confront the PRC subsidy problem. The first, used by the US, is to initiate anti-subsidy disputes at the WTO (see Table 7). Through 2008, the PRC has settled every WTO dispute over subsidies with a promise to remove the allegedly WTO-inconsistent measure. The only exception is the "Famous Brands" case, which was initiated only in December 2008.[22] The alternative way to contest the PRC's use of subsidies is for affected countries to facilitate use by their domestic firms of the country's own countervailing duty law. There is evidence (see Table 3) that WTO members including the US are using this second route.

5.3 New Rules and the Ability of Japan and the PRC to Self-enforce US Market Access

US actions in the Uruguay Round also had an important influence on the negotiating positions of other countries. The new WTO Agreement on Safeguards banned the use of VERs, an attempt to halt the proliferation of VERs that began in the 1960s and continued through the 1990s (Bown 2002b).[23] US resort to "aggressive unilateralism" and retaliation threats through its increasingly active use of the Section 301 policy in the 1988–1994 period helped convince Japan and other US trading partners to accept a more binding and legalistic system of dispute settlement, resulting in the WTO DSU.

Table 8 shows how Japan has used the WTO (and GATT) dispute settlements against the US. While Japan rarely used formal dispute settlement against the US during the GATT era, it has been much more active during the WTO period. The clear focus of Japan's WTO trade dispute efforts has been on reforming US use of AD. This is not surprising, given that Uruguay Round negotiators failed to agree on new rules to discipline use of AD.[24] Japan has filed disputes over US imposition of AD measures on specific Japanese exports

[22] Perhaps in preparation for the possibility that the parties to a future dispute are unable to negotiate a settlement and the dispute goes to WTO adjudication, PRC officials are becoming well informed on WTO rules and case law regarding subsidies and countervailing measures. As Bown (forthcoming) indicated, the PRC has been closely following the evolution of WTO rulings on subsidies in other countries' disputes (see Tables). As of early 2009, the PRC had participated as an "interested third party" in over a dozen formal WTO disputes involving other countries' subsidy issues.

[23] While VERs are banned under the Agreement on Safeguards, they are implicitly encouraged elsewhere in the WTO Agreements (e.g., through encouragement of "price undertakings" by targeted exporting firms in investigations under the WTO Antidumping Agreement). Moreover, because the WTO is a self-enforcing system, VERs can still be negotiated provided that no member complains. Because in many instances the exporting country is better off under a VER than under the likely alternative (usually a higher import duty levied under some other policy), there may be no "party" (member) to complain. Consumers of the affected imports and taxpayers in the importing country are likely to lose, but they have no direct standing in the WTO system.

[24] One consequence of the failure of the US and other WTO members to address AD reform is that the use of AD has proliferated globally across the WTO membership. Indeed, the most frequent users of AD are now developing countries, with other developing country exporters, especially the PRC, a frequent target.

(e.g., hot rolled steel). Japan also challenged the little-used "other" US AD law (Antidumping Act of 1916) as WTO-inconsistent because it allows for punitive damages beyond the imposition of ad valorem duties, and Japan joined the collective challenge to the US Byrd Amendment, which required AD duties collected from foreign firms to be refunded to the domestic US firms behind the AD petition. Japan has also challenged the Department of Commerce's use of "zeroing" to inflate dumping margins and thus justify higher AD duties (see Bown and Sykes 2008). Finally, Japan challenged the way in which the US conducts its "sunset reviews." These reviews are supposed to lead to the removal of the imposed AD duties after five years, but in most instances US duties have remained in place well beyond the five-year limit.

Table 8: Japan and PRC Use of GATT and WTO Dispute Settlement to Challenge the United States, 1955–2009[a]

No.	Product/Policy-Complainant(s) and Issue	Year
1.	**Countervailing duty calculation ("*Zenith* Case")**[b,c]–Japan alleged as GATT-inconsistent the US procedure for calculating subsidies during countervailing duty investigations in a way that penalizes trading partner exemption of exporters from indirect taxes (e.g., VAT schemes)	1977
2.	**Semiconductor retaliation**[a]–Japan alleged that the US violated GATT obligations by unilaterally raising tariffs against Japan's exports in a disagreement over whether Japan was abiding by the 1986 bilateral semiconductor agreement	1987
3.	**Section 301 import duties on autos**–Japan alleged as WTO-inconsistent the proposed US retaliation during the US Section 301 investigation of Japan's market access for foreign auto parts	1995
4.	**Government procurement**–Japan and EC alleged as a WTO violation of the Government Procurement Act the Massachusetts "Burma Act" legislation banning the state government from purchasing from persons who do business with Burma	1997
5.	**AD Act of 1916**–Japan and the EC alleged that the US Antidumping Act of 1916 was WTO-inconsistent as it allowed for imposition of penalties beyond the imposition of duties allowed by the Agreement on Antidumping and thus had a "chilling effect" on exporters	1999
6.	**AD on hot-rolled steel**–Japan alleged that the US violated obligations by imposing WTO-inconsistent antidumping duties on hot rolled steel products	1999
7.	**Byrd Amendment**–Japan, the EC, and nine other countries alleged the US "Continued Dumping and Subsidy Offset Act of 2000" policy of refunding to domestic petitioners the collected foreign duties after affirmative antidumping and countervailing duty investigations was a WTO-inconsistent subsidy	2000
8.	**Sunset review of AD on steel**–Japan alleged as WTO-inconsistent the US procedure for conducting a "sunset review" for removing antidumping duties on imports of corrosion-resistant steel	2002
9.	**Steel safeguards**–PRC, Japan, the EC, and six other countries alleged as WTO-inconsistent the 2002 US imposition of an import safeguard on a variety of steel products	2002
10.	**Zeroing**–Japan alleged as WTO-inconsistent the US procedure of using the method of "zeroing" (giving a value of zero for data on above normal-value sales instead of the positive value) in dumping margin calculations at various stages of the antidumping investigation and review process	2004
11.	**Coated free sheet paper AD/CVD**–PRC alleged as WTO-inconsistent the preliminary antidumping and countervailing duties the US imposed on imports	2007
12.	**Certain products AD/CVD**–PRC alleged as WTO-inconsistent US antidumping and countervailing duties imposed on imports of "Circular Welded Carbon Quality Steel Pipe," "Certain New Pneumatic Off-the-Road Tires," "Light-Walled Rectangular Pipe and Tube," and "Laminated Woven Sacks."	2008
13.	**Chicken import ban–**PRC alleged as a WTO-inconsistent standards (SPS) violation the US policy banning imports of poultry from the PRC	2009

AD = antidumping, CVD = countervailing duty investigations, EC = European Commission, GATT = General Agreement on Tariffs and Trade, PRC = People's Republic of China, SPS = Agreement on the Application of Sanitary and Physosanitary Measures, US = United States, VAT = value-added tax, WTO = World Trade Organization.

Notes:
[a] WTO disputes initiated through 28 April 2009.
[b] Dispute under the GATT; all other disputes took place under the WTO.
[c] Not a formal Article XXIII dispute, but found in Hudec (1993).

Sources: Compiled by the authors from WTO (1995, 2009) and Hudec (1993).

Table 8 indicates that the PRC has also been using WTO dispute settlement as a complainant since its accession. The PRC's approach been similar to that of Japan, but its activity has been more limited. On the complainant side, the PRC's only involvement in a formal dispute prior to 2007 was the challenge it joined with Japan, the EC, and six other WTO members seeking removal of the steel safeguard import restrictions imposed by the US in 2002.

Since 2007, however, the PRC has begun to challenge US use of AD and countervailing duty policies. The first dispute the PRC initiated against the US (after the imposition of a preliminary duty) became moot after the USITC found no evidence of injury, and so no final duties were imposed, as discussed in Section 3. However, in response to increasing US AD activity (see Figures 2 and 3b) and the new US stance on countervailing duty use (see Table 3), in 2008 the PRC initiated a challenge to the US laws in the first four instances in which the PRC's exporters were targeted with US countervailing duty investigations. In April 2009, the PRC initiated its first challenge to trade barriers over a standards issue, questioning whether the US ban on poultry imports from the PRC could be justified scientifically.

6. MACROECONOMIC ROOTS OF TRADE FRICTIONS

In previous sections, we have focused mainly on US trade policy responses at the industry or product level, and also US efforts to address certain systemic features of the partner economy, especially industrial policy and exchange-rate undervaluation, that are widely believed to confer an artificial competitive advantage relative to US firms. In this section, we examine the trade imbalances from a macroeconomic perspective, and we indicate similarities and differences for the cases of Japan and the PRC. Insights from the macroeconomic roots of the imbalance help to explain how imbalance episodes develop and also why they end.

The macroeconomic analysis begins from the accounting identity that a nation's current account balance must be equal to the difference between the nation's saving and its domestic investment.[25] Equivalently, a nation's current account balance must be equal to the difference between its domestic production and its total domestic spending for goods and services—consumption, domestic investment, and government. Any shortfall must be matched by an equal net capital inflow from abroad. Roughly speaking, the country's ability to "live beyond its means" in a particular year must be financed through borrowing from abroad.[26] Likewise, a country with a current-account surplus must have saving that exceeds its domestic investment and thus makes a net addition to national holdings of foreign assets.

An identity is simply a relationship that must hold at all times; it is not a theory that relates cause and effect. In practice, many economic variables can adjust simultaneously to maintain the relationship described by the identity. These include not only the components of the identity, but also variables that influence them, such as interest rates, exchange rates, and capital-market development. Moreover, if a new policy changes one variable directly, other induced changes may offset its impact. For example, if a country attempts to improve its trade balance only by raising all tariffs on imports, thus reducing imports, induced changes might include an exchange-rate appreciation, which would in turn encourage

[25]The current account balance is the balance on goods and services trade plus net earnings of factors employed abroad plus net unilateral transfers. In a very simple world of barter trade in which exports and imports of goods and services are the only international transactions, the trade balance is the same as the current account balance. In practice, movements in the US merchandise trade balance (our main focus elsewhere in this paper) are closely linked to movements in the current account.

[26]More precisely, foreign acquisitions of US assets in that year must exceed US residents' acquisitions of foreign assets. However, equities and similar ownership claims do not reflect borrowing and lending. For example, "foreign acquisitions of US assets" can include greenfield construction of new foreign-owned manufacturing facilities in the US or sale of an interest in an existing US business to foreign investors. The statement may also be misleading in implying that it is international borrowing that must adjust to cover the gap between domestic production and domestic demand for goods and services.

imports and reduce exports. The identity, however, does show how the external imbalance relates to aggregates in the domestic economy, and particularly national saving. No set of policies can reduce the US current-account deficit unless they result in higher national saving, lower domestic investment, or both.[27]

A country's saving consists of two parts: private saving and government (public) saving. Government saving is equal to the fiscal surplus or deficit. Private saving in turn consists of household saving and corporate saving. This decomposition is significant because the growth of US current account and trade deficits have occurred in tandem with rapid declines in US national saving. Although US saving dropped during both periods of bilateral conflict, the causes of the two drops were different.[28] In the 1980s, the growth of the US bilateral trade deficit with Japan occurred during a period when the federal budget deficit was also growing (i.e., government saving was falling). This is the situation often described as the "twin deficits." However, the ballooning US-PRC trade imbalances since the late 1990s have been associated with a steep decline in US *private* saving, as well as a return to a substantial fiscal deficit that began only in 2002. In 2008, a large federal deficit together with negative gross private saving produced a drop in US gross saving to 11.9% of gross national product (GNP), compared with around 20% at the start of the 1980s and a peak of 18.2% as recently as 1998.

Throughout the paper, we have focused on *bilateral* imbalances. In a world of many countries, a US saving-investment gap must be matched by a US current-account deficit with the rest of the world as a whole. Since the early 1990s, the US has had a deficit on goods trade with most global regions, not only with Japan and the PRC (see Figure 5). Mann (2004) termed the alignment of US and foreign structural characteristics and policy choices during this period "global co-dependency"—with the US increasingly serving as a "buyer of last resort" for producers throughout the world (see Mann 2002, 2004).[29] How the resulting *overall* US trade deficit is divided across particular trading partners depends on other countries' own macroeconomic relationships, as well as the countries' exchange rates relative to the dollar and comparative advantages relative to the US. A necessary condition for a large *bilateral* deficit is a saving shortfall relative to domestic investment in the US together with a corresponding savings surplus in the partner country. Both Japan and the PRC (as well as smaller East Asian countries) have high saving rates, and both have overall current-account surpluses (i.e., they are net purchasers of foreign assets). Thus, we can also think of a given partner's net saving financing US spending (private or government) through purchases of US assets. In fact, both Japan and the PRC have accumulated large quantities of US assets, including but not limited to US government securities, in both cases helping to maintain a currency that many considered "undervalued" relative to the dollar.

One interesting comparison that cannot yet be completed concerns the ends of the two episodes. Japan-bashing was moderated by the rapid appreciation of the yen relative to the dollar that began in 1985 and slowed to a crawl during Japan's "lost decade" in the 1990s. Although Japan's overall trade surplus persisted, its share in the overall US trade deficit peaked in 1991 at about 66% and fell subsequently. By 2008, US-Japan trade accounted for only about 8% of the overall US merchandise trade deficit. In part, this shift reflects the relocation of some production for the US market from Japan to the PRC (including Hong Kong, China, which reverted to PRC control in 1997), with Japanese multinationals exporting

[27] See McCulloch (1990) on the macroeconomic roots of the US-Japan current account imbalance in the 1980s. Ito (2009) compared the US-Japan imbalance of the 1980s with the US-PRC imbalance in the 2000s. His empirical analysis confirmed a significant causal role of budget balances in determining current-account imbalances. However, he also concluded that the Japanese current-account surpluses of the 1980s were driven by underperformance of investment rather than over-saving.

[28] US Bureau of Economic Analysis, National Income and Product Accounts, Table 5.1, shows the decomposition for each quarter of US saving into private saving and government saving.

[29] Mann (2004), writing during a period of dollar depreciation, used the term "co-dependency" to describe the complementary domestic macroeconomic imbalances and emphasizes that currency realignments alone cannot correct the US external imbalance.

intermediate parts to their PRC subsidiaries and a large share of the final output exported from the PRC to the US.[30]

In a prescient discussion of a US external imbalance that was already massive and still rising in 2004, Mann (2004: 20) wrote, "There is a real possibility that the entanglements created by this co-dependency cannot be undone by anything short of a global economic crisis." Indeed, the global recession that began in 2008 did reduce the saving/investment imbalances underlying the huge overall US trade deficit and the bilateral trade deficit with the PRC. US gross saving as a share of GNP reached a minimum in the second quarter of 2008 and then trended upward, while gross domestic investment began to fall in the third quarter. Although both imports and exports fell, exports fell by less. The US trade and current account deficits both narrowed in early 2009.

Meanwhile, slow or even negative growth of income in most countries worldwide caused demand for PRC exports to fall sharply. To maintain the pace of its economic growth, PRC policy makers implemented a major domestic stimulus, and saving fell relative to investment. In early 2009, the PRC's trade surplus also fell from the record level attained in 2008. Accordingly, the PRC's international reserves grew more slowly than in recent years. The PRC sold a substantial volume of US Treasury securities and other foreign bonds in early 2009 before resuming purchases in March.

7. CONCLUSIONS

A goal of this paper was to provide a framework that allows us to make sense of the US-Japan and US-PRC trade relationships over the past thirty years, seeing similarities and differences as well as implications for evolution of the rules-based GATT/WTO system. The central similarity in the two bilateral relationships is the huge bilateral trade imbalance, a reflection of the export-led growth strategies of theses countries, but also of underlying macroeconomic conditions. In both cases, the result has been a strain on the reciprocity-based trading system. We have looked at the imbalance as the result of exports that grew too quickly and imports that grew too slowly, but in both cases, the US public and government officials chose to interpret the imbalance as a symptom of non-market considerations. In both cases, the official responses included both policies that addressed the symptoms as well as efforts to remedy features of the partner economy that were perceived as underlying causes. In both cases, however, the US public and government officials were slow to acknowledge the underlying cause at home: the very low US saving rate and a resulting domestic macroeconomic imbalance that translated into a large external imbalance.[31]

On the import side, the two cases are similar in that the US resorted to VERs and AD, as well as negotiation of preferential agreements with traditional suppliers of relevant imported products in both cases. One difference is that the US has recently begun using countervailing duties against the PRC, an approach it did not take with Japan. Another difference is the use of the PRC-specific safeguards negotiated when the PRC joined the WTO.

On the export side, use of US Section 301 and GATT dispute settlement against Japan in the 1977–1994 period looks similar to the use of WTO dispute settlement against the PRC since 2006. Differences are more subtle; not surprisingly, US efforts in both cases reflected dominant export interests at the time. In the case of Japan, the role of *keiretsu* and active industrial policy were seen as an important part of the problem. In the case of the PRC, the

[30] The full export price of these goods is reflected in the statistics on US-PRC trade even when PRC value-added is only a fraction of this price.

[31] The official position of the US may be shifting toward greater acceptance of the role of US macro policy in sustaining the imbalance. In a major speech at Beijing University on 1 June 2009, US Treasury Secretary Timothy Geithner explicitly acknowledged the need for the US to increase private saving and reduce the fiscal deficit. Similar to many past public pronouncements of US officials, he also called for the PRC to shift away from export-driven growth by strengthening domestic demand.

legacy of a non-market system remains an issue, even though an increasing share of import-competing products and exports come from parts of the economy where private ownership and market forces are strong.

US frustration with its lack of success in prying open the Japanese market led to new rules introduced into the WTO system (i.e., Agreement on the Application of Sanitary and Physosanitary Measures, Technical Barriers to Trade Agreement, Government Procurement, Information Technology, TRIPS, and Agriculture) in the Uruguay Round negotiations. The most important change, however, was the introduction of a new system of dispute resolution with "teeth," though this required the US to modify the aggressive unilateralism that had characterized its approach to trade policy in the pre-WTO period. As we have noted, no progress has been made on AD, although the improved dispute-settlement system may help to address this problem over time.

Looking ahead to new issues, prospects for global negotiations are now dominated by two issues that overshadow the ones that constituted the Doha Round agenda as well as others that have vied for public attention most recently (e.g., contaminated foods and unsafe toys). One major new issue is the global recession, with the associated decline in the volume of world trade and the rise of new protectionism. The second is climate change and the trade-policy implications of efforts to limit carbon emissions—and to deal with "carbon leakage" from countries not willing to join in these efforts. the PRC in particular has already been the major target of a surge of WTO-legal administered protection and is likely also to be a major target of efforts to penalize imports from countries that do not sign on to new multilateral arrangements on carbon emissions.[32]

[32]Because of the PRC's heavy reliance on coal-fired power plants, most analysts have assumed the PRC will lag wealthier trading partners in efforts to limit carbon omissions and that border measures associated with a new global regime would therefore reduce the international competitiveness of PRC exports. However, the PRC has recently taken the world lead in building coal-fired power plants that are efficient and less polluting (Bradsher 2009) and has also moved forward rapidly with wind and nuclear power generation. By mastering clean technologies and driving down costs, the PRC may emerge as a major exporter of the environmental capital goods needed to implement ambitious goals regarding carbon emissions.

REFERENCES

Bagwell, K., and R. W. Staiger. 1999. An Economic Theory of GATT. *American Economic Review* 89(1): 215–248.

———. 2002. *The Economics of the World Trading System*. Cambridge, MA: MIT Press.

Barrows, G., and J. Harrigan. 2009. Testing the Theory of Trade Policy: Evidence from the Abrupt End of the Multifiber Arrangement. *Review of Economics and Statistics* 91(2): 282–294.

Bayard, T. O., and K. A. Elliott. 1994. *Reciprocity and Retaliation in U.S. Trade Policy*. Washington, DC: Institute for International Economics.

Bergsten, C. F., C. Freeman, N. R. Lardy, and D. J. Mitchell. 2008. *China's Rise: Challenges and Opportunities.* Washington, DC: Peter G. Peterson Institute for International Economics and Center for Strategic and International Studies.

Bhagwati, J., and H. T. Patrick, eds. 1990. *Aggressive Unilateralism: America's 301 Trade Policy and the World Trading System*. Ann Arbor, MI: University of Michigan Press.

Bown, C. P. 2002b. Why are Safeguards under the WTO so Unpopular? *World Trade Review* 1(1): 47–62.

———. 2009a. Global Antidumping Database (Current Version 5.0). Brandeis University Working Paper, July. http://www.brandeis.edu/~cbown/global_ad/.

———. 2009b. U.S.-China Trade Conflicts and the Future of the WTO. *Fletcher Forum of World Affairs* 33(1): 27–48.

———. Forthcoming. China's WTO Entry: Antidumping, Safeguards, and Dispute Settlement. In *China's Growing Role in World Trade*, edited by R. C. Feenstra and S.-J. Wei. Chicago, IL: University of Chicago Press.

Bown, C. P., and R. McCulloch. 2007. U.S. Trade Policy toward China: Discrimination and Its Implications. In *Challenges to the Global Trading System: Adjustment to Globalization in the Asia Pacific Region*, edited by S. La Croix and P. A. Petri. London and New York, NY: Routledge.

———. Forthcoming. U.S.-Japan and U.S-China Trade Conflict: Export Growth, Reciprocity, and the International Trading System. *Journal of Asian Economics*.

Bown, C. P., and A. O. Sykes. 2008. The Zeroing Issue: A Critical Analysis of Softwood V. *World Trade Review* 7(1): 121–142.

Bradsher, K. 2009. China Outpaces U.S. in Cleaner Coal-Fired Plants. *The New York Times*, 10 May.

Brambilla, I., A. Khandelwal, and P. K. Schott. Forthcoming. China's Experience under the Multifiber Arrangement (MFA) and the Agreement on Textile and Clothing (ATC). In *China's Growing Role in World Trade*, edited by R. C. Feenstra and S.-. Wei. Chicago, IL: University of Chicago Press.

Broda, C., N. Limão, and D. E. Weinstein. 2008. Optimal Tariffs and Market Power: The Evidence. *American Economic Review* 98(5): 2032–2065.

Corden, W. M. 1981. Exchange Rate Protection. In *The International Monetary System under Flexible Exchange Rates: Global, Regional, and National. Essays in Honor of Robert Triffin*, edited by R. N. Cooper et al. Cambridge, MA: Ballinger.

Dean, J. M., M. E. Lovely, and J. Mora. Forthcoming. Decomposing China-Japan-U.S. Trade: Vertical Specialization, Ownership, and Organizational Form. *Journal of Asian Economics*.

Feenstra, R. C., R. E. Lipsey, H. Deng, A. C. Ma, and H. Mo. 2005. World Trade Flows: 1962–2000. National Bureau of Economic Research (NBER) Working Paper 11040. Cambridge, MA: NBER.

Freund, C., and M. D. Pierola. 2008. Export Surges: The Power of a Competitive Currency. World Bank Policy Research Working Paper 4750. Washington, DC: World Bank.

Government of the United States, Department of Commerce. 2007. Commerce Applies Anti-Subsidy Law to China. News release, 30 March. http://www.commerce.gov/opa/press/Secretary_Gutierrez/2007_Releases/March/30_Gutierrez_China_Anti-subsidy_law_application_rls.html

Greaney, T. M., and Y. Li. Forthcoming. Assessing Foreign Direct Investment Relationships between China, Japan and the United States. *Journal of Asian Economics*.

Hudec, R. E. 1993. *Enforcing International Trade Law: The Evolution of the Modern GATT Legal System*. Salem, NH: Butterworth Legal Publishers.

Hufbauer, G. C., Y. Wong, and K. Sheth. 2006. *US-China Trade Disputes: Rising Tide, Rising Stakes*. Washington, DC: Institute for International Economics.

Ito, H. 2009. U.S. Current Account Debate with Japan Then, with China Now. *Journal of Asian Economics* 20(3): 294–313.

Mann, C. L. 2002. Perspectives on the U.S. Current Account Deficit and Sustainability. *Journal of Economic Perspectives* 16(3): 131–152.

———. 2004. Managing Exchange Rates: Achievement of Global Re-balancing or Evidence of Global Co-dependency? *Business Economics* July: 20–29.

McCulloch, R. 1990. Macroeconomic Policy, Trade, and the Dollar: Remarkable Events of the 1980s. In *The Economics of the Dollar Cycle*, edited by S. Gerlach and P. A. Petri. Cambridge, MA: MIT Press.

Morrison, W. M. 2009. China-U.S. Trade Issues. CRS Report for Congress. Washington, DC: Congressional Research Service. Updated 4 March.

Perkins, D. 2001. Industrial and Financial Policy in China and Vietnam: A New Model or a Replay of the East Asian Experience? In *Rethinking the East Asia Miracle*, edited by J. Stiglitz and S. Yusuf. Washington, DC: World Bank and Oxford University Press.

Rodrik, D. 2008. The Real Exchange Rate and Economic Growth. Harvard Kennedy School Manuscript, October.

Saxonhouse, G. 1983. What is All This about 'Industrial Targeting' in Japan? *The World Economy* 6(3): 253–274.

Staiger, R. W., and A. O. Sykes. 2008. 'Currency Manipulation' and World Trade. Stanford Law and Economics Olin Working Paper 363. Stanford, CA: Stanford University.

United States Central Intelligence Agency (CIA). 2009. *The World Factbook.* https://www.cia.gov.

United States International Trade Commission (USITC). 2007. China: Description of Selected Government Practices and Policies Affecting Decision Making in the Economy. USITC Publication 3978. Washington, DC: USITC.

United States Trade Representative (USTR), Office of the. Various years. Trade Enforcement Activities. USTR Trade Policy Agenda and Annual Report. http://www.ustr.gov.

———. 2009. Monitoring and Enforcement: Section 301 Table of Cases. http://www.ustr.gov/assets/Trade_Agreements/Monitoring_Enforcement/asset_upload_file985_6885.pdf

Van Assche, A., C. Hong, and A. Ma. Forthcoming. Global Production Networks and China's Processing Trade. *Journal of Asian Economics*.

World Bank. 1986. *World Development Report 1986*. New York, NY: Oxford University Press for the World Bank.

World Trade Organization (WTO). 1995. *Analytical Index: Guide to GATT Law and Practice*. 2 vols. Geneva, Switzerland: WTO.

———. 2008a. International Trade Statistics 2008. http://www.wto.org/english/res_e/statis_e/its2008_e/its2008_e.pdf.

———. 2008b. Trade Profiles 2008. http://www.wto.org/english/res_e/booksp_e/anrep_e/trade_profiles08_e.pdf.

———. 2008c. World Tariff Profiles 2008. http://www.wto.org/english/res_e/booksp_e/tariff_profiles08_e.pdf.

———. 2009. Dispute Settlement: The Disputes: Chronological List of Disputes Cases. http://www.wto.org/english/tratop_e/dispu_e/dispu_status_e.htm.