



U.S.–Japan and U.S.–China trade conflict: Export growth, reciprocity, and the international trading system

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ABSTRACT

First Japan and more recently China have pursued export-oriented growth strategies. While other Asian countries have done likewise, Japan and China are of particular interest because their economies are so large and the size of the associated bilateral trade imbalances with the United States so conspicuous. In this paper we focus on U.S. efforts to restore the reciprocal GATT/WTO market-access bargain in the face of such large imbalances and the significant spillovers to the international trading system. The paper highlights similarities and differences in the two cases. We describe U.S. attempts to reduce the bilateral imbalances through targeted trade policies intended to slow growth of U.S. imports from these countries or increase growth of U.S. exports to them. We then examine how these trade policy responses, as well as U.S. 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.

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1. Introduction

Japan in the 1950s through the 1990s and China 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 China have presented special challenges to the GATT/WTO trading system because their shares of world exports have been so large and the associated bilateral trade imbalances with the United States 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, Japan and China each accounted for a major share of total world exports. As of 2007, China's share of world merchandise exports had soared to 8.9%, less than Germany's 9.7% share but topping the U.S. share of 8.5% as well as Japan's 5.2%, in each of the latter three cases from a much larger economy (WTO, 2008b). Given the sharp drop in global import demand following the 2008 onset of the global financial crisis, China may not

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surpass Japan's 1980s peak of around 10%. However, U.S. imports from China in 2008 (\$337.8 billion) still exceeded their level in 2007 (\$321.5 billion); the 2008 bilateral trade imbalance (\$266.3 billion) also exceeded 2007's record figure, although only by \$10 billion.²

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.³ But if a large economy such as Japan or China pursues 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 may then seek ways to rebalance the bargain.

This paper examines the policy responses of the United States to the rapid growth of imports from Japan and China and the associated bilateral imbalances. We interpret U.S. trade policy activity vis-à-vis these countries during their respective export growth episodes within the "reciprocity" framework. The basic theory that sustainability of the GATT/WTO bargain requires large players to maintain a reciprocal balance of market access – i.e., to keep bilateral trade roughly balanced – helps to explain the bilateral trade policy actions the United States chose to pursue.⁴

We begin in Section 2 by considering some relevant features of the two episodes, identifying similarities and differences. We then examine how the United States has responded to bilateral imbalances with Japan and China, 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 U.S. officials and the U.S. public. In the face of a large bilateral trade deficit, the United States has used trade policy to treat the symptoms directly, i.e., to slow the partner's export expansion into the U.S. market and to speed up U.S. exporters' expansion into the partner's market. Section 3 compares U.S. measures intended to slow Japan's expanding exports to the United States in from 1970 through the 1990s and China's expanding exports since the 1990s. Section 4 describes U.S. efforts during the same periods to promote U.S. export expansion into the Japanese and Chinese import markets. Sections 3 and 4 also show how U.S. efforts to treat the symptoms may 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 U.S. officials and the public, U.S. policy approaches implemented with respect to Japan and China 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 U.S. policies based on the premise that such imbalances are due to a competitive advantage unfairly created by foreign (Japanese or Chinese) 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 U.S.–Japanese bilateral imbalance episode in the 1990s, and may also speak to the resolution of the U.S.–Chinese bilateral imbalance. Section 7 concludes.

Our purpose in the paper is to describe actions taken by the United States 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 U.S. policies as "targeting" Japanese or Chinese 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 Chinese industrial and macroeconomic policies in promoting economic growth or their conformity with international agreements.

2. U.S.–Japan and U.S.–China: Similarities and differences in the two episodes

There are striking parallels and also important differences between the U.S.–Japan frictions that peaked in the mid-1980s and the more recent U.S.–China 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.⁵ In

² Morrison (2009), Table 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.

³ Economic analyses such as Bagwell and Staiger (1999, 2002) treat 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. From the perspective of sustainability and in light of the constraints that self-enforcement implies, the rule of reciprocity then feeds back to the conduct of initial negotiations. See discussions in Bown (2002a,b).

⁴ 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. An importing country's market power increases when it imports more from a trading partner. Such an increase in market power creates an incentive for the importing country to raise its tariffs and thus improve its own terms of trade, an economic rationale for increased tariffs that is separate from any political motive. Broda, Limão, & Weinstein (2008) provide recent empirical evidence that importers' market power does influence their trade policies; except when constrained by international agreements, the United States has set higher barriers on imports where it has greater market power.

⁵ Although the link has wide acceptance among U.S. 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 below, an overall external imbalance cannot exist without a corresponding imbalance between domestic saving and domestic investment spending.

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 U.S. 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 U.S. dollar, through accumulation of dollar-denominated government securities.⁶ 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.⁷ Table 1 summarizes many of these comparisons.

One last and very significant common element in the two episodes is the response from the United States 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 and sometimes also 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, Singapore, South Korea, and Taiwan); recent U.S. and EU actions in textiles and apparel targeted at China have benefited Vietnam, India, and Bangladesh, along with U.S. partners in various preferential trade agreements. The United States also initiated bilateral negotiations with Japan and later China to increase their purchases of U.S. exports. We provide more details on U.S. trade policies toward Japan and China in Sections 3 and 4 below.

In addition, the United States has sought to limit foreign acquisitions of U.S. companies by both nations (as well as others) on “national security” grounds. The Committee on Foreign Investment in the United States (CFIUS) was established in 1975 for the purpose of monitoring the effects of inward FDI.⁸ In 1988, the U.S. Congress gave the President the power to block a foreign takeover based on advice from CFIUS indicating a threat to national security.⁹ For example, U.S. 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.¹⁰

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 Development Report 1986*). In contrast, China is still poor, at least in terms of per capita income (around \$3000 in 2007), despite a prolonged period of stellar growth performance.¹¹ Thus, it is not surprising that earlier trade frictions between Japan and the United States focused mainly on direct competition, i.e., Japan’s increasing share of the U.S. market and its displacement of U.S. exports in third-country markets. Moreover, as a wealthy country, Japan consumed many of the same types of goods and services produced by the United States but imported too few of those from the United States—at least in the view of U.S. producers and policy makers.

Given China’s much lower per capita income, only a small fraction of Chinese consumers can yet afford the products that represent U.S. comparative advantage, i.e., those supplied by intellectual-property-intensive industries (e.g., films, music, software, pharmaceuticals), when sold at prices that reflect full enforcement of U.S. intellectual property rights. Moreover, Chinese consumers’ desire to acquire such goods at affordable prices feeds the demand for pirated and copycat goods produced locally, thereby adding to U.S. complaints regarding China’s lax enforcement of intellectual property rights. But

⁶ Corden (1981) advances an analysis of exchange-rate protection of the entire tradables sector through currency undervaluation. Unlike the use of trade policies to favor exports or restrict competing imports selectively, undervaluation does not create distortions within the tradables sector as a whole. Recent empirical research shows that currency undervaluation is associated with export surges and higher GDP growth, especially for developing countries (Freund & Pierola, 2008; Rodrik, 2008). Rodrik suggests that an undervalued exchange rate may offset an informational market failure that would otherwise prevent firms in developing countries from identifying potential export products or markets. However, Staiger and Sykes (2008) use a theoretical analysis to show that the effects of exchange-rate undervaluation are complex and depend on a variety of underlying conditions; in some cases, exchange-rate intervention would have no real effects. Given the complex relationship between exchange-rate practices and trade volumes, Staiger and Sykes are doubtful that China’s exchange-rate policies constitute a violation of its WTO commitments, i.e., by acting as an across-the-board export subsidy.

⁷ 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. China 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, Freeman, Lardy, & Mitchell, 2008; USITC, 2007, Chapter 2). China 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 Chinese 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.

⁸ Following World War II, U.S. participation in FDI was almost entirely as a home base for outward investments. Inward FDI began to take off in the 1970s, and by the mid-1980s the United States had become the world’s largest host to inward FDI. CFIUS, an interagency committee chaired by the Treasury Secretary, was intended to address public and official concern regarding foreign control over U.S. economic activity.

⁹ Congress passed the Exon-Florio amendment (§721 of the Defense Production Act) during a period of growing concern about foreign acquisitions of U.S. assets.

¹⁰ The 1981 U.S. VERs limiting auto imports from Japan encouraged Japanese companies to move their factories to the United States. Between 1984 and 1987, seven Japanese companies built U.S. assembly plants. These were financed in large part by the abnormally high profits resulting from the VERs. By increasing supply to the U.S. market, the Japanese investments reduced profits of both Japanese and U.S. auto makers (De Melo & Tarr, 1991).

¹¹ Per capita income and other national averages mask large differences between the coastal areas and the interior provinces in the north and west of the country.

Table 1

Points of comparison: Japan (1970–1980s) and China (1990–2000s).

<i>Similarities</i>
High saving rate
Export-oriented growth strategy
Large domestic market
Large bilateral trade surplus with United States
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 U.S. government securities
Host-country scrutiny of outward FDI
Lack of transparency
<i>Differences</i>
Per capita income (about \$3000 for China in 2007; a substantial fraction of population living below \$2 per day)
Major role of agricultural reforms (China)
Openness to manufactured imports (China)
Special Economic Zones (China)
Large global trade surplus (Japan)
Key role of inward foreign direct investment (China)
Mode of technology transfer
Enforcement of intellectual property rights
Participation in vertical specialization
Centralization of industrial policy (Japan)
Industrial organization (Japan's <i>keiretsu</i>)
Direct competition with U.S. exports (Japan)
Role in U.S. security (Japan)

this consumption pattern also implies that China's continued growth may help to increase still further the country's already large imports from the United States.¹²

As a reflection of the large differences in relative factor abundance and productivity between the United States and China, direct competition with China has been an important issue for only a few U.S. industries, mainly for labor-intensive "sunset" industries like apparel. Rather, China has displaced other established trading partners in supplying the U.S. market. As Fig. 1 illustrates, China's share of the total U.S. trade deficit has largely replaced the share of other East Asian countries over the period from 1989 through 2007.¹³ In 1989, U.S. trade with China (including Hong Kong) accounted for less than 9% of the total, Japan about 45%, and other East Asian countries about 26%. By 2008, China's share had soared to more than 31%, while those of Japan and the rest of East Asia had fallen to around 9% each.¹⁴ Increased competition from China has stimulated interest on the part of other nations in negotiating preferential trade agreements with the United States as a means of getting better-than-MFN access to the lucrative U.S. market (Bown & McCulloch, 2007). However, the nature of competition from China has been shifting rapidly. U.S. officials have signaled their displeasure that China is encouraging development in high-technology sectors, including some sectors that will offer direct competition comparable to that in the earlier U.S.–Japan episode.

In terms of overall trade patterns, there are similarities as well as differences. Like Japan, China is a major importer of raw materials, and these imports have grown at a pace similar to that of its exports. However, China is far more open to manufactured imports, both of final goods and intermediate inputs, the latter an indication of China's much greater involvement in international vertical specialization. China's trade to GDP ratio (2005–2007) was 71.3%, an astonishing figure given China's size and level of development. In contrast, the corresponding ratio for the United States was 27.2% and for Japan 31.5%.¹⁵ Another significant difference is the role played by foreign direct investment (FDI). The first of China's export-oriented Special Economic Zones (SEZs), which opened in 1980, encouraged FDI through preferential treatment of foreign investors.¹⁶ By 2004, China's stock of inward FDI stood at \$702 billion, with an FDI to GDP ratio of 0.42, compared with

¹² As of 2008, China was already the third largest market for U.S. merchandise exports, although a large share of those exports consisted of agricultural products and raw materials.

¹³ We follow common practice in expressing national and regional bilateral imbalances as shares or fractions of the overall U.S. imbalance. Note, however, that some U.S. 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 foreign direct investment of processing activities to China.

¹⁴ These shifts reflect the growth of China's "processing trade," in which Chinese subsidiaries of Japanese manufacturing firms import intermediate inputs from Japan and export final goods to the United States. Similar supply chains link China to other more advanced neighbors in East Asia, such as Korea and Taiwan. See Dean, Lovely, & Mora (2009), Van Assche, Hong, & Ma (2009), and Greaney and Li (2009).

¹⁵ WTO (2008a). Data for China do not include Hong Kong, with a ratio of 397%, nearly half of which represents exports to the mainland.

¹⁶ One result may have been round-tripping of mainland capital, i.e., mainland investors routing funds through Hong Kong firms in order to qualify for the preferential treatment reserved for FDI.

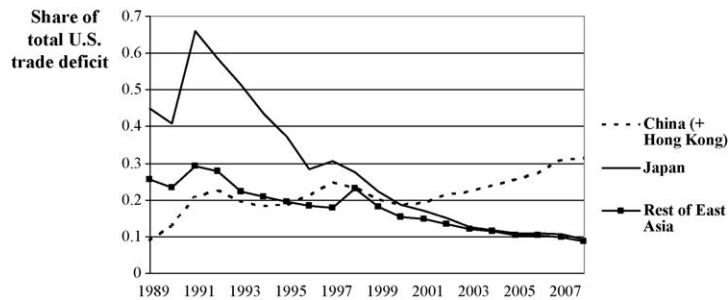


Fig. 1. Shares of total U.S. trade deficit, 1989–2007: China, Japan, and other East Asia.

Note: Bilateral trade deficit defined from series US General Imports–US Total Exports. Constructed by the authors from USITC DataWeb.

Japan's 1986 stock of \$7 billion, a negligible share of GDP. Indeed, even by 2004, Japan's FDI stock was still only \$97 billion, and its FDI to GDP ratio was just 0.02.¹⁷ While Japan and China both achieved rapid productivity improvement through adaptation of advanced technologies developed in richer countries, Japan acquired technology mainly through licensing agreements, while for China FDI has been a major channel for technology transfer.¹⁸

Although industrial policy has played an important role in both Japan and China, the dominant role of Japan's Ministry of International Trade and Industry (MITI) and Ministry of Finance (MOF) in the 1970s and 1980s has no close parallel in the China of today. Instead, much of China'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."¹⁹ In this respect China more closely resembles the United States 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, China 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 China's national government may enjoy more freedom of action than their Japanese counterparts since the government does not need to satisfy an electorate. However, Chinese officials believe that the country's political stability is highly dependent on continued economic growth. Chinese policy makers were therefore aggressive in stimulating domestic demand as a means to offset the effects of the sharp drop in exports that China experienced in early 2009.

The trade policy options available to the United States and other trading partners in dealing with China may be more circumscribed than in the case of Japan because of China's extensive links to these economies via FDI and vertical specialization.²⁰ 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 China's export sectors, finding suitable targets for authorized retaliation may prove difficult.²¹ Nonetheless, the United States has moved since 2006 toward greater reliance on the WTO in handling its trade conflicts with China.

3. Treating the symptoms (1): U.S. efforts to limit expansion of foreign exports into the U.S. market

In the face of major bilateral trade imbalances with Japan beginning in the 1970s and with China beginning in the 1990s, the United States implemented policies intended to slow these countries' export expansion into the U.S. market. In this section we compare U.S. attempts to slow imports from Japan and from China, examining in turn voluntary export restraints, anti-dumping, countervailing duties, safeguards, and formation of preferential trading arrangements with other sources of U.S. imports.

¹⁷ Hufbauer, Wong, & Sheth (2006, p. 77). Data for China include inward FDI from Hong Kong, of which some portion is due to round-tripping from the mainland. With Hong Kong considered separately from China, in 2008 Hong Kong ranked #3 worldwide in terms of FDI stock, after the United States and the United Kingdom, while China ranked #6, after France and Germany. Japan was #24 (CIA, 2009).

¹⁸ In at least a few cases, firms in each country sought to acquire technology by acquiring foreign companies or by using subsidiaries as listening posts in the United States and other advanced countries. In both cases, industrial espionage was also alleged.

¹⁹ Perkins (2001); Bergsten, Freeman, Lardy, & Mitchell (2008); USITC (2007). Bergsten et al. also note efforts in the early to mid-1990s to recentralize, particularly in the area of tax collection.

²⁰ On the other hand, security concerns may have shaped U.S. policies toward Japan until 1975, given U.S. reliance on Japanese bases during the Vietnam War.

²¹ See, for example, the discussion in Bown (2009b).

3.1. Voluntary export restraints (VERs)

3.1.1. Japan: VER proliferation across industries, 1960–1990s

Japan was admitted to the GATT in 1955 with strong support from the United States. 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 U.S.–Japan relationship over Japanese textile exports. By 1957, the first orderly marketing agreements (OMAs) between the United States and Japan had been signed.²² These agreements represented a U.S. 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-Fibre 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 U.S.–Japan trade frictions shifted toward a succession of more sophisticated products. For many products, rapid export growth resulted first in a U.S. safeguard (Section 201) petition requesting relief from surging imports for an injured domestic industry and then a negotiated VER. Table 2 gives examples of U.S. safeguard investigations resulting in such OMAs during the 1970s and 1980s in Japanese export products such as footwear, steel, television receivers, and even autos.

As Table 2 indicates, the safeguard law was not the only import-restricting policy that allowed U.S. industries to seek new trade barriers and that ultimately resulted in bilaterally negotiated VERs limiting Japanese exports to the United States.²³ U.S. anti-dumping policy, which we discuss in more detail in Section 3.2 below, also resulted in a number of Japanese VERs. The most important of these was the semiconductor VER, negotiated after a pair of anti-dumping petitions filed in 1985.²⁴ A 1993 petition under the U.S. anti-dumping law also resulted in a VER over photo paper between the U.S. firm Kodak and the Japanese firm Fuji; this dispute was a precursor to a high-profile WTO dispute between Kodak and Fuji. A 1996 anti-dumping petition over sodium azide resulted in a negotiated VER with three Japanese chemical-producing firms.

3.1.2. China: VERs in textiles and apparel, 2005–2008

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

Facing a surge in imports of textile and apparel products from China following the expiration of the MFA at the end of 2004, the United States negotiated a voluntary export restraint with China for the 2005–2008 period.²⁵ Although the rules of the WTO preclude use of VERs, as we describe in more detail below, this policy tool nonetheless returned, as before in the context of one major player seeking to slow the export expansion of another major trading partner.²⁶

²² The United States had already negotiated similar restrictions on Japanese textile exports prior to World War II.

²³ During this period, the United States also negotiated VERs with Japan and other exporters outside the legal frameworks of the safeguard and anti-dumping laws. For example, in 1986 the United States negotiated a VER with Japan and other countries over machine tools under section 232 of the Trade Expansion Act of 1962. Section 232 authorizes the President to implement new import restrictions on grounds of national security (Hufbauer & Elliott, 1994, p. 91). Voluntary restraints on flat-rolled steel products had been negotiated in 1985 (Hufbauer & Elliott, 1994, 103).

²⁴ In July 1985, Micron filed an anti-dumping petition over 64K DRAMS that led to the imposition of duties on imports from Japanese firms Hitachi, Mitsubishi, NEC, and Oki Electric. The duty order on 64K DRAMS remained in place until 1993. In October 1985, U.S. firms Advanced Micro Devices, Intel, and National Semiconductor filed a separate petition over EPROMS, and in December 1985 the U.S. government self-initiated a petition over 256K and above DRAMS. The petitions led to negotiated VERs (“Suspension Agreements” in the language of U.S. anti-dumping) by which Japanese firms Fujitsu, Hitachi, NEC, and Tokyo Shibaura (Toshiba) agreed to limit exports to the U.S. market. The 256K DRAM suspension agreement was revoked in 1991, but the EPROM agreement was not formally revoked until 1997. Additional detailed data on each of these anti-dumping cases has been compiled in Bown (2009a).

²⁵ On the economic effects of the end of the MFA, see Brambilla, Khandelwal, & Schott (in press) and Barrows and Harrigan (2009).

²⁶ Under the self-enforcing WTO system, the United States and China were free to choose this option as long as no country filed a complaint. The WTO’s Trade Policy Review of China (WTO 2006, pp. 60–61) describes the VER settlements between the U.S. and China (as well as a similar arrangement between the EC and China): “On 10 June 2005, China and the European Communities signed a Memorandum of Understanding (MOU), placing export restraints on ten categories of Chinese textiles and clothing exports to the EC until 31 December 2007. The growth rates of these exports would be limited to between 8% and 12.5% per year. As a quid pro quo, the EC agreed to end its ongoing safeguard investigation on these products and to refrain from adopting measures as permitted under Article 242 of China’s WTO Working Party Report, in categories not covered by the MOU. . . Under the Interim Measures, MOFCOM compiles a “Catalogue of Textiles Products Subject to Interim Export Administration”, including exports of textiles and clothing subject to restrictions imposed by countries or regions unilaterally, and textile exports subject to temporary quantitative control under bilateral agreements. For each product listed in the Catalogue, the quota is partly assigned through a bidding system, and partly allocated based on the exporter’s share in China’s total export value for the previous year in the respective categories. . . A similar agreement was signed with the United States on 8 November 2005. The restraints on certain categories of textiles and clothing exports from China are effective from 1 January 2006 to 31 December 2008; exports of these products are expected to increase by 8–10% in 2006, by 13% in 2007, and 17% in 2008.”

Table 2
Examples of U.S. safeguard (SG) and anti-dumping (AD) petitions resulting in VERs with Japan, 1975–1997.

	U.S. 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 therefore	1980	201-TA-44	1981
6.	SG	Carbon and certain alloy steel products	1984	201-TA-51	1984
7.	AD	EPROMS (Erasable programmable read-only memory–semiconductors)	1985	731-TA-288	1986
8.	AD	256K and above DRAMS (Dynamic random access memory–semiconductors)	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

Data collected by the authors from various USITC publications.

Notes: SG refers to a safeguard under the U.S. Section 201 law; AD refers to anti-dumping under the U.S. Section 731 law.

3.2. U.S. anti-dumping against Japan and China

Anti-dumping (AD) is a second policy tool the United States has used to slow the expansion of Japanese and Chinese exports into the U.S. market. Japan and China together faced a major share of all U.S. anti-dumping activity over the 1979–2008 period; 25% of all U.S. anti-dumping investigations targeted either Japanese or Chinese producers, and 33% of all U.S. anti-dumping measures imposed targeted either Japanese or Chinese exports.²⁷

However, as Fig. 2 indicates, U.S. use of anti-dumping over 1979–2008 is really made up of two distinct episodes: the rise (1979–1988) and fall (1989–2008) of anti-dumping use to manage the growth of Japan's exports to the United States, and increased use of anti-dumping (since 1989) to manage the growth of China's exports to the United States. In Fig. 2, the bars indicate the number of U.S. anti-dumping measures imposed during various sub-periods between 1979 and 2008; the lines indicate the respective shares of Japan and China in total U.S. AD measures imposed in each of the sub-periods. U.S. targeting of Japan with anti-dumping reached its peak in the 1984–1988 period, when the United States 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 United States imposed during that period.

After 1988, U.S. 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 U.S. use of anti-dumping. At the same time, U.S. use of anti-dumping shifted dramatically toward imposition of new restrictions on imports from China. During the second half of the period (1999–2008), the United States imposed more than 50 new anti-dumping import restrictions on Chinese exporters, and these restrictions were roughly a third of all anti-dumping measures the United States imposed during this period.

Fig. 3 illustrates the time pattern of U.S. anti-dumping investigations and measures imposed against Japan (panel a, 1979–2000) and against China (panel b, 1989–2007) as compared with the growth of the U.S. 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 U.S. anti-dumping to limit the trading partner's export expansion into the U.S. market. However, while U.S. anti-dumping activity against Japan began to decline as the yen rose in value relative to the U.S. dollar in 1985, anti-dumping activity against China continued unabated even after the yuan began to appreciate relative to the dollar in 2005.

3.3. Countervailing duties and country-specific safeguards

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

First, under the U.S. 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 United States never used its countervailing duty law to address imports from Japan over the entire 1979–2008 period.²⁸

From 1979 until 2006, the United States also never used its countervailing duty law to impose new import restrictions on China.²⁹ A 1984 policy decision of the U.S. Department of Commerce explicitly exempted China cases from consideration

²⁷ These are the 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.

²⁸ Out of 533 countervailing duty investigations in the United States between 1979 and April 2008, only one involved imports from Japan, a 1982 investigation of “Certain Nuts Bolts and Screws.” However, the case was withdrawn before receiving even a preliminary subsidy or injury determination.

²⁹ Domestic industries did initiate three countervailing duty petitions during this time period, however. U.S. petitions were filed in 1984 (Textiles and Textile Products), 1991 (Oscillating Fans and Ceiling Fans), and 1992 (Chrome-Plated Lug Nuts and Wheel Locks), but all of these cases were either withdrawn or terminated without any Department of Commerce or U.S. International Trade Commission ruling. See Bown (2009a).

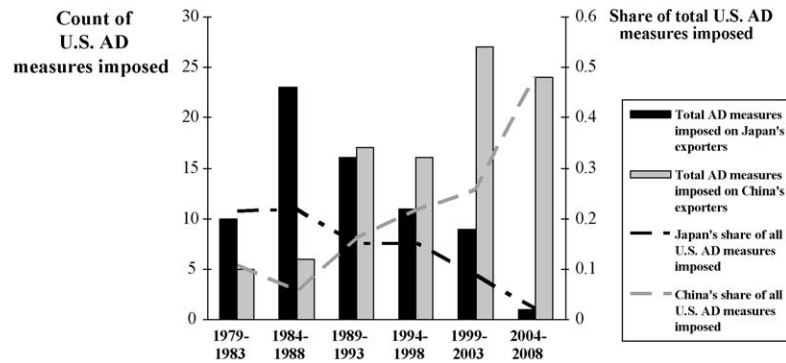


Fig. 2. U.S. anti-dumping activity against Japan and China, 1979–2008.

Note: Count is number of anti-dumping investigations initiated during those years that resulted in the imposition of final anti-dumping measures. Compiled by the authors from Bown (2009a).

under the countervailing duty statute. However, in November 2006, U.S. producers of coated free sheet paper included China in a petition they were filing against Indonesia and Korea over alleged subsidies. In March 2007, the Commerce Department opened the door for the United States to begin imposing countervailing duties on imports from China by reversing its earlier policy.³⁰ In December 2007, the U.S. 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* U.S. industries to request protection against imports from China under the countervailing duty law. As Table 3 indicates, thirteen additional investigations against China had been initiated as of April 2009, and all cases that had reached the stage of a final decision had resulted in the imposition of new countervailing duties, one as high as 226%.³¹

Second, upon China's accession to the WTO in 2001, the United States implemented two separate China safeguards in domestic legislation. The first safeguard, as discussed above, was limited to the 2001–2008 period, covered U.S. textile and apparel imports only, and was administered by OTEXA in the U.S. Department of Commerce. Separately, under Section 421 of the U.S. trade law, the United States has access to a broader China-specific safeguard through 2014, one that is administered in much the same way as the U.S. global safeguards (Section 201) law, with injury investigations taking place at the USITC and the U.S. President ultimately granted the discretionary authority to determine any policy response to the investigation.

Table 4 lists a number of China-specific safeguard investigations initiated under the Section 421 law between 2002 and 2009. No new import restrictions were imposed despite a number of USITC affirmative injury votes and recommendations to the President for new import restrictions. But the table also indicates that three of the six products investigated but denied import protection under the China safeguard did gain import protection under the U.S. anti-dumping law within five years after the failed China-safeguard investigation. Furthermore, the first China-safeguard investigation initiated during the Obama administration, in the case brought by the United Steel Workers over "Certain passenger vehicle and light truck tires," did result in the imposition of a new 35% tariff in September 2009.

3.4. Improving the relative terms of access to the U.S. market for other exporters

U.S. imposition of restrictions on imports from Japan and China sometimes benefits producers in other (unrestricted) exporting nations in addition to, or rather than, competing U.S. producers. This has been especially true for Chinese textiles and apparel, where other developing countries share China's comparative advantage relative to the United States. In such cases, restrictions on Japan and China have improved the *relative* terms of U.S. import market access available to other exporters. However, in many cases the United States 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 U.S. market and benefited from formal preferential trade agreements with the United States during this period include Israel (1985) and Canada (1987). With the growth of U.S. imports from China, the United States entered into preferential deals with Mexico (NAFTA, 1994), Central American countries and the Dominican Republic (CAFTA-DR, 2004), Bahrain (2006), and Morocco (2006). The United States 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 U.S.–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

³⁰ See Department of Commerce, "Press Release: Commerce Applies Anti-Subsidy Law to China," http://www.commerce.gov/opa/press/Secretary_Gutierrez/2007_Releases/March/30_Gutierrez_China_Anti-subsidy_law_application_rls.html, 30 March 2007.

³¹ The product-level countervailing duty investigations listed in Table 3 were initiated simultaneously with anti-dumping investigations of the same Chinese firms and products; most of these investigations resulted in the imposition of anti-dumping duties.

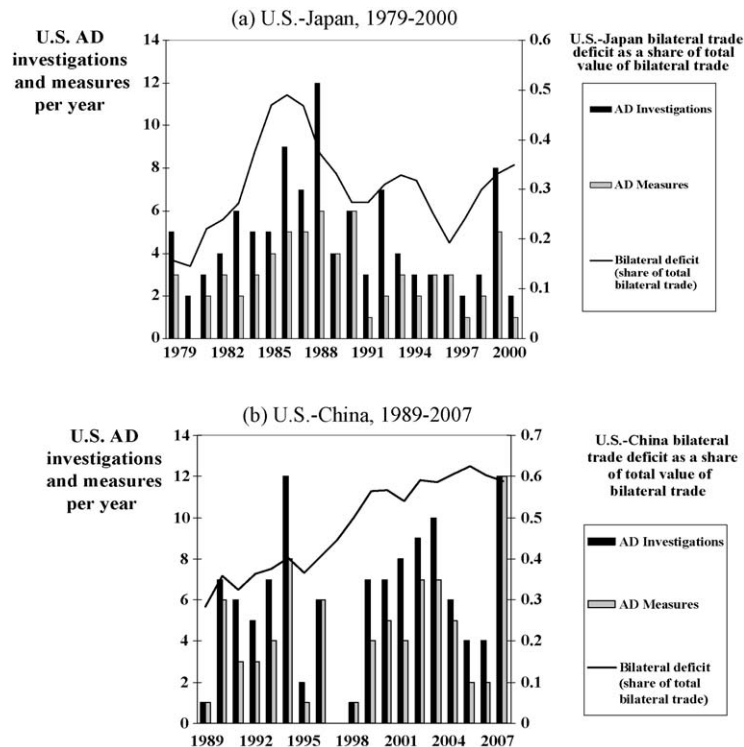


Fig. 3. The U.S. bilateral trade deficits and use of anti-dumping.

Note: Light bars indicate number of anti-dumping investigations initiated during those years that resulted in imposition of final anti-dumping measures. China is defined as China + Hong Kong. Anti-dumping data compiled by the authors from Bown (2009a). U.S.–Japan bilateral trade data are from Feenstra et al. (2005). U.S.–China bilateral trade data are from USITC DataWeb.

African Growth and Opportunity Act (2000; revised in 2002, 2004, and 2006). While such special preferential arrangements may have been motivated primarily by U.S. foreign-policy considerations rather than as a means to restore the market position of established suppliers to the U.S. market, their result nonetheless is to improve the market access of firms in other countries relative to their rivals in China.³²

4. Treating the symptoms (2): U.S. efforts to improve its exporters' market access in Japan and China

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 United States has pursued this approach against Japan, and to a lesser extent more recently against China, 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 U.S. Trade Act, a U.S. export industry can petition the U.S. 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 United States.³³ Section 301 was strengthened and revitalized in 1988.

4.1. U.S. 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 United States had only ended in 1952, and Japan's domestic market was not yet attractive to U.S. exporters of manufactured goods. Japan had relied heavily on food imports from the United States and other countries in the immediate post-war period, but as Japanese farmers recovered from the war, the demand for imported food waned. Traditional policies of self-sufficiency began

³² The USTR website provides a detailed description of U.S. trade preferences for various groups of developing countries: <http://www.ustr.gov/trade-topics/trade-development/preference-programs>.

³³ For a discussion of Section 301, see Bhagwati and Patrick (1990) and Bayard and Elliott (1994).

Table 3
U.S. countervailing duty (CVD) investigations of China, 2006–2009^a.

No.	Product	Petition year	Final CVD imposed (percent)
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 ^{**}
12.	Certain tow-behind lawn groomers and certain parts thereof	2008	na ^{**}
13.	Certain kitchen appliance shelving and racks	2008	na ^{**}
14.	Oil country tubular goods	2009	na

Source: Bown (2009a).

Notes: ^aData as of 15 April 2009. The entry na indicates final determination not yet available, ^{**} indicates that a preliminary CVD was imposed after a preliminary determination of injury and subsidization.

Table 4
China safeguard investigations by the United States under Section 421.

ITC case no.	Product	China-safeguard (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
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
TA-421-4	Ductile iron waterworks fittings	2003	Affirmative ITC vote, no CSG remedy imposed	No
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	Affirmative ITC vote, President imposed 35% tariff on China as remedy	No

Notes: Information collected by the authors and compiled in Bown (2009a), current as of 28 September 2009. AD is anti-dumping, CVD is countervailing duty.

to be restored, and in some cases U.S. food exports were excluded. Thus, early market-opening efforts focused on agricultural products.

By the mid-1970s, the United States 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 the U.S. Section 301 policy. Over the next twenty years, U.S. officials pursued at least 23 different formal actions against Japan in attempts to open up its market to U.S. exports. Fig. 4 shows formal U.S. market-opening initiatives against Japan and the bilateral U.S.–Japan trade deficit by year from 1965 through 2000. Similar to the U.S. use of anti-dumping against imports from Japan as shown in Fig. 3a, there is a strong positive correlation between the size of the bilateral trade deficit and these formal U.S. actions attempting to open up Japan's markets to U.S. exports.

Table 5 presents detailed information on 23 formal Section 301, GATT, and WTO trade disputes that the United States initiated to open up Japan's market.³⁴ While the United States had begun using the GATT dispute-settlement provisions in 1948, it did not file its first formal trade dispute against Japan until 1977.³⁵ U.S. 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 United States during this period, facing nearly a third of the 35 GATT trade disputes the United States 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

³⁴ All but one of the Section 301 cases against Japan listed in Table 5 are primarily about a U.S. export industry seeking additional access to the Japanese import market. The one case that does not fall into this category is the 1976 investigation in which Japan and the European Community were accused of colluding in a way that deflected Japanese exports away from the EC import market and toward the U.S. import market.

³⁵ This section draws on data compiled by Hudec (1993). The United States 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.

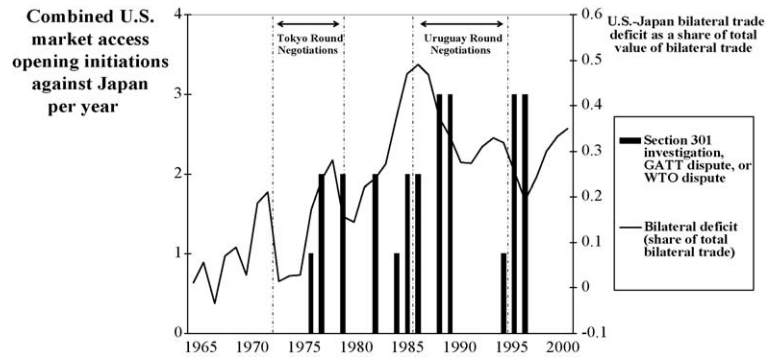


Fig. 4. The U.S.–Japan bilateral trade deficit and U.S. Section 301, GATT, and WTO dispute activity against Japan, 1965–2000. Section 301, GATT, and WTO dispute initiation data compiled by the authors as described in Table 5. U.S.–Japan bilateral trade data from Feenstra et al. (2005).

GATT contracting parties to reform the dispute-settlement provisions, the United States 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 United States bringing a formal GATT trade dispute, none of the next four Section 301 cases, initiated during 1989–1994, did so.³⁶ In the WTO era that began in 1995, all U.S. 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.

As the products in Table 5 indicate, U.S. 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, leather) and lower-value-added manufacturing (silk, cigars, cigarettes, footwear, bats). In the mid-1980s, while there were continued pressures to obtain Japanese market access for U.S. 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 United States 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. U.S. formal market-opening actions against China

China was one of the original contracting parties to the GATT but withdrew following the communist revolution in 1950. Although China became interested in rejoining (and achieving MFN status) soon after the 1979 commencement of market-oriented reforms and it gained GATT observer status in 1982, it did not resume full-fledged membership in the GATT/WTO system until 2001. Perhaps learning from their experience with Japan and other countries that had adopted export-led growth strategies, WTO members made China's reentry conditional on many special provisions. These included some China-specific safeguards allowing members to impose "temporary" discriminatory restrictions on Chinese exports and others requiring China to comply over time with a variety of multilateral commitments.

Moreover, the United States and other WTO members demanded many more import market-access commitments when they negotiated the terms of China's accession to the WTO than had previously been the case with new arrivals.³⁷ When China 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, China's applied and bound tariffs in 2007 were only slightly higher than those of the United States and Japan overall and actually lower than Japan's in certain areas (e.g., agriculture). China'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 China.

³⁶ The only Section 301 investigation of Japan during 1977–1988 that did not lead to a U.S.-initiated GATT dispute was the semiconductor case initiated in 1985. As noted in Section 3.1.1 above, the U.S. domestic industry simultaneously filed anti-dumping petitions against Japanese exports, which led to the negotiation of voluntary export restraints and ultimately the bilateral semiconductor agreements. Under these agreements, Japan promised to undertake "voluntary import expansions" to increase semiconductor imports from U.S. exporters. This in turn led to two formal GATT disputes. The EC initiated a dispute against Japan in 1987, alleging that its agreement with the United States discriminated against EC exporters. Japan initiated a dispute against the United States in 1987 after the United States retaliated by raising tariffs against Japan for its failure to live up to the terms of the bilateral semiconductor agreement.

³⁷ When the WTO was created in the Uruguay Round, many less-developed countries were permitted to join without special conditions. Other transition economies joined prior to China or around the same time without special conditions. China's "special" treatment was presumably a consequence of its already evident potential for significant global impact as an exporter. The growth of Chinese exports to the United States, Japan, and the European Union as well as other countries did accelerate following its WTO accession in 2001, triggering use by some countries of the special China safeguards to manage the burgeoning imports.

Table 5

U.S. Section 301 investigations targeting Japan's import market access, GATT and WTO disputes, 1955–2008.

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

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

Notes: ^{*}Earliest year of initiation of formal Section 301 petition or GATT/WTO dispute. ^{**}Not a GATT dispute initiated under Article XXIII, but a dispute documented in Hudec (1993). [†]U.S. retaliation or threatened retaliation led to Japan filing a GATT/WTO trade dispute against the U.S. The entry N indicates No and Y indicates Yes.

But as Fig. 5 shows, the U.S. bilateral trade deficit has nonetheless been expanding rapidly, with no sign of decline after China's accession to the WTO in 2001.³⁸ Thus, beginning in 2004, the United States began efforts similar to the formal actions taken against Japan beginning in the late 1970s to get China to open up its market to U.S. exports. Table 7 documents the formal trade disputes the United States has initiated against China through 2008, in which it alleges that China has not sufficiently (quickly or in depth) lived up to its import market-access commitments. The domestic industries behind U.S. initiation of formal disputes included both dominant export interests in areas of U.S. 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 United States and Japan discussed earlier, many of the issue-areas are relatively new and/or involve somewhat new disciplines, including TRIPS and the Agreement on Subsidies and Countervailing Measures (SCM), where China is particularly vulnerable given its history of state-owned enterprises and its still incomplete transition to a more market-oriented economy.³⁹

In considering the formal WTO disputes that the United States has chosen to initiate to address the bilateral imbalance with China, it is worth noting a path that the United States has *not* yet undertaken, i.e., resumption of the unilateral Section 301 actions that were criticized by U.S. trading partners during the GATT era.⁴⁰ The absence of unilateral actions is especially significant given that the USTR has received a number of petitions to investigate China 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 China's

³⁸ For a number of years prior to 2001, the United States had given China's exports MFN treatment (Normal Trade Relations in U.S. law) even though China was not yet a member of the WTO. Thus, China's 2001 entry did not substantially reduce the U.S. applied tariffs faced by Chinese exporters, although it did increase the certainty of that treatment.

³⁹ Indeed, the shift toward U.S. use of countervailing duty policy against China described above and illustrated in Table 3 may reflect the U.S. desire to speed the elimination of China's domestic subsidy programs, which increase China's ability to export while reducing foreign access to China's domestic market.

⁴⁰ During the period of general U.S. emphasis on use of Section 301 (1988–1994) described above in the context of our discussion of Japan, the USTR also initiated three separate Section 301 investigations of China between 1991 and 1994. Two of these investigations related to intellectual property rights, while one concerned general conditions of China's import market access that were alleged to impose barriers via quantitative restrictions, burdensome licensing procedures, technical barriers, and lack of transparency. For a discussion, see Bayard and Elliott (1994, Appendix).

Table 6
Applied tariffs and bindings for selected WTO members, 2007.

WTO member country	Product category	Binding coverage (percent)	Average bound tariff (percent)	Average applied tariff (percent)
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
China	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

Compiled by the authors from WTO (2008c).

Notes: The entry na indicates not available. Binding coverage is defined as share of HS six-digit subheadings containing at least one bound tariff line. Average shown are simple averages of the ad valorem (ad valorem equivalent) six-digit duty averages.

exchange rate or manufacturing labor rights, alleging that undervaluation of China's currency constitutes a WTO-inconsistent subsidy or that its mistreatment of manufacturing workers affects U.S. market access. In each instance, the USTR has declined to investigate the issue of the petition.⁴¹

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 U.S. import restrictions and export promotion, U.S. 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 U.S. officials and the U.S. public at large) and the consequences for the international trading system of U.S. efforts to address those causes.

As we describe in Sections 5.1 and 5.2, a common view in the United States during both episodes was that inappropriate foreign government interference with market forces lay at the root of the imbalances. This perception led naturally to U.S. 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 United States faced with Japan versus its bilateral problem with China 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 United States—in particular, how Japan and China have used the WTO dispute-settlement process to self-enforce their exporters' access to the U.S. market.

5.1. U.S.–Japan conflict and the reach of WTO disciplines

U.S. priorities in the Uruguay Round were shaped by dissatisfaction arising from U.S. 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 United States initiated against Japan during the 1977–1994 period.

⁴¹ Specifically, USTR (2005, 259) states, “One petition alleged that certain labor policies and practices of the Government of China with respect to Chinese manufacturing workers are unreasonable, as defined in Section 301(d) of the Trade Act, and burden or restrict U.S. commerce. The United States Trade Representative (USTR) determined not to initiate an investigation under Section 301 of the Trade Act with respect to the petition because the Government of the United States is involved in ongoing efforts to address with China many of the labor issues raised in the petition, and because initiation of an investigation would not be effective in addressing the policies and practices covered in the petition. Two substantially similar petitions alleged that the policies and practices of the Government of China with respect to the valuation of Chinese currency deny and violate international legal rights of the United States, are unjustifiable, and burden or restrict U.S. commerce. The USTR determined not to initiate investigations with respect to the petitions because the United States is involved in ongoing efforts to address with China the currency valuation issues raised in the petitions, and because initiation of investigations would not be effective in addressing the policies and practices covered in the petitions.” In 2005 the USTR declined to pursue a similar petition against China over currency (USTR 2006, 225), in 2006 over labor (USTR, 2007, 215), and in 2007 over currency (USTR, 2008, 206).

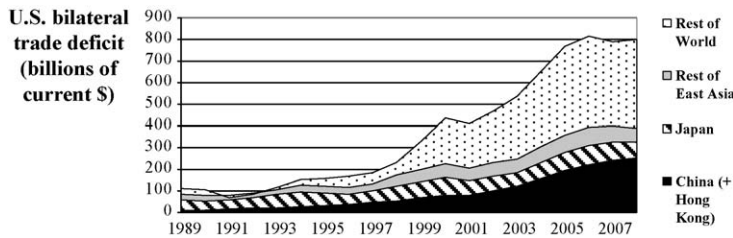


Fig. 5. Composition of U.S. trade deficit, 1989–2007, by region.

Note: Bilateral trade deficit defined from series U.S. General Imports–U.S. Total Exports. MS Excel files for Figs. 1–4 and this figure. Constructed by the authors from USITC DataWeb.

In the Uruguay Round, the United States 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 (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 over trade in 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 United States against Japan since 1995 (Table 5), which put the new rules to the test. One example is a 1995 WTO dispute under the new TRIPS (Trade Related Aspects of Intellectual Property Rights) Agreement, in which the United States alleged that Japan was not sufficiently protecting the copyrights of U.S. musical artists for their past performances and sound recordings. The United States also quickly tested the reach of the new General Agreement on Trade in Services (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, U.S. agricultural interests continued to play a role as the United States pursued standards cases under the new Agreement on Sanitary and Phytosanitary Measures (SPS). The United States demanded that Japan remove burdensome import restrictions and testing requirements for various U.S. 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. U.S.–China conflict and the reach of WTO disciplines

Perhaps the most fundamental issue raised by China’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 (NME) status, which in practice has translated into huge dumping margins and anti-dumping duties. Along with remaining cash subsidies and tax rebates, China continues to provide financial support to state-owned enterprises (SOEs), easy access to loans for preferred companies and sectors, 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 China’s entry into the WTO, countries that had already attained membership were able to extract massive accession commitments from China. These included commitments by China 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 China’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 China’s explicit subsidies through the DSU must resort to other policy options to confront the currency issue.

WTO members have used two approaches to confront the China subsidy problem. The first, used by the United States, is to initiate anti-subsidy disputes at the WTO (see Table 7). Through 2008, China 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 2008.⁴² The alternative way to contest China’s use of subsidies is for an affected country to

⁴² 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, Chinese officials are becoming well informed on WTO rules and case law regarding subsidies and countervailing measures. As Bown (in press, Table 10) indicates, China has been closely following the evolution of WTO rulings on subsidies in other countries’ disputes. As of early 2009, China had participated as an “interested third party” in over a dozen formal WTO disputes involving other countries’ subsidy issues.

Table 7
U.S.-initiated WTO trade disputes over access to China's import market, 2001–2008.

No.	Product/policy—complainant(s) and issue	Year
1.	<i>Integrated circuits</i> —U.S. alleged that China's domestic value-added tax and rebate scheme violated national treatment thus discriminating against imports	2004
2.	<i>Automobile parts</i> —U.S., EC, and Canada alleged that China's policies violated rules on national treatment and subsidies and created disincentives for domestic auto manufactures to use imported parts	2006
3.	<i>Refunds, reductions or exemptions from taxes and other payments</i> —U.S. and Mexico alleged that China's policies granted WTO-inconsistent subsidies if firms purchased domestic over imported goods or if firms met export criterion	2007
4.	<i>Movies, music, publications (IPR Enforcement)</i> —U.S. alleged that China 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.	<i>Movies, music, publications (Distribution)</i> —U.S. alleged that China 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.	<i>Financial information services and foreign financial information suppliers</i> —U.S., EC, and Canada alleged that China'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.	<i>"Famous Brands"</i> —U.S., 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 criteria and are thus in violation of the SCM Agreement	2008

Compiled by the authors from WTO (2009).

Table 8
Japan and China use of GATT and WTO dispute settlement to challenge the United States, 1955–2009.

No.	Product/policy—complainant(s) and issue	Year
1.	<i>Countervailing duty calculation ("Zenith Case")</i> [†] —Japan alleged as GATT-inconsistent the U.S. 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.	<i>Semiconductor retaliation</i> [*] —Japan alleged that the U.S. 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.	<i>Section 301 import duties on autos</i> —Japan alleged as WTO-inconsistent the proposed U.S. retaliation during the U.S. Section 301 investigation of Japan's market access for foreign auto parts	1995
4.	<i>Government procurement</i> —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.	<i>AD Act of 1916</i> —Japan and the EC alleged that the U.S. Anti-dumping Act of 1916 was WTO-inconsistent as it allowed for imposition of penalties beyond the imposition of duties allowed by the Agreement on anti-dumping and thus had a "chilling effect" on exporters	1999
6.	<i>AD on hot-rolled steel</i> —Japan alleged that the U.S. violated obligations by imposing WTO-inconsistent anti-dumping duties on hot rolled steel products	1999
7.	<i>Byrd Amendment</i> —Japan, the EC, and nine other countries alleged the U.S. "Continued Dumping and Subsidy Offset Act of 2000" policy of refunding to domestic petitioners the collected foreign duties after affirmative anti-dumping and countervailing duty investigations was a WTO-inconsistent subsidy	2000
8.	<i>Sunset review of AD on steel</i> —Japan alleged as WTO-inconsistent the U.S. procedure for conducting a "sunset review" for removing anti-dumping duties on imports of corrosion-resistant steel	2002
9.	<i>Steel safeguards</i> —China, Japan, the EC, and six other countries alleged as WTO-inconsistent the 2002 U.S. imposition of an import safeguard on a variety of steel products	2002
10.	<i>Zeroing</i> —Japan alleged as WTO-inconsistent the U.S. 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 anti-dumping investigation and review process	2004
11.	<i>Coated free sheet paper AD/CVD</i> —China alleged as WTO-inconsistent the preliminary anti-dumping and countervailing duties the U.S. imposed on imports	2007
12.	<i>Certain products AD/CVD</i> —China alleged as WTO-inconsistent U.S. anti-dumping 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.	<i>Chicken import ban</i> —China alleged as a WTO-inconsistent standards (SPS) violation the U.S. policy banning imports of poultry from China	2009

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

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

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 United States, are using this second route.

5.3. New rules and the ability of Japan and China to self-enforce U.S. market access

U.S. 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 voluntary export restraints (VERs), an attempt to halt the proliferation of VERs that began in the 1960s and continued through the 1990s.⁴³ U.S. 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 U.S. trading partners to accept a more binding and legalistic system of dispute settlement, resulting in the WTO Dispute Settlement Understanding (DSU).

Table 8 shows how Japan has used WTO (and GATT) dispute settlement against the United States. While Japan rarely used formal dispute settlement against the United States 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 U.S. use of anti-dumping. This is not surprising, given that Uruguay Round negotiators failed to agree on new rules to discipline use of anti-dumping.⁴⁴ Japan has filed disputes over U.S. imposition of anti-dumping measures on specific Japanese exports, e.g., hot rolled steel. Japan also challenged the little-used “other” U.S. anti-dumping law (Anti-dumping 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 U.S. Byrd Amendment, which required anti-dumping duties collected from foreign firms to be refunded to the domestic U.S. firms behind the anti-dumping petition. Japan has also challenged the Department of Commerce's use of “zeroing” to inflate dumping margins and thus justify higher anti-dumping duties.⁴⁵ Finally, Japan challenged the way in which the United States conducts its “sunset reviews.” These reviews are supposed to lead to the removal of the imposed anti-dumping duties after five years, but in most instances U.S. duties have remained in place well beyond the five-year limit.

Table 8 indicates that China has also been using WTO dispute settlement as a complainant since its accession. China's approach has been similar to that of Japan, but its activity has been more limited. On the complainant side, China'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 United States in 2002.

Since 2007, however, China has begun to challenge U.S. use of anti-dumping and countervailing duty policies. The first dispute China initiated against the United States (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 Section 3.3 above. But in response to increasing U.S. anti-dumping activity (Figs. 2 and 3b) and the new U.S. stance on countervailing duty use (Table 3), in 2008 China initiated a challenge to the U.S. laws in the first four instances in which China's exporters were targeted with U.S. CVD. In April 2009, China initiated its first challenge to trade barriers over a standards issue, questioning whether the U.S. ban on poultry imports from China could be justified scientifically.

6. Macroeconomic roots of trade frictions

In previous sections we have focused mainly on U.S. trade policy responses at the industry or product level, and also U.S. 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 U.S. 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 China. 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.⁴⁶ 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

⁴³ See the discussion in Bown (2002a). 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 Anti-dumping 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.

⁴⁴ One consequence of the failure of the United States 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 anti-dumping are now developing countries, with other developing country exporters, especially China, a frequent target.

⁴⁵ Bown and Sykes (2008) provide a discussion of zeroing.

⁴⁶ 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 U.S. merchandise trade balance (our main focus elsewhere in this paper) are closely linked to movements in the current account.

from abroad. Roughly speaking, the country's ability to "live beyond its means" in a particular year must be financed through borrowing from abroad.⁴⁷ 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 imports and reduce exports. But the identity does show how the external imbalance relates to aggregates in the domestic economy, and particularly national saving. No set of policies can reduce the U.S. current-account deficit unless these policies result in higher national saving, lower domestic investment, or both.⁴⁸

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 U.S. current-account and trade deficits has occurred in tandem with rapid declines in U.S. national saving. But although U.S. saving dropped during both periods of bilateral conflict, the causes of the two drops were different.⁴⁹ In the 1980s, the growth of the U.S. 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 U.S.–China trade imbalances since the late 1990s have been associated with a steep decline in U.S. *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 U.S. gross saving to 11.9% of 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 U.S. saving-investment gap must be matched by a U.S. current-account deficit with the rest of the world as a whole. Since the early 1990s, the United States has had a deficit on goods trade with most global regions, not only with Japan and China (see Fig. 5). Mann (2004) terms the alignment of U.S. and foreign structural characteristics and policy choices during this period "global co-dependency"—with the United States increasingly serving as a "buyer of last resort" for producers throughout the world.⁵⁰ How the resulting *overall* U.S. 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 United States. A necessary condition for a large *bilateral* deficit is a saving shortfall relative to domestic investment in the United States together with a corresponding savings surplus in the partner country. Both Japan and China (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 U.S. spending (private or government) through purchases of U.S. assets. In fact, both Japan and China have accumulated large quantities of U.S. assets, including but not limited to U.S. 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 U.S. trade deficit peaked in 1991 at about 66% and fell subsequently; by 2008, U.S.–Japan trade accounted for only about 8% of the overall U.S. merchandise trade deficit. In part, this shift reflects the relocation of some production for the U.S. market from Japan to China (including Hong Kong, which reverted to Chinese control in 1997), with Japanese multinationals exporting intermediate parts to their Chinese subsidiaries and a large share of the final output exported from China to the United States.⁵¹

In a prescient discussion of a U.S. external imbalance that was already massive and still rising in 2004, Mann (2004) writes, "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

⁴⁷ More precisely, foreign acquisitions of U.S. assets in that year must exceed U.S. residents' acquisitions of foreign assets. However, equities and similar ownership claims do not reflect borrowing and lending. For example, "foreign acquisitions of U.S. assets" can include greenfield construction of new foreign-owned manufacturing facilities in the United States or sale of an interest in an existing U.S. 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.

⁴⁸ See McCulloch (1990) on the macroeconomic roots of the U.S.–Japan current account imbalance in the 1980s. Ito (2009) compares the U.S.–Japan imbalance of the 1980s with the U.S.–China imbalance in the 2000s. His empirical analysis confirms a significant causal role of budget balances in determining current-account imbalances. However, he also concludes that the Japanese current-account surpluses of the 1980s were driven by underperformance of investment rather than over-saving.

⁴⁹ U.S. Bureau of Economic Analysis, National Income and Product Accounts, Table 5(1), shows the decomposition for each quarter of U.S. saving into private saving and government saving.

⁵⁰ For a complete discussion, see Mann (2002, 2004). Mann (2004), writing during a period of dollar depreciation, uses the term "co-dependency" to describe the complementary domestic macroeconomic imbalances and emphasizes that currency realignments alone cannot correct the U.S. external imbalance.

⁵¹ The full export price of these goods is reflected in the statistics on U.S.–China trade even when Chinese value-added is only a fraction of this price.

underlying the huge overall U.S. trade deficit and the bilateral trade deficit with China. U.S. 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 U.S. 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 Chinese exports to fall sharply. To maintain the pace of economic growth, Chinese policy makers implemented a major domestic stimulus, and saving fell relative to investment. In early 2009, China's trade surplus also fell from the record level attained in 2008. Accordingly, China's international reserves grew more slowly than in recent years. China sold a substantial volume of U.S. Treasury securities and other foreign bonds in early 2009 before resuming purchases in March.

7. Conclusions

A goal of this paper is to provide a framework that allows us to make sense of the U.S.–Japan and U.S.–China 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 outward-oriented growth strategy followed by Japan and China 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 fast” from the U.S. perspective and imports that grew “too slowly.” In both cases, the U.S. public and government officials chose to interpret the imbalance as a symptom of non-market considerations; in both cases, the official response included policies that addressed the symptoms as well as efforts to remedy features of the partner economy that were perceived as underlying causes. But in both cases the U.S. public and government officials were slow to acknowledge an underlying cause at home: the very low U.S. saving rate and a resulting domestic macroeconomic imbalance that translated into a large external imbalance.⁵²

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

On the export side, use of U.S. Section 301 and GATT dispute settlement against Japan in the 1977–1994 period looks similar to the use of WTO dispute settlement against China since 2006. Differences are more subtle; consistent with a political-economy perspective, U.S. 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 China, the legacy of a non-market system has remained an issue, even though an increasing share of import-competing products and exports has come from parts of the economy where private ownership and market forces are strong.

U.S. frustration with its lack of success in prying open the Japanese market led to new rules introduced into the WTO system (SPS, TBT, Government Procurement, Information Technology, TRIPS, 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 United States 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 anti-dumping, 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, 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. China 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.⁵³

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⁵² The official position of the United States may be shifting toward greater acceptance of the role of U.S. macro policy in sustaining the imbalance. In a major speech at Beijing University on June 1, 2009, U.S. Treasury Secretary Timothy Geithner explicitly acknowledged the need for the United States to increase private saving and reduce the fiscal deficit. Similar to many past public pronouncements of U.S. officials, he also called for China to shift away from export-driven growth by strengthening domestic demand.

⁵³ Because of China's heavy reliance on coal-fired power plants, most analysts have assumed China 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 Chinese exports. However, China 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, China may emerge as a major exporter of the environmental capital goods needed to implement ambitious goals regarding carbon emissions.

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References

- Bagwell, Kyle, & Staiger, Robert W. (1999). An economic theory of GATT. *American Economic Review*, 89(1), 215–248.
- Bagwell, Kyle, & Staiger, Robert W. (2002). *The economics of the world trading system*. Cambridge, MA: MIT Press.
- Barrows, Geoffrey, & Harrigan, James. (2009). Testing the theory of trade policy: Evidence from the abrupt end of the Multifibre Arrangement. *Review of Economics and Statistics*, 91(2), 282–294.
- Bayard, Thomas O., & Elliott, Kimberly Ann. (1994). *Reciprocity and retaliation in U.S. trade policy*. Washington: Institute for International Economics.
- Bergsten, C. Fred, Freeman, Charles, Lardy, Nicholas R., & Mitchell, Derek J. (2008). *China's rise: Challenges and opportunities*. Washington: Peter G Peterson Institute for International Economics and Center for Strategic and International Studies.
- Bhagwati, Jagdish & Patrick, Hugh T. (1990). *Aggressive unilateralism: America's 301 trade policy and the world trading system*. Ann Arbor: University of Michigan Press.
- Bown, Chad P. (in press). China's WTO entry: Antidumping, safeguards, and dispute settlement. In Robert C. Feenstra & Shang-Jin Wei (Eds.), *China's growing role in world trade*. Chicago, Illinois: University of Chicago Press.
- Bown, Chad P. (2009a). Global antidumping database (Current Version 5.0). *Brandeis University working paper*, July. Available on line at http://www.brandeis.edu/~cbown/global_ad/.
- Bown, Chad P. (2009b). U. S.–China trade conflicts and the future of the WTO. *Fletcher Forum of World Affairs*, 33(1), 27–48.
- Bown, Chad P. (2002a). Why are safeguards under the WTO so unpopular? *World Trade Review*, 1(1), 47–62.
- Bown, Chad P. (2002b). The economics of trade disputes, the GATT's Article XXIII and the WTO's Dispute Settlement Understanding. *Economics and Politics*, 14(3), 283–323.
- Bown, Chad P., & McCulloch, Rachel. (2007). U.S. trade policy toward China: Discrimination and its implications. In Sumner La Croix & *Challenges to the global trading system: Adjustment to globalization in the Asia Pacific Region*. London and New York: Routledge.
- Bown, Chad P., & Sykes, Alan O. (2008). The zeroing issue: A critical analysis of Softwood V. *World Trade Review*, 7(1), 121–142.
- Bradsher, Keith (2009). China outpaces U.S. in cleaner coal-fired plants. *The New York Times*, May 10.
- Brambilla, Irene, Khandelwal, Amit, & Schott, Peter K. (in press). China's experience under the Multifiber Arrangement (MFA) and the Agreement on Textiles and Clothing (ATC). In Robert C. Feenstra & Shang-Jin Wei (Eds.), *China's growing role in world trade*. Chicago, Illinois: University of Chicago Press.
- Broda, Christian, Limão, Nuno, & Weinstein, David E. (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*. Cambridge, MA: Ballinger. [Reprinted in W.M. Corden (1985), *Essays in international economics*. Oxford: Blackwell].
- Dean, Judith M., Lovely, Mary E., & Mora, Jesse. (2009). Decomposing China–Japan–U. S. Trade: Vertical specialization, ownership, and organizational form. *Journal of Asian Economics*, 20(6), 596–610.
- De Melo, Jaime, & Tarr, David. (1991). *VERs under imperfect competition and foreign direct investment: A case study of the U.S.–Japan auto VER*. World Bank Country Economics Department, WPS 667, May.
- Feenstra, Robert C., Lipsey, Robert E., Deng, Haiyan, Ma, Alyson C., & Mo, Henry (2005). *World trade flows: 1962–2000*. NBER Working Paper 11040, January. Cambridge, Massachusetts: National Bureau of Economic Research.
- Freund, Caroline, & Pierola, Martha Denise (2008). *Export surges: The power of a competitive currency*. World Bank Development Research Group, WPS 4750, October. Washington: World Bank.
- Greaney, Theresa M., & Li, Yao. (2009). Assessing foreign direct investment relationships between China, Japan and the United States. *Journal of Asian Economics*, 20(6), 611–625.
- Hudec, Robert E. (1993). *Enforcing international trade law: The evolution of the modern GATT legal system*. Salem, New Hampshire: Butterworth Legal Publishers.
- Hufbauer, Gary Clyde, & Elliott, Kimberly Ann. (1994). *Measuring the costs of protection in the United States*. Washington: Institute for International Economics.
- Hufbauer, Gary Clyde, Wong, Yee, & Sheth, Ketki. (2006). *US–China trade disputes: Rising tide, rising stakes*. Washington: Institute for International Economics.
- Ito, Hi ro (2009). U.S. current account debate with Japan then, with China now. *Journal of Asian Economics*, 20(3), 294–313.
- Mann, Catherine L. (2002). Perspectives on the U.S. current account deficit and sustainability. *Journal of Economic Perspectives*, 16(3), 131–152.
- Mann, Catherine L. (July 2004). Managing exchange rates: Achievement of global re-balancing or evidence of global co-dependency? *Business Economics*, 20–29.
- McCulloch, Rachel (1990). Macroeconomic policy, trade, and the dollar: Remarkable events of the 1980s. In Stefan Gerlach & Peter A. Petri (Eds.), *The economics of the dollar cycle*. Cambridge, MA: MIT Press.
- Morrison, Wayne M. (2009). China–U.S. trade issues. CRS Report for Congress, updated March 4.
- Perkins, Dwight (2001). Industrial and financial policy in China and Vietnam: A new model or a replay of the East Asian experience? In Joseph Stiglitz & Shahid Yusuf (Eds.), *Rethinking the East Asia miracle*. Washington: World Bank and Oxford University Press.
- Rodrik, Dani (2008). The real exchange rate and economic growth. Harvard Kennedy School manuscript, October.
- Saxonhouse, Gary (1983). What is all this about 'industrial targeting' in Japan? *The World Economy*, 6(3), 253–274.
- Staiger, Robert W., & Sykes, Alan O. (2008). 'Currency manipulation' and world trade. Stanford University working paper, August.
- United States Central Intelligence Agency (CIA) (2009). *The world factbook* [available at <https://www.cia.gov>, last accessed 3 June 2009].
- United States International Trade Commission (USITC). (2007). *Description of Selected Government Practices and Policies Affecting Decision Making in the Economy. China*: USITC Publication 3978, December.
- United States Trade Representative (USTR), Office of the (2009). Monitoring and enforcement: Section 301 table of cases" [available at http://www.ustr.gov/assets/Trade_Agreements/Monitoring_Enforcement/asset_upload_file985_6885.pdf, last accessed 15 April 2009].
- United States Trade Representative (USTR), Office of the (various years). Trade Enforcement Activities. In *USTR trade policy agenda and annual report* [available at <http://www.ustr.gov>, last accessed 15 April 2009].
- Van Assche, Ari, Hong, Chang, & Ma, Alyson. (2009). Global production networks and China's processing trade. *Journal of Asian Economics*, 20(6), 640–654.
- World Trade Organization (WTO) (2009). Dispute Settlement: The dispute: Chronological list of disputes cases [available at <http://www.wto.org>, last accessed 15 April 2009].
- World Trade Organization (WTO) (2008a). Trade Profiles 2008 [available at <http://www.wto.org>, last accessed 3 June 2009].
- World Trade Organization (WTO) (2008b). International Trade Statistics 2008 [available at <http://www.wto.org>, last accessed 3 June 2009].
- World Trade Organization (WTO) (2008c). World Tariff Profiles 2008 [available at <http://www.wto.org>, last accessed 14 June 2009].
- World Trade Organization (WTO). (1995). *Analytical index: Guide to GATT law and practice, Vols. 1 and 2*. Geneva: WTO.