

The Rise of US Anti-dumping Activity in Historical Perspective

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1. INTRODUCTION

ANTI-DUMPING (AD) provisions have been a part of US trade law for over 80 years, but have been prominent only in the past two decades. AD was such an obscure part of US trade policy that there was virtually no economic research on the topic until the pioneering paper of Finger, Hall and Nelson (1982). Since then, research on AD policy has focused almost exclusively on the period since 1980.¹ As a result, we know very little about the use of AD laws prior to 1980 and the degree to which there has been a shift toward more intensive use of AD remedies over time.

The purpose of this paper is to put the recent US AD experience in historical perspective, focusing in particular on the period since World War II. This perspective enables us to answer several questions. Is it true that few AD petitions were filed prior to 1980? If so, what explains that low level of AD activity, given that it is now considered to be an 'easy' way for import-competing firms to gain protection? And what economic and political factors explain the shift toward a more intensive use of AD remedies over time? Only by looking at the historical experience with AD can we shed light on these questions.

An examination of the entire history of US AD policy reveals the following:

- The number of AD investigations conducted in the late 1930s and the late 1950s and early 1960s is surprisingly large and comparable to the post-1980s levels of activity.

Helpful comments and advice were received from Bruce Blonigen, Mike Finger, Thomas Prusa, Shang-jin Wei, and seminar participants at Michigan, Dartmouth, and the International Monetary Fund. This paper was revised while the author was a visiting scholar in the Trade Unit of the IMF's Research Department.

¹ See Blonigen and Prusa (2003) for an excellent survey of the economic literature on AD measures.

- Most AD investigations prior to the 1970s were dismissed by the Treasury Department as lacking evidence of less-than-fair-value (LTFV) sales; by contrast, now virtually all petitions move on to the injury determination stage of the process.
- The increase in AD cases since the early 1980s is related to the rise of multiple petitions, i.e., petitions that cite several source countries of dumping the same product in the US market; in fact, the number of products targeted in AD cases has fallen since the mid-1980s.
- The proximate determinants of the annual number of AD cases is the unemployment rate, the exchange rate, import penetration and a 1984 legal change that encouraged the filing of multiple petitions.

This paper first examines some of the legal and administrative changes in AD policy since its inception. The paper then performs the service of collecting and presenting data on the annual number of AD investigations over time. Finally, an econometric model is used to examine the importance of various determinants of the annual number of AD investigations.

2. THE EVOLUTION OF US ANTI-DUMPING LAW

The precursors to US AD legislation emerged in the late nineteenth century from the anti-trust movement and concerns about the role of unfair competition in fostering the growth of monopolies. The Sherman Anti-trust Act of 1890 declared illegal any effort to combine or conspire to monopolise a particular market. The Clayton Act of 1914 made price discrimination an illegal practice if it reduced competition or tended to create a monopoly.

Legislation enacted shortly thereafter extended these principles to international trade. The Wilson Tariff of 1894 made it unlawful for foreign producers to combine or conspire to monopolise the US market.² Similarly, the Anti-dumping Act of 1916 (part of the Revenue Act of 1916) made it illegal to sell imported goods at prices substantially lower than the market value in the exporting country:

with the intent of destroying or injuring an industry in the United States, or of preventing the establishment of an industry in the United States, or of restraining or monopolizing any part of trade and commerce in such articles in the United States.³

This 1916 AD law is a criminal statute with criminal punishments. The remedy is not higher import duties but rather fines (triple damages) and possible imprisonment for those found guilty. The law is rarely invoked because the

² Viner (1923, p. 241) judges this part of the Wilson tariff to be 'without practical significance'.

³ Quoted in Congressional Budget Office (1994, p. 20).

exporter must be shown to have had ‘predatory intent’ with the aim of limiting or restraining competition, and proving such intent is difficult for the plaintiff. The law is still on the books, but it was recently ruled as inconsistent with WTO obligations.⁴

US AD law, as we currently know it, really began with the Anti-dumping Act of 1921, part of the Emergency Tariff Act of that year. According to this law:

Whenever the Secretary of the Treasury finds that an industry in the United States is likely to be injured, or is prevented from being established, by reason of the importation into the United States of foreign merchandise, and that merchandise of such class or kind is being sold or is likely to be sold in the United States or elsewhere at less than its fair value, he shall make such finding public. . . . [I]f the purchase price or the exporter’s sales price is less than the foreign market value (or, in the absence of such value, than the cost of production), there shall be levied, collected, and paid a special dumping duty in an amount equal to such difference.⁵

The Anti-dumping Act of 1921 contains all the elements of what we now recognise as AD: that duties may be imposed if the exporter’s sales price is less than the foreign market value, that foreign costs of production may be calculated if the foreign market value is not ascertainable, that the dumping must be related to injury suffered by the domestic industry, that higher import duties are the appropriate remedy, etc.

The 1921 law differs markedly from the 1916 legislation. The 1916 law focuses on the intent of the exporter, whereas the 1921 law hinges on a finding of price discrimination and injury. The 1916 law is enforced in legal proceedings in the court system, whereas the 1921 law is administrated by executive agencies. In the 1916 law, dumping is related to some vague notion of predatory pricing, but in the 1921 law dumping occurs simply if foreign firms charge lower prices on products sold in the United States than in their home market, regardless of whether predation is an issue. The remedy in the 1916 law is fines and possible imprisonment, whereas the remedy in the 1921 law is higher import duties (if injury to domestic producers is found).

Thus, the 1921 law set the stage for AD filings in a way that the 1916 law could not. As Finger (1993, p. 24) notes:

Under the softer standard of interpretation and proof, administration of the law could follow changing political pressures for protection much more quickly than a more rigorous, rule-of-law standard would allow. Thus it prepared the way for the eventual emergence of AD as the main vehicle for import-competing interests to press for protection – and for governments to respond to those pressures.

⁴ The EU and Japan challenged the 1916 law as inconsistent with GATT 1994 since it does not have a material injury test as required by the Uruguay Round’s Anti-dumping Agreement. In 2000, the WTO Appellate Body affirmed a panel ruling against the United States on the matter.

⁵ Quoted in CBO (1994, p. 21). Thus, the United States was slow to follow the example of Canada, which enacted the first AD law in 1904. It is ironic that Canada developed AD laws to block steel imports from the United States (particularly from the US Steel Corporation) and now, a century later, the US steel industry is among the major users of the law to stop imports.

Despite this, AD was not a critical component of US trade policy during the 1920s and 1930s, or in the period immediately following World War II. US import tariffs were quite high through the 1920s and early 1930s, and import penetration (measured by the ratio of imports to GDP) was very low. Although tariffs began to fall by the mid-1930s, due in part to negotiations under the Reciprocal Trade Agreements Act of 1934, domestic producers could invoke various trade laws to obtain protection from foreign competition.⁶ But AD was not an easy avenue for obtaining import relief, as statistics discussed in the next section will indicate.

Yet policymakers did not forget about the AD law. The United States was the main proponent of including AD procedures in Article VI of the General Agreement on Tariffs and Trade in 1947. Indeed, the 1921 legislation formed the textual basis for Article VI. But Congress has been sensitive to any weakening of US AD policy in multilateral negotiations. For example, the Kennedy Round negotiations in the 1960s arrived at an AD code with a much more stringent definition of 'material injury' than in US law. Congress objected to the higher standard and passed a law stipulating that the United States would abide by the code only so long as it did not conflict with existing US law.

In the 1970s and 1980s, as demand for AD measures increased, Congress passed legislation that changed various features of the AD law and made import duties a more likely outcome of the process. The Trade Act of 1974 expanded the definition of dumping to include home market sales below the average cost of production. The Trade Agreements Act of 1979 repealed the Anti-dumping Act of 1921 and the revised AD law was enacted as a new Title VII to the Tariff Act of 1930. This Act shortened the time limits for AD investigations and determinations and allowed the use of 'best information available' in cases where foreign firms did not provide information requested of them. The Trade and Tariff Act of 1984 required that the International Trade Commission cumulate the imports of all countries subject to an AD investigation when making an injury determination. This increased the benefit to domestic firms of filing petitions targeting several different countries of dumping the same product.⁷

⁶ The Tariff Commission helped to enforce several different trade laws during this period. For example, Section 337 of the Tariff Act of 1930 authorised the Tariff Commission to investigate alleged unfair methods of competition relating to imports when the effect or tendency of such methods or Acts is to destroy or substantially injure a domestic industry, or to prevent the establishment of an industry, or to restrain or monopolise the trade and commerce of the United States. Section 336 of the Tariff Act of 1930 – the so-called flexible tariff provision – sets forth a procedure under which an import duty could be changed by proclamation of the president after an investigation and report by the Commission on the differences between the cost of production in the United States and in its principal foreign supplier. In addition, Section 22 of the Agricultural Adjustment Act authorises the president to restrict imports of a commodity that render ineffective or interfere materially with US agricultural programmes (notably price supports).

⁷ See Hansen and Prusa (1996).

TABLE 1
Administrative Responsibilities in Anti-dumping Policy

	<i>Dumping Determination</i>	<i>Injury Determination</i>
1921–1954	Treasury Department	Treasury Department
1954–1979	Treasury Department	Tariff Commission
1979–present	Commerce Department	International Trade Commission

Note:

The Tariff Commission was re-named the International Trade Commission in 1974.

In addition to these legal changes, as noted in Table 1, Congress made two important administrative changes to the AD process in 1954 and 1979. Originally, the Treasury Department had full responsibility for determining if foreign merchandise had been imported at less than fair value (LTFV) and investigating whether the domestic industry was injured as a result of such imports. Effective from 1 October, 1954, Congress shifted the injury investigation from Treasury to the US Tariff Commission (now the International Trade Commission). Since the Tariff Commission routinely conducted such investigations in enforcing other trade laws, this shift appears to have been motivated mainly by issues of administrative expertise. Treasury Department officials supported this change, noting that injury determination was ‘completely outside the ordinary scope of departmental activities’.⁸

Effective from 1 January, 1980, the Carter administration shifted the LTFV determination to the Department of Commerce. With Congress’s consent, this shift took place in part because of the perceived indifference of Treasury to the plight of petitioning firms. As a report of the House Ways and Means Committee noted in 1979:

This Committee has long been dissatisfied with the administration of the antidumping and countervailing duty statutes by the Treasury Department. . . . Given Treasury’s performance over the past 10 years, many have questioned whether the dumping and countervail investigations and policy functions should remain in the Treasury Department.⁹

In its report, the House (1979, pp. 6–7) committee noted (without specifically naming the Treasury Department) that ‘past deficient administration of these laws’ was due to ‘low priority and inadequate staffing levels’. The committee noted that the shift

⁸ Annual Report of the Secretary of the Treasury, FY 1953–54, p. 304.

⁹ Committee on Ways and Means, US House of Representatives. Report on the Trade Agreements Act of 1979. House Report No. 317, 96th Congress, 1st Session, July 1979, p. 24.

will give these functions high priority within a Department whose principal mission is trade. In the past, agencies have arbitrarily set a course of administration of these statutes contrary to congressional intent.¹⁰

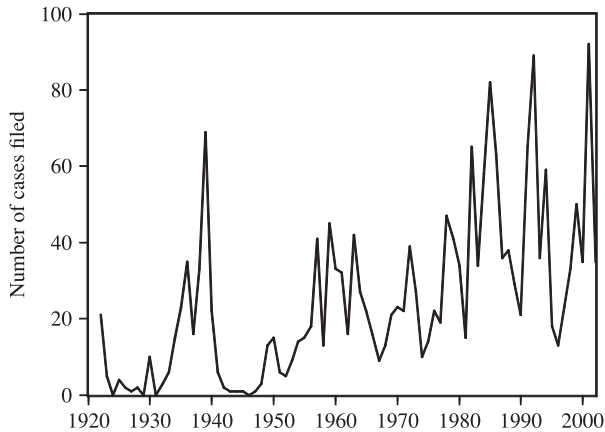
Thus, changes in the legal provisions of the AD law and in the administrative enforcement of the law were designed to facilitate the filing of petitions and increase the probability of import duties as being the final outcome.

a. Anti-dumping Activity Over Time

As noted in the introduction, most economic research on US AD policy has not examined the pre-1980 experience. The failure to study AD measures prior to 1980 is due to the lack of readily available data from that period and the perception that AD was not very important at that time. As a result, there is little sense for the overall trend in US AD activity prior to 1980.

To shed some light on AD prior to 1980, Figure 1 presents the annual number of AD cases filed since 1922. (These data are presented and their sources described in the Appendix.) This figure reveals that AD cases were by no means non-existent prior to 1980. Indeed, AD filings were quite pronounced during the late 1930s, even rivalling the large number of cases in the early 1980s and early

FIGURE 1
Annual Number of Anti-dumping Cases Filed, FY 1922–2002

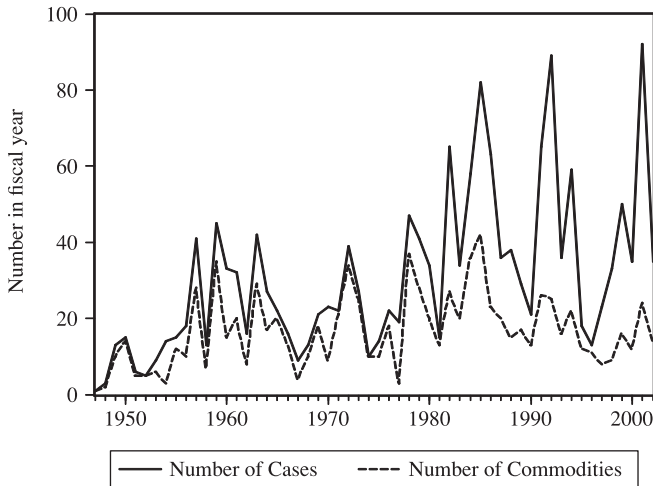


Source: See Appendix.

¹⁰ The House report also noted (p. 8), 'One of the major criticisms of moving international trade functions to the Commerce Department has been the orientation of that Department toward its domestic business constituency. This perception may be true at this time; if so, it is an orientation which the Department must change. Too great protection of domestic markets will effectively smother US export potential, as other governments retaliate with their own protectionist barriers against US imports.'

FIGURE 2

Anti-dumping Cases, Number of Cases and Number of Commodities, FY 1947–2002



Source: See Appendix.

1990s. In addition, there was a steady and fairly substantial stream of cases from the mid-1950s until the mid-1960s.

Figure 2 focuses on the post-World War II period, where greater case detail is available. This figure presents the total number of cases and the number of cases relating to a particular imported product. Each AD petition targets imports from a single country source. Prior to the early 1980s, most domestic industries filed a single petition that targeted imports of a particular product from a particular country. Since then, the number of multiple petitions has increased significantly. For example, of the 65 cases filed in FY 1991, six petitions concerned carbon steel standard pipe, seven dealt with wire rope, nine related to coated ground wood paper, 14 addressed ball bearings, and so on. Though there were 65 individual investigations in this year, only 26 different imported commodities were the subject of scrutiny. Indeed, the surges in AD activity in 1992–94 and 1998–2001 are directly related to the multiple petitions filed by the steel industry.

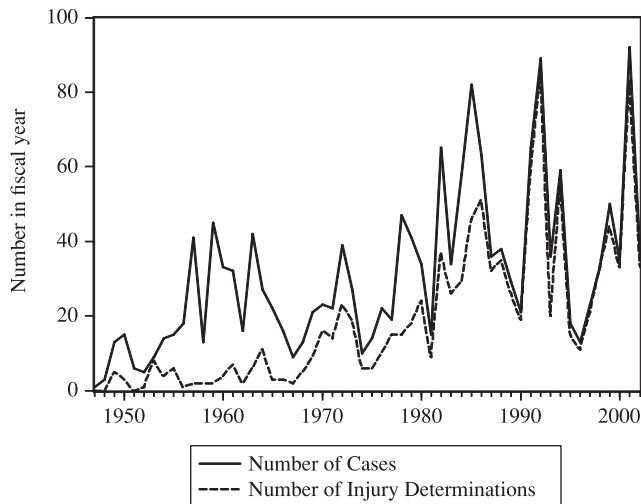
The increase in multiple petitions reflect several factors. First, the number of countries that supply the United States with a particular product has increased over the post-war period. To prevent the trade diversion that would occur if only one source of imports was affected by AD duties, domestic petitioners have a growing incentive to file multiple petitions. In addition, as noted earlier, a legal change in 1984 requires the International Trade Commission to cumulate imports from all petitions in making injury determinations. This gives petitioning firms an extra incentive to file multiple petitions to raise the probability of an affirmative injury finding.

As Figure 2 illustrates, after adjusting the total number of AD petitions for those covering the same product, the number of products targeted by AD filings after 1980 does not appear to be significantly higher than in previous decades. When looked at from the perspective of the number of products targeted, AD seems to have peaked around 1985 and to have declined since then. The message of Figure 2 is therefore strikingly contrary to the conventional view – AD may not be more important after 1980 than before.

Of course, each AD action now may have a greater negative impact on trade than in the past. As Blonigen (2003) notes, AD margins have risen significantly since the 1980s, so that the impact of AD duties on trade is greater. Furthermore, the rise of multiple petitions means that imports are more broadly shut out of the market when duties are imposed. While single petitions gave rise to substantial trade diversion, as countries not facing the AD duties increased their exports significantly after the imposition of duties, such diversion is less likely when multiple petitions are the norm.

Figure 3 plots the total number of cases and the number of cases in which an injury determination (either affirmative or negative) was made. An injury determination is required before AD duties can be imposed. As the figure illustrates, although many AD cases were filed in the late 1950s and early 1960s, very few cases reached the injury determination stage. Of those that did, injury was not often found to exist. Table 2 documents this point by presenting the disposition of AD cases between 1934 and 1954. During that period, only five per cent of all cases resulted in import duties. In more than 80 per cent of all cases, a finding of

FIGURE 3
Number of Anti-dumping Cases and Injury Determinations, FY 1947–2002



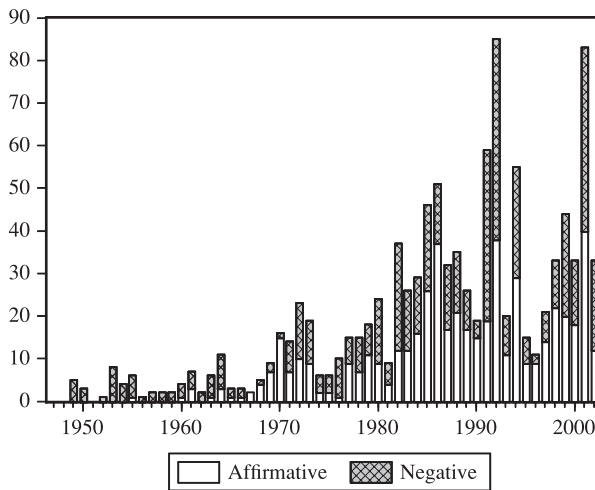
Source: See Appendix.

TABLE 2
Outcomes of Anti-dumping Cases, 1934–1954

	<i>Number of Cases</i>	<i>Percentage Distribution</i>
Total Cases	146	100
No Basis for Finding under AD Law	139	95
No Sales at LTFV	90	62
<i>De minimis</i> , complaint withdrawn, etc.	28	19
No Injury	21	14
Findings under Anti-dumping Act	7	5

Source: Committee on Ways and Means, US House of Representatives (1957, p. 15).

FIGURE 4
Anti-dumping Injury Determinations, FY 1947–2002



Source: See Appendix.

no dumping was made, either because imports were not found to be priced at LTFV, dumping margins were minimal, or petitions were withdrawn. As a result, no injury ruling by the Treasury was required. In only a quarter of the remaining cases (five per cent of all cases) was there an affirmative injury finding.

The dearth of injury rulings began to change in the early 1970s and, by the mid-1980s, virtually every case filed received an injury determination one way or the other. Figure 4 illustrates this development and shows that, since the late 1970s, roughly half of all ITC injury determinations are affirmative.

In conclusion, the number of AD investigations is clearly greater after 1980 than before, largely because of the increased propensity of firms to file multiple petitions. The number of imported products targeted for AD action has been

remarkably stable over time. In addition, since the late 1970s, almost every case reaches the injury determination stage.

3. DETERMINANTS OF ANTI-DUMPING CASES FILED

None of the existing studies of the determinants of aggregate US AD activity – notably Feinberg (1989), Leidy (1997) and Knetter and Prusa (2003) – examine the pre-1980 period. Therefore, the data described above can be used to explore some of the economic and political factors accounting for the rise in AD actions since the end of World War II.

Knetter and Prusa (2003) focus on two primary determinants of the annual number of AD cases – the change in real GDP and the real exchange rate. They find that an appreciation of the real exchange rate (with a one-year lag) leads to an increase in the number of AD petitions filed. Although a decline in real GDP leads to an increase in filings, the change in real GDP (with a three-year lag) is not a statistically significant determinant of AD filings when steel cases are excluded.

Exchange rates and business cycles might also explain the lower level of AD activity during the 1950s and 1960s. During that period, the Bretton Woods system of fixed exchange rates ensured that real exchange rate movements were minimal. In addition, business cycle fluctuations were relatively mild. Starting in the early 1970s, exchange rate variability increased and the US economy experienced some severe business cycle downturns. The rise in the use of AD remedies coincides with these economic changes.

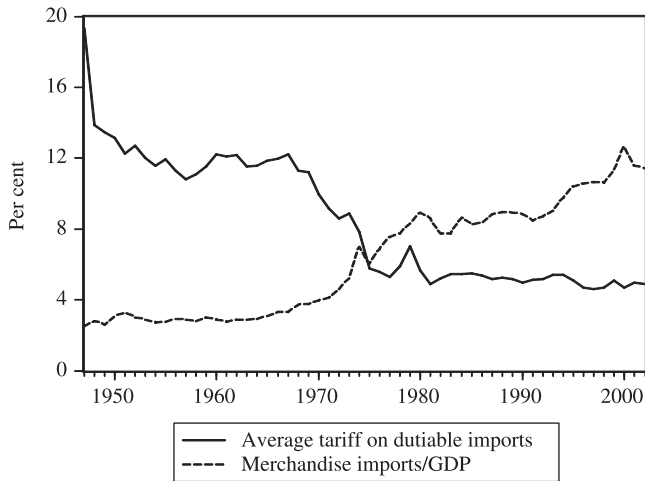
From a longer-term perspective, at least two other factors could also account for the rise in AD activity over the post-war period – the increased role of import competition in the US economy, and legal and administrative changes in AD policy.

First, the exposure of American industries to import competition clearly increased over the post-war period. Figure 5 shows that the ratio of merchandise imports to GDP starts to rise in the late 1960s. The import/GDP ratio increased from about three per cent of GDP in the 1950s and 1960s to about eight per cent in the 1980s and reached more than ten per cent by the end of the 1990s.

This rise in import penetration is plausibly related to the decline in the average tariff on dutiable imports. The average tariff fell quite sharply in the late 1960s and early 1970s due to the reduction in tariff rates as a result of the Kennedy Round of multilateral trade negotiations and the impact of higher import prices on the *ad valorem* equivalent of the many specific duties in the tariff code.¹¹ The timing of the decline in tariffs on dutiable imports and the rise in import penetration is quite striking. The correlation between these two series is -0.94 . This

¹¹ Irwin (1998) examines how the combined impact of changing tariff rates and fluctuations in import prices has affected the average US tariff over time.

FIGURE 5
Average Tariffs and Import Penetration, 1947–2002



decline in trade barriers exposed many industries to foreign competition and may have pushed them toward using AD duties to protect themselves.

A second factor that could account for the rise in AD activity is institutional changes in the administration of the AD law. As reported earlier, various subtle changes in the legal requirements for AD relief in 1974, 1980 and 1984, may have increased the number of AD complaints by raising the probability of obtaining import relief. In addition, in 1980 the Commerce Department replaced the Treasury Department as the institution responsible for LTFV determinations. The shift took place because Treasury was perceived to be relatively indifferent to AD petitions, whereas Commerce was expected to be a more sympathetic advocate for domestic firms seeking protection. Simply changing the agency responsible for handling the complaints may have constituted a regime shift that increased the number of petitions.

The relative importance of these potential determinants of AD activity can be sorted out by regressing the annual number of AD cases on various independent variables. Following the work of Knetter and Prusa (2003), two macroeconomic determinants of AD filings are the change in the log of real GDP and the log of the foreign exchange value of the dollar. The first measures the rate of US economic growth; previous studies have found that the number of AD petitions increases during a recession and decreases during an expansion, although the relationship has been found to be weak.¹² The unemployment rate is an alternative variable that will be used as well.

¹² The data are from the website of the Commerce Department's Bureau of Economic Analysis (www.bea.gov).

The exchange rate used here is the nominal effective US dollar exchange rate from the IMF's *International Financial Statistics*. The real exchange rate has been used in other studies, but it is available from the IMF and other authorities only since 1975. As is well known, however, movements in nominal exchange rates are closely related to movements in real exchange rates; indeed, for the period 1975 to 2002 the correlation between the nominal and real effective exchange rate of the dollar is 0.90.

In addition, the regressions will use measures of import competition – the merchandise import to GDP ratio and the average tariff – and a dummy variable to capture administrative changes.¹³ Both are exogenous variables from the standpoint of any individual industry that is considering appealing to the government for protection. Finally, dummy variables taking the value of one for the periods after 1974, 1979 and 1984 will represent the effects of legal and administrative changes on the number of filings. Strictly speaking, the dummy variables capture any omitted factors after these years that would increase AD filings, but the variables are plausibly linked to legal and administrative changes at that time.

Table 3 presents some econometric results in which the dependent variable is simply the number of cases filed in any given fiscal year. Since the dependent variable is a count measure, the regressions are estimated by a negative binomial regression.¹⁴ From column (1), using the main variables employed by Knetter and Prusa (2003), it appears that changes in GDP and the exchange rate are not systematically related to the annual number of filings over the longer time-period considered here. However, as column (2) shows, the unemployment rate, rather than the change in real GDP, appears to be more precisely related to the number of AD petitions. A higher unemployment rate is related to more AD cases.

Column (3) shows that the results improve when import penetration (measured by the import to GDP ratio) is included with the macroeconomic determinants. Not surprisingly, a rise in import penetration increases the number of AD filings. The coefficient on the exchange rate reverses its sign from the previous column and becomes statistically significant. As expected, an appreciation in the foreign exchange value of the dollar leads to more AD filings. Column (4) shows that the results do not change substantially with the substitution of the average tariff on dutiable imports for import penetration, although the coefficient on unemployment is estimated less precisely.

Column (5) includes three dummy variables for the years starting in 1975, 1980 and 1985, to represent the impact of the 1974 and 1984 legal changes and

¹³ The import/GDP data are from the BEA. The average tariff figures are from the Department of Commerce's Historical Statistics of the United States, updated by the US International Trade Commission.

¹⁴ See Cameron and Trivedi (1998). A more sophisticated approach would take into account the possibility of serial correlation in the regression.

TABLE 3
 Determinants of Anti-dumping Cases, FY 1947–2002
 (Dependent Variable: Annual Number of Anti-dumping Cases)

	(1)	(2)	(3)	(4)	(5)	<i>Standardised Coefficients</i>
Log of GDP (–1)	–0.43 (4.47)	–	–	–	–	–
Unemployment Rate	–	0.21* (0.06)	0.13* (0.06)	0.08 (0.06)	0.20* (0.08)	0.25* (0.08)
Log of Nominal Effective Exchange Rate (–1)	–0.60 (0.69)	–0.60 (0.59)	1.62* (0.71)	1.72* (0.72)	1.77* (0.73)	0.23* (0.09)
Log of Import/GDP Ratio	–	–	0.81* (0.18)	–	0.66 (0.55)	0.22 (0.14)
Log of Average Tariff (Dutiable Imports)	–	–	–	–1.24* (0.27)	–	–
Dummy Variable (starting 1975)	–	–	–	–	–0.30 (0.62)	–
Dummy Variable (starting 1980)	–	–	–	–	–0.20 (0.39)	–
Dummy Variable (starting 1985)	–	–	–	–	0.75* (0.28)	0.61* (0.22)
Pseudo- R^2	0.52	0.55	0.56	0.56	0.57	0.57
Log Likelihood	–235.0	–234.4	–226.3	–225.4	–222.8	–223.1

Note:

Estimated by a negative binomial regression. Robust standard errors are reported.

* Indicates statistical significance at the ten per cent level.

the 1980 shift of AD responsibilities to the Commerce Department. These dummy variables reduce the impact of import penetration, but do not change the effect of unemployment or the exchange rate on AD cases. However, the only dummy variable that is positive and statistically significant is that for the 1984 legal change that gave firms the incentive to file multiple petitions. Taking the exponential of the coefficient on the dummy variable indicates that the conditional mean of the number of cases is 2.12 times higher after 1984. This implies a substantial effect: a 112 per cent increase translates into an additional 22 cases per year from pre-1984 levels.

To facilitate a comparison of the importance of each of these factors, the next column reports coefficients on the standardised variables. The effects of the unemployment rate, the exchange rate and import penetration are roughly comparable: a one standard deviation increase in the exchange rate leads to about a 0.23 standard deviation increase in the number of filings. Thus, there is a rough symmetry between comparably sized changes in these variables in terms of their impact on the number of AD cases.

Table 4 considers two different dependent variables, the annual number of products covered in AD cases (i.e., multiple petitions concerning a single product

TABLE 4
Determinants of Number of Products and Injury Determinations, FY 1947–2002

	(1) <i>Number of Products</i>	(2) <i>Number of Injury Determinations</i>
Unemployment Rate	0.20* (0.07)	0.23* (0.10)
Log of Nominal Effective Exchange Rate (-1)	1.83* (0.57)	1.35* (0.84)
Log of Import to GDP Ratio	0.85* (0.49)	2.22* (0.64)
Dummy Variable (starting 1975)	-0.49 (0.58)	-1.21 (0.74)
Dummy Variable (starting 1980)	-0.39 (0.38)	-0.01 (0.34)
Dummy Variable (starting 1984)	0.40* (0.21)	0.83* (0.32)
Pseudo- R^2	0.32	0.70
Log Likelihood	-192.8	-183.7

Note:

Estimated by a negative binomial regression. Robust standard errors are reported.

* Indicates statistical significance at the ten per cent level.

become one observation) and the number of injury determinations (both affirmative and negative). As in the previous table, the unemployment rate, the exchange rate, the import penetration ratio and the 1984 legal change all appear to be important determinants of the number of products involved in AD cases (column (1)). In explaining the declining number of products targeted after the mid-1980s, the impact of the drop in the unemployment rate and the lower foreign exchange value of the dollar must have dominated the continued rise in import penetration and the 1984 legal change.

The results in column (2) indicate that the same factors are at work in explaining the number of cases that receive an injury determination.¹⁵ In this case, the coefficient on the 1984 legal change is more than double that in the previous column. This indicates that the cumulation requirement appears to have had an impact on the number of cases getting to the injury stage.

Several conclusions cut across these findings. Changes in real GDP do not appear to be systematically related to AD activity. This suggests that the industry-specific cycles that trigger AD demands are not necessarily correlated with the economy-wide business cycle. (The difficulties faced by the steel industry after

¹⁵ Hansen and Prusa (1997) investigate the political and economic factors behind whether the ITC renders an affirmative or a negative injury finding.

the Asian financial crisis in 1997, for example, coincided with robust economic growth in the United States.) Rather, the two macroeconomic phenomena that drive AD activity are the unemployment rate (positively related) and the exchange rate (appreciations being positively related). In addition, the increasing role of imports in the economy – related to the decline in average levels of protection – is also positively related to the number of AD filings.¹⁶

Finally, as the dummy variable indicates, something clearly happened to the level of AD activity after 1984. In that year, the Congress changed the AD law to require the ITC to cumulate the impact of all imports from countries against which a petition had been filed in rendering its injury decision. This gave import-competing firms an incentive to file more AD petitions against other countries for a given product. The effect could also represent the lagged impact of a major institutional change – the shift in administrative responsibility from Treasury to Commerce. The Commerce Department was much more apt to find LTFV sales, leading to many more petitions filed and injury determinations made. Thus, empirical results that focus exclusively on the period after 1979 may fail to capture the importance of legal changes and bureaucratic incentives in giving rise to additional AD activity.

4. CONCLUSION

This paper has put recent US AD experience in historical perspective by studying the number of AD cases prior to the 1980s. Contrary to the conventional view, many AD petitions had been filed in previous decades, particularly in the late 1950s and early 1960s and again in the early 1970s. Unlike today, however, most of these petitions did not result in the imposition of AD duties. The greater number of petitions in recent years reflects the tendency of firms to file multiple petitions, while the number of products targeted for AD measures has actually declined since the early 1980s.

In terms of the empirical results, the annual number of AD investigations is affected by two macroeconomic factors – unemployment and the exchange rate. In addition, the trend toward greater import penetration in the US economy dating from the early 1970s (a factor that is highly correlated with declining average tariffs) and legal and administrative change in AD policy have also had an impact on the number of AD cases.

¹⁶ This substitution is to be expected and perhaps even welcomed. Fischer and Prusa (2003) argue that contingent protection dominates high average protection as a mechanism for insuring import-competing firms and their workers from import shocks. So from a welfare perspective, sector-specific contingent protection measures are superior to uniform non-contingent tariffs.

APPENDIX

Annual Number of Anti-dumping Cases, Products and Injury Determinations, by Fiscal Year

	<i>AD Filings</i>	<i>Products</i>	<i>Injury Determinations</i>	
			<i>Affirmative</i>	<i>Negative</i>
1947	1	1	0	0
1948	3	2	0	0
1949	13	10	0	5
1950	15	14	0	3
1951	6	5	0	0
1952	5	5	0	1
1953	9	6	0	8
1954	14	3	0	4
1955	15	12	1	5
1956	18	10	0	1
1957	41	28	0	2
1958	13	7	0	2
1959	45	35	0	2
1960	33	15	1	3
1961	32	20	3	4
1962	16	8	0	2
1963	42	29	1	5
1964	27	17	3	8
1965	22	20	1	2
1966	16	13	1	2
1967	9	4	2	0
1968	13	10	4	1
1969	21	18	7	2
1970	23	9	15	1
1971	22	21	7	7
1972	39	34	10	13
1973	27	25	9	10
1974	10	10	2	4
1975	14	10	2	4
1976	22	18	1	9
1977	19	3	9	6
1978	47	37	7	8
1979	41	28	11	7
1980	16	20	9	15
1981	14	13	4	5
1982	35	27	12	25
1983	46	20	12	14
1984	38	36	16	13
1985	69	42	26	20
1986	83	23	37	14
1987	16	20	17	15
1988	42	15	21	14
1989	24	17	17	9
1990	35	13	15	4
1991	66	26	19	40
1992	84	25	38	47
1993	37	16	11	9

APPENDIX *Continued*

	<i>AD Filings</i>	<i>Products</i>	<i>Injury Determinations</i>	
			<i>Affirmative</i>	<i>Negative</i>
1994	51	22	29	26
1995	14	12	9	6
1996	21	11	9	2
1997	15	8	14	7
1998	36	9	22	11
1999	46	16	20	24
2000	45	12	18	15
2001	77	24	40	43
2002	35	14	12	21

Note on sources: There is no consolidated and reliable source for early AD cases. Several sources were used in the construction of this time series. For the period 1922 to 1953, the source is <http://ia.ita.doc.gov/stats/pre80ad.txt>. This source is poorly documented. A more reliable and complete compilation of all cases prior to 1953 might be available by going through the Treasury's publication *Treasury Decisions*. For the period from 1953 to 1979 (fiscal years), the number of cases filed is reported in the *Annual Report of the Secretary of the Treasury*. After these data were compiled, I discovered that Baldwin (1998, p. 302) presents the same data for essentially the same period. For fiscal years 1980 to 2002, the source is an internal document from the Office of Investigations, International Trade Commission.

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