

ECHOING ANTIDUMPING CASES
Regulatory competitors, imitation and cascading protection

by

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ABSTRACT

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This paper analyses how an antidumping procedure in one country may lead to identical procedures targeting similar products originating from the same countries under other foreign antidumping statutes. The concept of 'echoing' protection is elaborated to describe the phenomenon of contingent protection in one country followed by similar protective behavior abroad. We find that 'echoing' antidumping is significant in Canada, Europe and the United States, three big users of antidumping law. We then provide several documented explanations for that phenomenon. Channels of transmission of echoing antidumping examined in this paper include multinational enterprises attempting to monitor the antidumping process in the countries where they are located; exports flows diverted by an antidumping proceeding becoming subject to another complaint in the market where they end up; and suits filed in imitation of successful foreign competitors.

JEL classification: F13, F14, F23, L21

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“For ye be false echone false and false again”.
John Skelton

Introduction

Upon examining petitions upheld in the main antidumping user countries, one can not help but notice the wide variety of investigations that have been carried out. All sorts of commodities have been targeted by antidumping petitions, ranging from the most commonly consumed, such as potatoes, TVs and disposable lighters, to the most exotic and mysterious ones: coumarin, refractory chamottes and decabromodiphenylether. Moreover, dozens of countries have been hit by antidumping proceedings, from Albania to Zimbabwe. Potentially any product from any country could one day fall under an antidumping proceeding.

Despite this apparent diversity, the practice of domestic antidumping laws reveals converging patterns. This is obviously the case with big antidumping users: Canada, the European Community (EC) and the United States (US). The facts show, indeed, that some categories of products and some countries are more often subject to proceedings than others, and the outcomes of antidumping cases appear to be quite similar among enforcers of the law. Messerlin and Reed [1995] point out that the proportion of cases concluded by the imposition of antidumping measures among the two main users of antidumping, the EC and the US, are of the same order. They also note that chemical and steel products account for a large portion of antidumping cases and that countries such as China, Korea, or Taiwan are more often targeted than their share in the international trade would lead one to suppose. We have some evidence here that domestic antidumping systems behave in a similar fashion. Why should this be the case? Trade patterns vary among countries, national antidumping systems - though GATT-consistent - are still different and monitored in different ways, domestic industries do not necessarily have the same concerns in every country. One of the explanations that Messerlin and Reed [1995] draw from these facts is that:

the convergence of the United States and the Community in their **AD [anti-dumping]** measures is much less the consequence of an upsurge in the practice of dumping than of a ‘protection engineering process’... [W]e should think in terms of the strategies of firms rather than **of** countries. There is no doubt that similar regulations, leading to similar outcomes, allow global firms to master the **AD** procedures of many countries. As a result, one might, for instance, expect an increased number of similar complaints lodged by the same firms in **both** the United States and the Community.

This extreme convergence in the use of national antidumping laws is precisely the aim of our study here, focusing on the occurrence of similar, if not identical, complaints in the main antidumping user countries. The fact is largely ignored, but this is not because similar complaints are so uncommon

or random. We show, on the contrary, that the phenomenon is significant and thus deserves an explanation. Messerlin and Reed assume that multinational firms can monitor antidumping law to their profit, and this study will demonstrate that there are instances of such behavior. However, this explanation does not account for the whole story. We will examine other mechanisms which lead to this mirroring use of antidumping. Identifying them may allow us to understand better how antidumping systems are monitored and detect some predictability in their use.

In the first part we examine, in the most exhaustive way possible, instances of epidemics of 'echoing' antidumping investigations. We define 'echoing' antidumping complaints as antidumping cases targeting in different importing countries similar products originating in the same exporting country. We focus particularly on cases which have occurred in the US and the EC. We also consider briefly Canadian antidumping cases. We thus review the antidumping practices of three of the four main users of antidumping law. A preliminary analysis of these multiple occurrences of identical cases provides some enticing insights. In the second part, we try to sketch out possible explanations for this phenomenon, focusing on the questions of why firms from different countries may seek protection against imports of precisely the same kind of products and why they then resort to identical trade instruments. We find three main reasons explaining why such 'echoing' behavior can occur: (a) monitoring by multinational enterprises (MNE), (b) cascading protection, and (c) diffusion effects via imitation and positive externalities.

I. How antidumping investigations in Canada, the EC and the US focus on the same products: evidence of some strong existing links between their use of antidumping law

- Defining echoing antidumping

We have coined the term ‘echoing’ to describe the situation where two or more almost identical products, originating in the same country, are subjected to the scrutiny of contingent protection in several countries. Our inquiry will thus attempt to explain why in two or more countries, where producers are not necessarily the same or directly competing against each other but where ‘similar’ products are produced, ‘similar’ measures come to be taken against ‘similar’ importing competition. In particular, we focus on the case of antidumping investigations aimed at protecting domestic manufacturers.

The conundrum here is that we have to define more accurately all these similarities. Beginning with the product, we know that the classical economic definition of a commodity includes, in addition to its physical properties, the date and the state of nature in which it is available, as well as the location. By definition, products subject to ‘echoing’ are not sold at the same place, nor necessarily in the same state of nature and at the same time. In practice, antidumping systems do not go far in setting up the criteria that define the scope of a proceeding. Following their usage, we will rely chiefly on a comparison of the physical properties and use of the product. Authorities seeking to define the scope of their investigation employ these two criteria, in order to classify as ‘like’ the competing commodities of imports and domestic production.

Domestic producers (in the countries where antidumping law is invoked) and exporters of these ‘similar’ products should be thought of as firms which would compete for the same clients, should they happen to be present in the same market (they sometimes actually are). A ‘similar’ product would therefore be a potential (or actual) close substitute. The problem is that we cannot be sure that the products we want to compare are close enough to render our concept meaningful.

When we speak of ‘similar’ measures, we are referring to the diverse forms of contingent trade protection. Antidumping, anti-subsidy, escape clause, patent infringement by imports, or trade instruments (such as Section 301 in the US and the Trade Barriers Regulation in the EC) are not identical, but they can be used in a similar fashion: contingently, targeting a particular product, often from a particular country.¹

¹ We note that these measures are sometimes used simultaneously, especially in the US. The domestic producer may also seek protection from other domestic laws, like the Buy American Act in the US, or anti-trust laws.

A final word to explain why we have chosen the terminology of ‘echoing’. ‘Echoing’ suggests the existence of a common source at the origin of identical petitions. One explanation of ‘echoing’ may then be that certain spill-over effects operate on the factors that trigger the decision to resort to contingent protection in different countries. We believe this to happen in most of the ‘echoing’ cases we find. However, this definition of ‘echoing’ *per se* does not imply the existence of a causal link between two investigations. Theoretically, ‘echoing’ can be merely coincidental.²

- Identifying echoing

Looking for ‘echoing’ antidumping cases across countries is not an easy task. The WTO’s Antidumping Code stipulates that information about ongoing investigations must be made public (Article 12) and requires regular reporting to the WTO’s Committee on Anti-Dumping Practices (as established by Article 16). Additional information, beyond legal reporting requirements in official publications such as the Federal Register, the Official Journal of the European Communities or Canada’s Gazette, remains scarce. Some administrations, however, such as the International Trade Commission (ITC) and the International Trade Administration (ITA) in the United States, make an effort at transparency by compiling and making accessible supplementary information. Other administrations, like, for instance, the European Commission, keep the antidumping process rather opaque. The Commission does not disclose the submissions of the petitioners, nor does it always specify on behalf of whom the petitioner acts.

Since selecting close substitutes is a complicated task and may therefore be subject to argument, focusing solely on identical products has the great advantage of making the study clearer and more tractable. By ‘identical’, we mean that we will restrict ourselves to cases where the products under consideration in two national investigations are identical, according to the criteria used by the antidumping authorities. Restricting our study to identical products does not affect the quality of the conclusions drawn, but it affects the estimate of the amplitude of the phenomenon.

Again, for reasons of tractability, we ignore petitions which have been dismissed by the antidumping administrative authorities.³ The main reason is the lack of information regarding these petitions. Following our primary definition of ‘echoing’, we should also consider cases where countervailing duties or other forms of protection (escape clause, 301, etc.) echo an antidumping suit in

² Moreover, we prefer talking of ‘echoing’ cases instead of ‘similar’, ‘like’, or ‘twin’ cases, in order to prevent confusion, since ‘similar’ and ‘like’ are concepts used in different contexts in antidumping issues, and ‘twin cases’ is used in the antidumping literature for other purposes (Messerlin [1990]).

³ We also ignore instances which do not even attain the formal petition stage, such as the reported attempt by Cray in the recent suit against Japanese supercomputers in the US to get the US government to lobby for similar action in Europe. See [Inside US Trade](#), 29 August 1997.

another country (and vice versa). As we have good reason to believe that ‘echoing’ occurs chiefly within the antidumping sphere, we have ignored this. In particular, we have not included in our study products hit by an anti-subsidy investigation in one country and an antidumping one in another (e.g. investigations regarding tillage tools from Brazil in the United States and Canada). In a sense, we thus devote our study to the purest cases of ‘echoing’, which are also the easiest to track.

National legislations do not provide strict guidelines for the definition of the product covered by an investigation. In the EC, petitioners are asked to provide a “complete description of the allegedly dumped product”⁴ Likewise, in the U.S., the Code of Federal Regulations⁵ requires a “detailed description of the subject merchandise [...] including the technical characteristics and uses of the merchandise and its current U.S. tariff classification number”. Antidumping practitioners know that the definition of the scope of the proceeding is rather *ad hoc*, and is largely determined by the nature of the complaint filed by the petitioners. An illustration of the flexibility of the procedure is given by the two petitions against bicycle imports in the US, and by the consecutive complaints against Korean imports of polyester film in Europe. In the bicycle case, the 1982 petition against Taiwanese exporters regarded finished bicycles as well as their parts, whereas the 1995 petition against Chinese imports regarded only finished bicycles.⁶ In the polyester film suits, the petitioners, unsuccessful in their initial claim, narrowed down the product definition in the course of the second proceeding in an attempt to get a positive determination of injury.⁷ These two examples show that the definition of the product range subject to the investigation may vary according to the circumstances. Defining accurately the scope of the complaint is very important indeed: if too wide, the injurious effect of some imports may be diluted; if too narrow, the measures will have a limited effect.

The authorities may expand or restrict the scope of the investigation, as they did in the TV case in Europe⁸ or in the case involving mobile phones from Japan in the U.S.⁹ Generally they do not, and the like-product definition follows the scope of the complaint.¹⁰

4 Article 5.2(b) of Regulation (EC) N° 384/96 OJ L56/1 of 6 march 1996.

5 CFR 351.202 (b) 5

6 The reason being that US producers out-sourced in the meantime their production of parts and did not want to target their own foreign-based production.

7 The first petition, held in 1988, regarded polyester film (PET film) of all thickness. Following a ruling of no injury, the petitioners filed a second suit in 1990 against polyester film less than 25 microns. This second case led to another no injury finding. In 1995, the same plaintiffs filed a third complaint targeting imports of PET video film between 7 and 16 microns of thickness. This last complaint was finally withdrawn. Vermulst and Waer [1996: 283] provide another example in the investigation against imports of polyester yarn.

8 Vermulst and Waer [1996:285-287] detail the whole story.

9 50 FR 45448, October 31, 1985. The DoC included discrete subassemblies in the complaint. It rejected the respondents’ claim that the subassemblies were not the same class or kind of merchandise as the subject of the complaint, by using the five criteria used by the ITC in its like product determinations.

Immediate detection of identical cases is not always easy, since two antidumping procedures in different countries, while dealing with a common imported product, may not necessarily cover the same range of imports. The magnesium, ball bearings and TV cases are such cases. As a rule, we consider two investigations as potentially ‘echoing’ if at least they deal with a common product. The first test for identifying common products is provided by the Harmonized System (HS) classification of the products subject to the investigation. Since Europe and the US comply with this system, the first six digits of the national tariff codes of these countries correspond to the HS codes and identify a same class of products. In Europe, the product subject to the investigation is generally identified in terms of its Combined Nomenclature code, that is, the HS 6-digits subheading plus two further digits (Vermulst and Waer [1996: 77]). In the US, the International Trade Administration, who has authority in the matter, adopts an identical approach, stipulating, however, in its determinations that “the HTSUS subheadings are provided for convenience and custom purposes, the written description remains dispositive.” The definition of the product coverage of an investigation is further refined by descriptive language, which provides additional evidence of similarity between two product investigated.

A second test consists in identifying the producers or exporters targeted by the investigation. This may prove useful in confirming the robustness of our detection process and is somewhat similar to the common manufacturing criteria used by the ITC. The facts confirm that, in the majority of cases that we have identified, national investigations target some common producer/exporter (table 1).¹¹ Finally, a third test is provided by the official publications, which sometimes confirm the reality of ‘echoing’ by referring explicitly to the foreign antidumping proceeding as dealing with the same product. Such ‘official’ confirmation is found in 18 cases (11 cases in Europe and 16 cases in the US, see table 2).

Time is another issue in our detection process. The lag between two investigations could render the parallel inadequate, because products or trade patterns may have changed completely during that period. The quality and functions of a product (e.g. electronic components, typewriters), custom classifications (the switch from TSUS to HTSUS for instance) and even countries (e.g. Yugoslavia and USSR partitions, German reunification...) can undergo dramatic change over a relatively short period. Since we focus on the behavior of firms, we have considered cases dealing with countries that have undergone partition or reunification as similar. We have suppressed cases

10 As demonstrated by the following story, the like-product determination itself may be influenced by ‘echoing’. In the like-product determination of the 1Meg DRAM from Korea case, the ITC surprisingly justified its choice not to establish an upper limit in the range of product based on the following fact: “in its preliminary determination regarding imports of DRAMs from Korea, the Commission of the European Communities also considered the question of whether future-generation DRAMs are within the like product”. DRAM of One Megabit and Above from the Republic of Korea, investigation 731-TA-556 (final). USITC publication n°2629, May 1993.

11 Another interesting aspect to consider would be to check whether the petitioners in two ‘echoing’ cases are related. Unfortunately, as mentioned earlier, the European Official Journal notifications just mention the petitioners and do not always specify on behalf of which member of the industry the complaint is brought.

which did not overlap in time.¹² However, we consider that even cases very distant in time might have some common ground when the more recent proceeding takes place before the older one has been terminated or expired. Bearing these restrictions in mind, we consider our data an underestimate of the reality of ‘echoing’, and prefer to think of it as a (relatively exhaustive) sample.

- The reality of echoing

Our screening process has yielded a substantial number of cases supporting our thesis. A first glance at ‘echoing’ cases reveals that we are faced with a phenomenon that is far from uncommon, and which is surely underestimated. Europe and the US (table 3) have so far experienced at least 54 common cases.¹³ Our screening process was less rigorous in the case of echoing between Canada and the United States, since we did not have access to the Canadian Gazette but only to partial secondary sources, and should, therefore, be viewed with caution. A first appraisal of echoing between these two countries reveals about 56 cases. The overall total of 218 cases¹⁴ involved in ‘echoing’ is certainly not negligible, and is significant on a worldwide level. Echoing cases to or from Europe and Canada amount to 103 out of 691 (14.9%) of all antidumping cases initiated in the US between 1980 and 1996. In Europe the proportion of echoing solely to or from the US amounts to 49 out of 599 antidumping initiations (8.2%) over the same period; in Canada, the proportion amounts to a significant 51 out of 394 cases (12.9%; see table 4 for data about the number of cases initiated in each country). ‘Echoing’ is undoubtedly a phenomenon of some importance.

One may think that ‘echoing’ has increased over the years, possibly as a result of the worldwide opening of markets. Surprisingly, though, the distribution over time of such cases is very stable in Europe and the US. Between 1990 and the present, the proportion of echoing cases which occurred in Europe was exactly the same as the one estimated over the entire period in our sample. We note a slight decrease in the US (14.3% of the post-1990 cases are ‘echoing’), which may not be significant. Canada displays a strong proportion (23.5%) of cases echoing to or from the US between 1990 and 1996. Given the unreliability of our detection process in the case of Canada, we will not

12 Such as the investigations regarding pig iron from USSR and Romania, bicycles from Taiwan and microwave ovens from Japan, in the United States and in Europe.

13 This is a conservative estimate, since there may still be some undetected echoing cases. The total number of cases varies, depending on whether we count echoing cases from the European or from the US perspective. One reason is that one case involved the USSR in Europe and three former USSR republics in the US. Another reason is that the same case concerning a class of products in one country can be split in two or more different cases in another (see e.g. the case of Dram from Japan, the ball and tapered bearings cases, the bicycle tires and tubes, and the pipe fittings cases). The US count of echoing cases to or from Europe is 56.

14 That is approximately 54 cases in Europe, 56 + 58 cases in the US, 56 cases in Canada, minus 6 common cases to these three countries which are then counted twice in the US.

draw any conclusions from this apparent increase, except that, once again, ‘echoing’ occurs very frequently.

‘Echoing’ between Europe and the US appears especially striking when we consider the specific case of China. We find 15 ‘echoing’ cases dealing with this country.¹⁵ This represents a substantial 25.4% of the total 59 antidumping cases filed against Chinese exporters in the US between 1980 and 1996 and a comparable proportion in Europe, since 61 cases have been filed there against China over the same period (table 5). China accounts for 28.2% of all instances of ‘echoing’ between these two countries (31 out of 110 cases). Surprisingly, in the US-Canada ‘echoing’ cases, Chinese exports account for only 8 of the 114 instances in the sample.

‘Echoing’ may not involve solely a pair of countries. China has been targeted three times by the US, Canada and Europe in unison (paint brushes, photo albums and bicycles). Korea (color televisions), USSR and GDR (both urea) have been targeted once by the three countries together. These 18 cases represent a significant part of our sample, suggesting that ‘echoing’ can resound widely. Indeed, ‘echoing’ is, in some cases, quite spectacular: in addition to petitions from Canada, Europe and the US over the past 4 years, Chinese bicycle manufacturers have also faced an antidumping suit in Mexico. Chinese exporters of disposable lighters have undergone antidumping suits in Europe, the US and Argentina, while Russian producers of magnesium have been targeted in the US, Europe and Brazil. Another recent example is the so-called ‘pasta war’, where Italian producers have been targeted by the US, Canada, Israel and New Zealand (with an anti-subsidy suit). In addition to showing us that ‘echoing’ obviously happens wherever antidumping laws exist, such epidemics obviously corroborate our initial suspicion of some coordination between the practices of diverse domestic antidumping systems.

- Simultaneity

Another set of observations leads us to surmise that this remarkable parallel in filing behavior is not just the result of mere coincidence. Looking at the dates of initiation of investigations in each country,¹⁶ the quasi-simultaneity of a number of cases comes across as a striking phenomenon. Table 6 depicts the coordination that sometimes occurs between national antidumping systems. The *blue ribbon* of transatlantic ‘echoing’ is held by the suits against urea exports from the USSR and GDR: only twenty-nine days elapsed between the initiation of the two antidumping proceedings. Other quasi-

¹⁵ ¹⁶ if we count from the European perspective.

simultaneous filings in the US and Europe were: Atlantic salmon from Norway (1 1/2 months) and silicon metal from Brazil (2 months).¹⁷

On the other hand, some cases are very remote from each other: several years (5 for typewriters suits in the US and the EC), and even more (15 years in the sugar from Germany cases in Canada and the US) may pass before an equivalent investigation is undertaken in a second country. This could be presented as evidence against 'echoing' between the two procedures, but we believe that this is not the case. In fact, these cases appear in a very different light when one bears in mind that these very remote antidumping measures were still in place when similar proceeding were initiated in the second country and that, for example, the process of annual reviews in the US re-actualizes a case.

The timing issue also raises questions about the direction in which diffusion of antidumping occurs. Table 6 shows us that there is no precise direction of diffusion from one country to another in the Europe-USA 'echoing', though the US seem to be a little more often at the origin of 'echoing' cases. On the contrary, past evidence suggests strongly that Canada is rather a 'follower' of the US.¹⁸ The direction of diffusion also reveals that an echoing case can 'echo' back in the country of origin. We mean by this that 'echoing' occurs both ways. The movement generally proceeds as follows: an investigation 'echoing' a previous one may target more exporting countries or a larger range of products. This second investigation can then 'echo' back in the country of origin, which in its turn will initiate an investigation against these imports not previously included in the first investigation. This happened in cases such as those of urea, unwrought magnesium and ball bearings. In the special case of barium chloride from China, a first complaint was filed in Europe, triggering an 'echoing' investigation in the U.S. which was then followed by a second inquiry in Europe.

Another fact is that 'echoing' between Canada and the US and between Europe and the US displays different characteristics. Quasi-simultaneous 'echoing' cases are more frequent between Europe and the US than between the US and Canada. The distribution of 'echoing' cases among countries and industries also varies. Whereas China repeatedly appears in Euro-American 'echoing' instances, it does not appear as much in Canadian-American ones, which prefer to target Korean and Japanese firms instead. The steel industry is at the origin of most 'echoing' cases between Canada and the US, whereas the chemical industry accounts for a large proportion of 'echoing' between

16 Ideally, we should examine the petition dates, but they are not systematically available for Europe. The initiation dates are nevertheless close enough to the petition dates in most cases to give us a good idea of the simultaneity of suits by firms. The lag between petition and initiation is however bigger in Europe (generally 4 to 5 months) than in the US (less than one month in most cases).

17 Only fifteen days separated the initiation of the American and the Canadian investigations in the antidumping procedure against imports of stainless steel sheets and strips from France (table available from the author).

18 Table available from the author.

Europe and the US. This leads us to think that the possible explanations for the occurrence of 'echoing' might differ according to which countries are involved.

We conclude this part by finally noticing that 'echoing' antidumping cases result in a higher proportion of restrictive outcomes than regular cases. In our sample, 77.8% of the European cases and 83.9% of the US cases have led to the imposition of duties or some other restrictive measure.¹⁹ Messerlin and Reed [1995] report that 70% and 61% of the cases initiated in Europe and the US respectively between 1979 and 1989 have resulted in the imposition of measures. In the light of our coming explanations for the occurrence of 'echoing' we are not surprised by this result.

¹⁹ Out of 54 European cases, 42 led to restrictive measures, 11 to no measures at all, and 1 has not yet been concluded. Out of 56 U.S. cases, 47 led to restrictive measures and 9 to no measures at all.

II. Monitoring by Multinational Firms

In the following sections, we sketch out three main theories for the occurrence of ‘echoing’: monitoring of domestic antidumping law by multinational corporations, cascading, and imitation. Evidence supports all three fairly strongly. Some other explanations also seem plausible, though less probable. We can only guess at them and evidence remains to be found.

A first explanation for the occurrence of ‘echoing’ antidumping cases deals with the possibility of a MNE attempting to capture domestic antidumping laws. The MNE can use antidumping as a tool to protect its different markets. In a more strategic fashion, antidumping may also enable the MNE to artificially segment the markets in which it is established and eventually price-discriminate between them (could that be, for instance, the intention of Rhône Poulenc in the coumarin case?). Since antidumping laws must comply with GATT article VI, domestic antidumping systems present strong common features, which render the cost of switching from one system to the other affordable.

Filing a petition in a foreign country is not, however, a straightforward process. In the US, the landmark Brother case has recently raised and answered the question of whether a domestic subsidiary of a foreign firm could file under the US antidumping statutes.²⁰ The US Court of International Trade decided to rule out a decision by the ITA to deny Brother the right to file a complaint, thus granting subsidiaries of foreign multinationals the capacity to petition under the US antidumping law.²¹ Following this decision, Jerge [1994] noted: «[it is] quite likely that other foreign multinational firms operating American facilities may wish to follow Brother’s lead and file similar action».

The US antidumping records show that it did not take long for Jerge’s prediction to be fulfilled. In the case of disposable lighters originating in China and Thailand (1994), Bic Corp., the sole petitioner, was a fully-owned subsidiary of the French firm Bic S.A. Similarly, the complaints against the imports of Chinese coumarin (1994) in Europe and the US have been initiated by Rhône Poulenc and its North-American subsidiary alone. Other ‘echoing’ complaints that have involved European-owned subsidiaries as interested parties include: PET film from Korea (1990, Hoechst and ICI), refined antimony trioxide from China (1991, Anzon is owned by Cookson, a British group), silicon

20 The Court of International Trade ruling took place in the long-running antidumping dispute on typewriters which opposed Smith Corona, originally a US-owned company, and Brother Industries, a Japanese conglomerate. In 1979, Smith Corona brought antidumping charges against Brother, which was subsequently imposed an antidumping duty. In March 1991, Smith Corona alleged that Brother was circumventing the antidumping order. The ITA determined absence of circumvention. In April, Brother filed in its turn a complaint against imports from typewriters manufactured by Smith Corona in Singapore. Smith Corona challenged Brother’s right to standing. The ITA used ITC’s domestic industry six-factor test to finally deny standing for Brother.

21 Brother Industries (USA) Inc. v. United States, 801 F Supp. 751, 1992.

carbide from China (1993, Exolon-ESK Co. is 50%-owned by German-based Wacker Chemie) and bicycles from China (1995, Murray Ohio is owned by the English group Tomkins).²²

The US statutes are not the only ones to allow such foreign petitioning. In Europe too, though the legislation is quasi-silent on this issue, subsidiaries may be granted the right to petition. Parties affiliated with the respondents may not be granted that status,²³ and in other cases the Commission has discretionary power to include or not foreign petitioners in the investigation. Brother, opting for a strategy identical to the one adopted in the US, asked to be included in the "community industry" definition on the occasion of a review of antidumping measures against imports of typewriters from Japan, a right which was finally denied by the Commission:

It is the consistent practice of the Community to decide on a case-by-case basis whether certain producers in the Community may be excluded from the term 'Community industry' according to the first indent of Article 4(5) of the basic Regulation.²⁴

The practice reveals that generally, the Commission acts in a way to facilitate the petition.²⁵ US-owned European companies, such as Motorola (DRAMs from Japan and South Korea, 1987 & 1991), Dupont de Nemours Luxembourg (PET film from South Korea, 1990), and Quaker Oats Chemicals (furfuryl alcohol from China, 1994), have thus been able to secure extra protection under European antidumping statutes.

- Further monitoring in the EC

We focus here on some unique European cases. The first concerns the French group Rhône Poulenc and the complaints against coumarin exports from China (1994). The sole petitioner in the American antidumping petition was Rhône Poulenc Specialty Co., a 68% subsidiary of Rhône Poulenc, itself sole petitioner (represented by the CEFIC) in the quasi-simultaneous European investigation. What is remarkable in this instance, is that Rhône Poulenc Specialty Co. also happened to be the cooperating firm from the analogue country chosen in the normal value calculation in the European petition. Despite fierce opposition by the importers concerned,²⁶ the European Commission

22 In the last case, the European parent didn't get involved in any antidumping proceeding in Europe.

23 Article 4.1 of the regulation, see note 3.

24 Electronic typewriters originating in Japan, OJ L157/76 of 29 June 1993 [definitive review]. Recital 12.

25 For a discussion of that issue, see Vermulst and Waer [1996: 292-96].

26 One of the importers argued that the Commission did not make sufficient efforts to obtain cooperation from other, non-related, coumarin producers. It also complained about the monopoly position enjoyed in the US market by Rhône Poulenc Specialty (which was believed at the time to enjoy a nearly 90% market share there), which would allow it to dictate prices (Coumarin originating in the People's Republic of China, OJ L86/1 of 4 April 1996 [definitive]. Recitals 7 & 8).

justified its odd choice by the fact that neither the Indian nor the Japanese producers contacted agreed on cooperating. The European authorities further stated that:

the fact that Rhône Poulenc Inc. was a company related to the complainant did not affect the determination of normal value because this was based on the prices at which coumarin was sold in the United States. It was found that in spite of the existence of a single producer of coumarin in the United States the competition was particularly fierce, as the high volume of imported products showed; in particular during the investigation period, China, the major exporter of coumarin in the United States, held a substantial share of the United States market and an anti-dumping proceeding in respect of this imports was being conducted by the United States authorities.²⁷

In other words, the Commission considers, somewhat cynically, that the dumping practices of Chinese exporters in the United States participate in promoting competition there and in enforcing 'normal' prices (since they will be used for the purpose of normal value determination). 'Fair prices' were not yet re-established in the US since, for the period of investigation (April 93 - March 94), antidumping duties had not yet been imposed (the Department of Commerce less than fair value preliminary determination was rendered on the 24th of July 1994). The Commission also dismissed the respondents' allegations, according to which the antidumping measures would place Rhône Poulenc in a monopolistic situation in Europe too. Denying that the European measures would create a monopoly situation, the authorities stressed, as they generally do, that the aim of the antidumping duty is to restore "effective competition", i.e. "not to eliminate from the community market imports originating in a given third country", and therefore prices should be fixed at a level which would not prevent competition.²⁸ Here, it is necessary to stress that the European Commission is found assessing respective situations in the EC and in the US in a paradoxical way. Obviously, the Commission does not believe US measures to be always that innocuous for imports and competition, since it admits that antidumping measures actually reduce drastically the level of exports when applied in the US. This assessment is made by the European authorities when they justify the threat of diverting exports on the ground that they are hit by antidumping measures in another export market. In the barium chloride from China findings, the Commission explains that "there is little, if any, outlet for Chinese exports on the American market, where demand for Barium Chloride is traditionally high, since the United States imposed anti-dumping measures in 1984."²⁹ Obviously, in the eyes of the Commission, antidumping measures have contrary effects on either side of the Atlantic.

27 Coumarin originating in the People's Republic of China, OJ L 239/4 of 7 October 1995 [provisional], recital 15.

28 Cf. supra note 26, recital 26.

29 Barium chloride originating in the People's Republic of China or the German Democratic Republic, OJ L227/7 of 4 August 1989 [provisional]. Recitals 42-44. The Commission held a similar reasoning in the ball bearing from Japan case, predicting that the initiation of an antidumping proceeding in the States which led to preliminary dumping duties would "necessarily leave a limited outlet for Japanese exports in the United States market..." Certain ball bearings originating in Japan and Singapore, OJ L256/1 of 20 September 1990 [definitive review]. Recital 43. Emphasis added.

A rather similar case to the Coumarin one is the suit against imports of refined antimony trioxide from China. One of the petitioners in the 1991 American case, Anzon Inc., was wholly owned by the English group Cookson, itself a petitioner in the 1992 European case. In this latter instance, the authorities resorted to the use of a third market determination for the purpose of calculating the normal value. The country finally chosen was the United States, and the cooperating firm was... Anzon Inc.³⁰

In the end, one may wonder to what extent the MNE can manipulate the determination of the third market value in such a case, as suggested by the defendants. One can question also the fact that Rhône Poulenc, which suggested the United States as an analogous country, was able to predict that its subsidiary would be chosen, given that coumarin production is concentrated world-wide, and few other producers were *de facto* in a position to cooperate.³¹

Vermulst and Waer [1996: 203] confirm that in an increasing number of occurrences the only surrogate firm willing to cooperate is related to a complainant. They cite two other cases: potassium chloride from Belarus, Russia, Ukraine,³² and pocket lighters from China.³³ The case of silicon carbide from China can be added to this list.³⁴ It is compelling to note that 4 of these 5 cases are precisely ‘echoing’ cases. As we have seen in the coumarin case, the Community justifies this choice by the existence of normal competitive forces that preclude the related firm from having any influence on the normal value determination. Are we willing to believe this or must we suspect some sophisticated monitoring by the petitioners?

We have undoubtedly established that MNEs know how to take advantage of domestic antidumping laws. It seems that there is a kind of a learning and spillover effect between parent and subsidiary. This hypothesis could be supported by the building of in-house (or ex-house, as in trade associations) expertise on trade-law related issues, and this would also account for the existence of some lag between cases. However, in only four instances we see parent and subsidiary filing a petition in each country. Moreover, it is not always obvious that the parent will precede the subsidiary (antimony, coumarin, PET film). Sometimes, as in the case of Motorola, the parent did not get involved

30 It should, however, be noted that the complainants initially proposed Korea as a reference country. The Korean producers refused to cooperate. Refined antimony trioxide from China, OJ L176/1 of 9 July 1994 [definitive].

31 Vermulst and Waer [1996: 201], note that “if an analogue country is suggested by one party (usually the complaining industry) and other parties (foreign exporters, Community importers) do not raise objections, the Commission will follow that suggestion, provided it is possible.” They also add (p. 200) “Typically, the E.C. industry, in order to prepare the complaint, will have had sufficient time to explore various market economy third countries and to pick and choose one of its liking.”

32 Potassium chloride (potash) originating in Belarus, Russia, Ukraine, OJ L110/5 of 28 April 1992 [provisional].

33 The collaborating firm was a Philippines subsidiary of Swedish Match, one of the two complainants with BIC S.A. Gas-fuelled, non-refillable pocket flint lighters originating in the People’s Republic of China, OJ L101/38 of 5 April 1995 [definitive].

34 The two cooperating producers from the US, the reference country, were Exolon ESK Co., related to Elektroschmelzwerk Kempten, and Norton Co., related to a Norwegian producer. Silicon carbide originating in the People’s Republic of China, Poland, the Russian Federation and Ukraine, OJ L94/21 of 13 April 1994 [definitive review].

in any investigation.³⁵ Thus, the monitoring by MNE does not provide a complete answer to the filing of coordinated petitions.

One explanation may be that the opportunity to employ such a strategy may not be that frequent for the MNE, and might account for the low occurrence of such ‘echoing’ cases. Quite a number of conditions must be met in order to allow the foreign-owned domestic firm to petition, and these conditions must coincide in several countries. The MNE may not be in a dominant position in every country and may not be able to secure a coalition. Not every subsidiary has a right to protection, either. That is the case, for example, in the US, where the subsidiary may have to meet the criteria considered by the Court of International Trade in the Brother case. According to Jerge [1994], “American manufacturing,³⁶ sales and service personnel are still required to Brother to market the products in the United States even though the goods are designed and engineered abroad. It would seem that these facts would be the strongest indicators of whether Brother U.S.A. is a domestic business...”³⁷ Now that the US statutes allow subsidiaries to seek protection, strategies like the one adopted by Bic or Rhône Poulenc, aimed at targeting the rival in several markets, may become more frequent, thus achieving broader protection.

- Cartel effect

Collusion between firms operating in several countries and deciding to hit jointly a common foreign rival – especially when these firms do not occupy a dominant position in their respective markets - could be another hypothesis for explaining multiple overseas petitions. We can imagine that MNE firms meeting in a specific market could agree to coordinate their strategies against a common rival. Some instances of ‘echoing’ could support that hypothesis.

In the 1991 cases of PET film exports from Korea, for instance, petitioners in Europe and in the US resemble each other like twins. Whereas the subsidiary of the American firm Dupont in Luxembourg, the British ICI, the German Hoechst and the French Rhône Poulenc agreed on filing a petition under the European statutes, Dupont, Hoechst and ICI met again to petition under the US statutes 3 months later. The positive experience of forming a coalition in Europe, though unsuccessful in securing antidumping relief, has surely influenced the decision to act in the same way in the US.

35 In 1982, Motorola, which in the past had filed antidumping complaints against Japanese rivals, asked the government to conduct an informal study on 64K DRAMs imports, with a possible antidumping suit in mind. Faced with lack of support from the SIA, and in consideration of its alliance with Hitachi, it finally renounced. In 1985, the manufacturer pulled out of the DRAM market. In the US 1986 suit, Motorola backed Micron’s petition by participating with Texas Instrument in hearings (Yoffie [1987] and Irwin [1994]).

36 This includes the extent and source of capital investment.

37 In the particular case of Bic Corp., the company has been established in the States since 1958, is the leading manufacturer of lighters in North America, employs approximately 2600 people, and provides its own investment needs (from the annual report to the SEC, form 10-K, 3/30/95).

Moreover, the colluding history of chemical firms reinforces our hypotheses in this instance. Hoechst and ICI, Messerlin [1990] reports, have been cited in a European antitrust "twin" case of an antidumping action, and thus suspected by him of trying to exploit the European antidumping process.

We can also regard the antidumping process as a means to secure collusion with foreign producers. In the potassium permanganate case, Asturquimica, the sole European producer, filed a complaint in March 1986 against Chinese imports of this product. Asturquimica had been itself previously hit by a duty in a similar procedure in the US. One notes further that Asturquimica asked for the cooperation of Carus Chemicals Co. for the purpose of third market value determination in the investigation. Carus Chemicals, precisely the sole US producer and the firm that petitioned against Asturquimica a few years before, agreed upon cooperating. The respondents opposed, in vain, the choice of Carus as surrogate firm. Generally, third parties do not easily agree to cooperate in investigations, for obvious reasons of confidentiality. In our sample, European firms tried on several occasions to get help from American producers. It is very tempting to interpret these instances as attempts to secure some form of collusion. This is, therefore, not unimaginable as a possible incentive for petitioning under antidumping statutes.

III. Cascading and diverting effects

It is well known that antidumping proceedings, like others forms of contingent protection in general, generate several kinds of trade diverting and cascading effects, which may lead to further antidumping petitions. Trade diversion occurs when contingent protection leads exports or production to be redirected to another country. Cascading protection (Hoekman & Leidy [1992]) happens when protection in an industry or a country leads other industries or other countries to look for protection. Webb [1987] shows how the imposition of antidumping duties incites a producer to relocate its manufacturing activities from one third-country to another. This has been, for instance, the case with bicycles: Chinese exports came to replace Taiwanese exports hit by antidumping duties.³⁸ Another effect is the diversion of trade-flows from countries named in the investigation to non-named countries, as evidenced by Prusa [1996]. The cases of imports of ferro-silicon or disposable lighters in Europe are exemplary in this respect. A third effect is depicted by Hoekman & Leidy [1992], who show how antidumping protection in a downstream industry induces upstream suppliers of intermediate inputs to pursue contingent protection as well. The reality of this phenomenon has been examined by Feinberg & Kaplan [1993].

Here, we characterize a domino effect that occurs across antidumping users. The mechanism of transmission is simple and results also from trade diversion: exports hit by duties, or exports which may potentially be hit by duties, are redirected toward third countries, and might then become hit again there, because the consecutive increase in imports in the third country is likely to be perceived as injuring. This, of course, presupposes that the existence of sunk costs and a low and inelastic domestic demand incite the exporter to dump exports instead of stopping production for exports; that there exists a sufficient, price elastic, demand in the second country; and that the existing level of protection in that country does not prevent the diversion. The trade-diversion explanation provides a rationale for the existence of important time lags between two investigations: this may be the period necessary to conquer new markets, ‘injure’ domestic producers, and therefore provoke a reaction. As we will see, cascading ‘echoing’ is caused not so much by actual diversion, as by the fear of diversion. The diversion argument thus provides a rationale in favor of the threat of injury argument.

- The semiconductor disputes

38 Cf. David Sands: US ‘Big 3’ want tariffs, but coalition opposes idea, Washington Times, 25 February 1996, p. A13.

The semiconductors antidumping trade dispute in the US and Europe offers a superb illustration of this domino effect. Shortly after the US Department of Commerce (DOC) had issued its final determinations in the 64K DRAMs from Japan case (April 1986), and the preliminary determinations in the 256K DRAMs and EPROMs from Japan (March 1986), the European chip makers expressed concerns that semiconductor exports might be diverted from the US to Europe. The European manufacturers then decided to file a complaint against Japanese imports of EPROMs in December 1986 and against imports of DRAMs in July 1987. Trade diversion has proven a persistent concern in the European semiconductor cases, since it was also explicitly raised in the case of DRAMs from Korea (1991-93). Indeed, referring to the US preliminary determination (October 1992), the European findings of March 1993 stated that:

In conclusion, in assessing the Community interest [...] the Commission has concluded that any possible increase in the input cost for the user industry would have to be viewed against the background of the Community industry [...]. This assessment has also to be seen in the light of the anti-dumping measures taken in the USA which may lead to increased imports into the Community.³⁹

The most interesting aspect of this case, however, is that we find the very same argumentation at work in the ITC final determination (May 1993), inspired in turn by the final European determination. We have come full circle. Here is the ITC line of reasoning:

In March 1993, the Council of the European Communities determined that dumped imports of DRAMs from Korea caused material injury to the EC DRAM industry, and imposed antidumping duties of 24.7 percent, which represented the highest individual level of price undercutting of any Korean producer, on imports of DRAM from Korea. [...] The antidumping determination in the European Community indicates that a significant market for Korean DRAMs during the period of this investigation is likely to be less available in the future.⁴⁰

A look at the time frame of the US and European cases reveals that the two proceedings were closely interlinked, preliminary and final determinations occurring almost simultaneously. It is not surprising, then, that both administrations closely watched what the other was doing. The coordination of the two investigations had the somewhat unprecedented result of mutually inflicting injury and of mutually reinforcing the likeliness of positive injurious dumping determination.

- The diversion argument in Europe

39 DRAM from South Korea, OJ L66/1 of 18 March 1993 [definitive]. Recital 39. Emphasis added.

40 DRAM of One Megabit and Above from the Republic of Korea, investigation 731-TA-556 (final), USITC publication 2629, May 1993. Emphasis added.

The same concern over the potential threat of diversion has been expressed in instances other than the semiconductor cases. To our knowledge, European antidumping authorities have cited the diversion explanation in at least five other antidumping findings. In the coumarin and the magnesium from China cases, the threat of diversion is also mentioned in the assessment of the Community interest.⁴¹ In color televisions from Korea, the existence of a foreign antidumping order (the antidumping order on TVs in the US) is not explicitly referred to, but the possibility of diverting exports from the US is mentioned there as a threat of injury.⁴² In the paintbrush from China case, the Council Regulation has gone further in considering that diverting exports actually occurred and injured European producers. The European understanding of the situation was the following:

The growth of Chinese exports to the Community was accentuated by the fact that they are liable to an anti-dumping duty of 125% in the United States and a duty of over 100% in Canada.⁴³

Threat of diversion effects have also been invoked in review proceedings and in the re-kindling of ‘echoing’ cases. The ‘fear of diverting exports’ argument is then employed in the campaign against the withdrawal of existing antidumping measures. As in the initiation of the 1988 proceeding against barium chloride from China: petitioners alleged that ceasing the antidumping measures (instituted consequently to the 1983 investigation) would leave the market exposed to the threat of Chinese imports, since “at the same time, the United States market continue[d] to be protected by the anti-dumping duties levied since 1984...”⁴⁴ The antidumping authorities heard them, since the petitioners’ reasoning was followed in the preliminary determination.⁴⁵ The Commission, citing the antidumping duties imposed in the US in 1988, held an identical reasoning in the 1990 (small and tapered bearings) and 1992’s reviews of the antidumping duties imposed on imports of ball bearings from Japan.⁴⁶

- and in the US

41 Coumarin originating in the People’s Republic of China, OJ L86/1 of 4 April 1996 [definitive], Recital 26. Magnesium from the People’s Republic of China, OJ L142/24 of 14 May 1998 [provisional], Recital 50.

42 Small-screen color television receivers originating in the Republic of Korea, OJ L107/56 of 27 April 1990 [definitive], recital 29.

43 Paint, distemper, varnish and similar brushes originating in the People’s Republic of China, OJ L79/24 of 22 March 1989 [definitive], recital 25.

44 Barium chloride originating in the People’s Republic of China and the German Democratic Republic, OJ C308/7 of 3 December 1988 [initiation].

45 Cf. supra note 29.

46 Cf. supra note 29, Ball bearings with a greatest external diameter exceeding 30mm originating in Japan, OJ L286/2 of 1st October 1992 [definitive review], Recital 36

In the US, the diversion argument has been employed four times in addition to the DRAM case by the ITC as a ‘reasonable indication of threat of material injury’. Cases against imports of magnesium from Russia and Ukraine, persulfates from China, disposable lighters from China and Thailand and bicycles from China.⁴⁷ See for instance the bicycle from China case:

Within the past three years, Canada, the European Union (EU) and Mexico imposed antidumping duties, ranging from 31 to 144 percent, on Chinese bicycles. These duties are significantly higher than existing US duties on Chinese bicycles, which range from 5.5 to 11 percent. As such, these three Western markets for Chinese bicycles are unlikely to absorb additional exports of Chinese bicycles. To the contrary, Chinese bicycles formerly exported to these countries may be diverted to the United States.

However, the ITC does not necessarily follow systematically this line of reasoning. Its final determination in the investigation regarding disposable lighters from China states that:

Argentina’s and the European Union’s (“EU’s”) dumping findings against disposable lighters from China do not establish that any threat of material injury is real.⁴⁸

The ITC did not consider the threat of diversion in this particular case because Chinese exports to Argentina and Europe consisted of standard, not child-resistant, lighters, and therefore could not be diverted to the US, where safety regulations require lighters to be child-resistant.⁴⁹

Whether these diverting effects (or their threat) are real or imaginary is irrelevant to our discussion; what must be kept in mind is that outstanding foreign antidumping orders provide a rationale for both the petitioner and the antidumping authorities to justify allegations of injury or threat of injury. Existence of such an outstanding antidumping order and the resulting fears of diversion it may create must thus be considered as a factor favoring ‘echoing’. One can identify several criteria favoring the occurrence of diverting effects: the heavier antidumping duties imposed relatively to the degree of protection in other markets, the bigger the market protected by antidumping is, the larger the sunk costs for the exporter, the larger the ratio of exports to the total sales of the manufacturer. Such an effect seems, indeed, to be more likely to occur between the US and Europe, two big markets of comparable size, income levels and degree of protection.

47 Bicycles from the People’s Republic of China, Investigation No. 731-TA-731 (preliminary), ITC, May 1995, pub. 2893. Magnesium from China, Russia and Ukraine, Investigation No. 731-TA-696-698 (final), ITC pub. 2885, May 1995. Persulfates from the People’s Republic of China, Investigation No. 731-TA-749 (preliminary), ITC pub. 2989, August 1995. Disposable Lighters from the People’s Republic of China, Investigation No. 731-TA-700 (final), ITC pub. 2896, June 1995. Disposable Lighters from Thailand, Investigation 731-TA-701 (final), ITC pub. 2968, April 1995.

48 cf. supra note 39.

IV. Imitation and positive externalities

The analysis of the successive European petitions in the semiconductor cases would be incomplete if analyzed only in terms of cascading antidumping. There is also, as Flamm [1996: 189] notes in his account of the semiconductor trade dispute, an important part played by imitation. He writes:

By May 1986, European chip producers, in envy of the extraordinary political success of the American SIA,⁵⁰ had followed its example by forming the European Electronic Component Manufacturers Association (EECA) in order to bring dumping cases against Japanese chip imports.

and on p. 176:

the European chip makers set up a working party to bring dumping charges against Japanese memory chip exports. (...) As the US and Japanese negotiations approached an end-of-June deadline to suspend the pending dumping suits, European chip producers rushed to inform the European Commission that they intended to file an antidumping complaint...⁵¹

Would-be imitators are not only European, as is confirmed by the Magnesium from Russia and Ukraine case. Following the submission on 15 January 1994 of a petition in Europe, an executive from Magcorp, the would-be petitioner in the US, immediately called upon the market leader, Dow, to file a similar petition.⁵²

As a way to save costs on information gathering and on computing decisions, imitation may be desirable in imperfect and uncertain information environments. It may be more profitable to reach an inefficient outcome with low-cost imitation than trying to get the Pareto-efficient one at great cost. Because accessing information has a cost, rationality is bounded. These cost considerations provide a rationale for imitators of firms taking trade protection action to stick to the same protection device. Again, this is less costly.

The imitator, alleges Pingle [1995], “makes choices after having observed the action and (perhaps) the outcomes of one or more other decision makers”. In our instance, we can therefore have two types of imitators: those who will decide to file an antidumping suit after having observed

49 This statement implies that the products under consideration in the US and the European antidumping investigations are different. However, this differentiation is the mere result of regulation and not of market forces, since child-resistant disposable lighters perform the same function as non-child resistant lighters, since they are produced by the same firms (see for instance the ITC findings), and since the petition has been initiated by BIC in both cases, we still consider these cases as ‘echoing’.

50 Semiconductor Industry Association

51 Flamm draws on two Financial Times articles, of May 1, 1986, p. 6 & July 1, 1986, p. 14.

52 EU launches Mg case as US producers get antsy, Platt's Metals Week, 65(4), 24th January, 1994, pages 2-3. Dow Chemical joined the suit in the end of June 1994.

their 'colleagues' doing so in another country, and those who will wait to see the results (preliminary or final) of the proceeding. This difference can also account for the different lags between an investigation and its 'echo'. Experiments conducted by Pingle regarding the decision to imitate provide us with further clues about the environment favorable to the occurrence of such behavior. Pingle shows that decision-makers tend to imitate in rather unfamiliar situations, and when a decision is to be made for the first time. The inclination to imitate diminishes with experience. His findings also support the view that imitation works as a complement to the rational process of comparing alternatives, and that imitator and rationalizers coexist. Though these experiments focus on individual behavior, we believe that their conclusions remain, to some extent, valid in our case.

The decision to file for antidumping is generally taken at the highest decision level of the firm, as is manifested by the MagCorp case. The study of the semiconductor case reveals the involvement of top executives in the legal issues of antidumping. Yoffie [1987] reports that John Scalise, the chairman of Intel, devoted approximately one third of his schedule to the dispute with Japanese producers. Joseph Parkison, the chairman of Micron, is also known to be personally involved in his company's antidumping disputes. Finally, industry associations such as the SIA or its counterpart among computer manufacturers, the Computer System Policy Project, are formed at the top executive level. Baumol [1993] identifies imitation and litigation as two activities particularly associated with entrepreneurship.⁵³

Imitation is facilitated by several mechanisms of transfer. One such mechanism derives from participation in an industry association at the international level, where firms exchange information and views. Another channel may be provided by international legal firms. Without putting into question the deontology of legal practitioners, the mere fact that some firms specialize internationally on trade law matters is a source of information transfer. A third way, already discussed, is MNEs.

The story would then go as follows: the domestic firm may lack experience regarding the antidumping process and may not be able (or rich enough) to evaluate the costs and payoffs associated with it. It may also lack information regarding the price exerted in the country of origin of these exports and the costs of its exporter rivals. The initiation of a proceeding brings to its attention the possibility of dumping behavior. Observing the antidumping procedure and its outcome can supply further details about its rival exporter and provide the opportunity to update its information set and reach a separating equilibrium. Notice that this account is particularly plausible in the instance of below-cost dumping. Indeed, following Hartigan [1995], one may infer that the dumping determinations convey information about the costs of the exporter. Convicted of dumping, there is a greater chance that this exporter might exhibit high costs. In the same spirit, the fact that a firm belonging to the same

industry files a petition indicates its beliefs about the positive payoffs associated with it. In that regard, there can be some (limited) informational cascades.

- Positive externalities

Another mechanism explaining imitation lies in the existence of positive payoff externalities (Sinclair [1990], Bikhchandani, Hirshleifer and Welch [1992]) which allow for further saving on costs. The existence of such externalities can be fairly well documented in the case of ‘echoing’ antidumping. Though not necessarily important, they certainly motivate filing behavior. They also explain, as we will see in some aspects of the US legislation implementation, why an antidumping complaint will usually spill over into another antidumping complaint, rather than into a different form of protection which would annul some of these positive externalities.

A first source of positive payoff externality is the existence of an ongoing investigation or antidumping order which may favorably influence ongoing antidumping processes and outcomes in other countries. In the case of the US this is very clear, with the stretched interpretation of Article 10.6 of the Uruguay Round Antidumping Agreement embedded in sections 733c and 735(a)(2) of the Tariff Act of 1930, as amended (19 U.S.C. §§ 1673b(e) and 1673d(a)(3)). This provision, first provided by the Act of 1979, considers the possible existence of outstanding foreign antidumping orders as proof of the existence of a history of dumping, one of the two criteria needed in the determination of critical circumstances.⁵⁴ A definitive (resp. preliminary) affirmative determination (by the DOC) of the existence of critical circumstances enables the imposition of retroactive duties (resp. retroactive suspension of liquidation), thus further harming the exporter. Petitioners must allege the existence of such critical circumstances, in order to be granted extra relief. The existence of an ongoing antidumping investigation in a third country constitutes, therefore, a certain influence on the timing of the decision to file a petition.

In our sample, seven cases (bicycles from China, disposable lighters from China, silicon carbide from China, paint brushes from China, photo albums from Korea, ball bearings from Japan, tapered roller bearing from Romania) exhibit affirmative determinations of critical circumstances based on this provision. In the case of the silicon metal from China investigation, though an existing

⁵³ It should be noted that Baumol considers only imitation in technological transfers. Imitation considered in our context does not differ much from Baumol's focus.

⁵⁴ The existence of an ongoing antidumping petition in another country does not constitute a proof of the existence of an history of dumping. See for instance Magnesium from China, Russia and Ukraine, investigation 731-TA-696-698 (final), USITC pub. 2885, May 1995.

order in Europe was mentioned, the critical circumstance determination was based on other factors. For instance, in the silicon carbide case, the DOC stated:⁵⁵

Petitioner established that there is a history of dumping of silicon carbide by the PRC by providing documentation concerning both a 1986 finding of dumping and a 1993 review of antidumping measures in the European Community.... Inasmuch as we have determined that there is a history of dumping of the subject merchandise, the Department does not need to determine whether the importers of this merchandise knew, or should have known, that the merchandise was being sold at less than fair value.

Though the existence of a foreign antidumping order on the same product leads most often, when alleged, to affirmative determination of existence of critical circumstances, enabling imitative antidumping filers to secure some extra rent, this is not always the case. In the disposable lighters from China and Thailand, as well as in the photo albums from Korea and Hong Kong proceedings, the existing EC order on imports of these products led to an affirmative determination of critical circumstances for China and Korea only, but not for Thailand and Hong Kong, because imports from these latter countries were not considered to be substantial. Similarly, in the case of DRAMs imports from Korea and urea from USSR where the petitioner alleged critical circumstances on the aforementioned basis, they were finally not awarded.

In Europe, in accordance with Article 14(5) of the Regulation, retroactive antidumping duties can be imposed, provided that, *inter alia*, there is a history of dumping over an extended period. Vermulst and Waer [1996: 99-100] notice that no retroactive duties have ever been imposed in Europe, despite numerous requests. Antidumping decision being voted according to a simple majority rule, the reluctance of some Community States members would be the reason. The authors add that the loosening of requirements with the introduction of the Registration Procedure should favor such petitions.

Passed or ongoing foreign antidumping proceedings may well exert some positive influence, even in the absence of a critical circumstances determination. As we have already seen the mere potential mention of these foreign proceedings in official findings in a manner conducive to an affirmative injury, threat of injury, or public interest finding, is a source of positive externality.⁵⁶

We finally mention two other possible positive externalities: the first one is the fact that it may be marginally more efficient to harm an exporter already targeted, while the second rests in the

⁵⁵Preliminary Affirmative Determination of Critical Circumstances: Silicon Carbide From the People's Republic of China [59 FR 16785, April 8, 1994].

⁵⁶ This is clearly the case in the Canadian International Trade Tribunal's (CITT) findings of injury in the inquiry about bicycles and frames from Taiwan and China. The CITT stated: "[f]inally, the Tribunal notes that remedial trade action was recently taken in the European Community against Chinese bicycles. This offers a further indication of the market disruption that can be created by that country's growing exports. The Tribunal, therefore, concludes that the dumping of the subject goods is likely to cause material injury to the domestic production of like goods". Bicycles and frames originating or exported from Taiwan and the People's Republic of China, Inquiry NQ-92-002 (CITT).

opportunity sometimes given to the petitioner to contact and cooperate with a foreign rival for the purpose of a third-country determination. In this latter case, the firm may secure extra profits through the possibility of colluding.

In the light of what we have seen, it is not surprising to find China heavily targeted by ‘echoing’ antidumping. The lack of information about Chinese exporters is a plausible explanation for the occurrence of imitative behavior regarding them. Because firms do not know the costs of their Chinese rivals, when they observe a petition abroad they become aware of their rivals’ vulnerability. They also know that if they file an antidumping complaint, they will probably have to resort to third-market value determination, and possibly, in the case of US petitioners, prove the existence of critical circumstances.

Conclusions

We have seen that antidumping cases can ‘echo’ surprisingly often in the form of new antidumping complaints in other countries. This could be just one symptom of the search for new forms of protection in developed countries, by industries which are either no longer competitive or who have been surviving by means of heavy trade barriers to international competition. Industries such as steel, textile or consumer electronics in Europe and the US have traditionally shown a persistent pattern of heavy protection from competition originating in newly industrialized countries. Similar factor endowments in developed countries, resulting in identical non-competitive industries – typically medium technology intensive industries – would thus explain why antidumping targets the same kinds of products and the same exporting countries: precisely the ones who have a comparative advantage in producing this product. Echoing may also be rooted in exogenous shocks in demands and prices. Demand and price uncertainty are, indeed, popular explanations for the occurrence of dumping behaviors.⁵⁷ An unexpectedly low world price, foreign or domestic demand will lead the discriminating exporter to dump its goods simultaneously in several countries.⁵⁸

57 See for instance Davies & MacGuiness [1982] for an uncertainty in the world price of the exported good, Either [1982] for an uncertainty in the world demand and Bernhardt [1984] and Staiger & Wolak [1992] for shocks in the local demand of the exported good.

58 When dumped exports are motivated by the necessity of getting rid of excess capacities in periods of slack internal demand, as in Staiger & Wolak [1992], one may assume that the exporting country diversifies its exports to several countries, smoothing the effect of dumping, so as not to trigger antidumping petitions there. Assuming that the exporter does so in two countries, one being less competitive, and thus preferred as a dumping ground, since prices there are relatively higher, two scenarios may occur: if the demand is revealed to be particularly low, the exporter will be prevented from selling in both markets by simultaneous antidumping suits (Staiger & Wolak follow the assumption that antidumping measures bar the exports from the market). If the revealed demand is somewhat higher, but still slack, the exporter may still be able to export in the least competitive country without triggering antidumping law, while being barred from the first country (if we admit that the level at which antidumping is triggered is the same in both countries). From there one can imagine that in a repetition of this game the exporter, now unable to export to the first country, is again faced with an unexpectedly low demand and becomes vulnerable to another antidumping suit

Although these hypotheses have some validity, and deserve further examination, they do not explain why industries should look for (and obtain) precisely the same kind of contingent protection. World competition is accompanied by the emergence of world protection-seeking strategies. Moreover, there is evidence that antidumping constitutes particularly fertile ground for the adoption of identical strategies of protection, by providing additional channels for ‘echoing’.

The observation that the petitioners themselves are often found at the root of ‘echoing’ is of particular interest. This is an expression of firms’ particularly high adaptability to a changing trading environment which, with regard to administrative rigidity, also explains why ‘echoing’ flourishes more within antidumping than within any other form of protection. The capacity of the firm to run ahead of the legislator is manifested time and time again in the course of our investigations, which have revealed some new aspects of the sophisticated exploitation of the antidumping system.

Most of all, mechanisms, signals and externalities embedded in the law give strong incentives to firms to adopt ‘echoing’ strategies. We have found that the alleged threat of diverted exports, the possibility of triggering several suits for a MNE, thus behaving as a regulatory competitor on several markets, or the temptation to imitate a (possibly) successful colleague provide explanations for ‘echoing’ cases. Often these incentives reinforce each other, as we can see, for instance, in the semiconductor suits. In this context, the MNEs appear to be in a position to generate and take advantage of ‘echoing’ better than anybody else. They may file petitions in several countries where they are in a dominant position, collaborate with domestic producers to initiate new cases, and cooperate with them for the purpose of a third-market valuation. Such cases are the investigations regarding coumarin, disposable lighters, furfuryl alcohol, EPROMs and antimony trioxide. The fact that in several cases more than a single explanation for foreign petitions could be advanced, gives us a strong indication that ‘echoing’ does not occur by mere chance.

If ‘echoing’ may be, as we saw, the consequence of identical strategies adopted by domestic producers in separate markets, we find in addition that it can also lead the respondent to adopt identical strategies in order to counter the antidumping suits. One example is provided by the system of defense adopted by Brother, which attempted to obtain petitioner status both in the European and in the American suits. Another example is the case of imports of magnesium from Russia: the Russian and Ukrainian respondents tried to induce the European Commission to use a methodology similar to the one that had been used in the antidumping case in the US.⁵⁹

in the second (and last) dumping market. Had it had other dumping ground, it might still have been able to avoid antidumping duties in this country, but has now no other choice but to face them.

⁵⁹ Russian and Ukrainian producers alleged that the production costs determined for the analogue producer were not accurate on the basis of the methodology used in the US. Unwrought pure magnesium originating in Russia and Ukraine, OJ L174/3 of 12 July 1996 [definitive], Recital 18.

The reasons we have invoked as possible causes for ‘echoing’ also account for why ‘echoing’ does not occur in many cases where it would be expected. In particular, the incentive to imitate tends to disappear with experience, diverting exports may not necessarily happen, and numerous other criteria have to be met in order to initiate a case. Rare are also the situations where a MNE can control the antidumping initiation process on several big markets, and strategic considerations such as the desire not to favor a foreign rival in helping it seek antidumping protection can explain the absence of ‘echoing’. There are also some products for which ‘echoing’ may not occur simply because there is no domestic production of the good, or because they already enjoy substantial trade protection in other countries. For instance, ‘echoing’ does not occur between the US and the EC for agricultural products because European producers do not need antidumping protection, since they already have the Common Agricultural Policy. On the contrary, we see several ‘echoing’ cases dealing with agricultural goods between Canada and the US (sugar, garlic...).

Future directions of research can be envisaged. As already mentioned, ‘echoing’ is a phenomenon which is not confined to antidumping, but can also be applied to other forms of protection. Further study of other instances of ‘echoing’ protection, as well as a more comprehensive picture of ‘echoing’ antidumping globally (particularly in developing countries) could be instructive. Since ‘echoing’ seems to be a rather widespread phenomenon, econometric tests of the significance of ‘echoing’ and some of its underlying hypothesis could be conducted, employing, for instance, a probit analysis or a Granger-Sims causality test procedure. Finally, modeling the mechanisms which determine ‘echoing’ would contribute to a better understanding of this new facet of trade protection.

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TABLES

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Table 1 : Targets of ‘echoing’ in Europe and the US

<i>Product</i>	<i>Company</i>
64K & 256K DRAM from Japan	Fujitsu Ltd. Hitachi Ltd. NEC Corp. Oki Electric Industry Co. Ltd. Toshiba Corp. Mitsubishi Electric Corp.
Antimony Trioxide from China	China National Non-Ferrous Metals I/E Corp. China National Metals and Minerals I/E Corp.
Barium Chloride from China	Sinochem (China National Chemicals I/E Corp.)
Bicycles from China	Catic Bicycle Co. Ltd.
Color Television from Korea	Daewoo Electronics Co. Ltd. Goldstar Co. Ltd. Samsung Electronics Co. Ltd.
Coumarin from China	Tianjin n.1 Perfumery Factory
Disposable lighters from Thailand	Thai Merry Co. Ltd.
Disposable lighters from China	Gao Yao Hua Fa Industrial Co.
DRAM from Korea	Goldstar Electron Co. Ltd. Hyundai Electronics Industries Co. Samsung Electronics Co. Ltd.
EPROM from Japan	Fujitsu Ltd. Hitachi Ltd. Mitsubishi Electric Corp. NEC Corp. Sharp Corp. Toshiba Corp.
Ferrosilicon from Egypt	EFACO, Egyptian Ferro Alloys Co.
Ferrosilicon from USSR	Promsyrio Import
Ferrosilicon from Brazil	Companhia Brasileira Carbureto de Calcio
Ferrosilicon from Venezuela	CVG Fesilven
Magnesium from Ukraine	Concern Chlorvinil (Oriana)
Microdisks from Japan	Hitachi Maxell Ltd.
Paint brushes from China	China National Native Products and Animal By-products I/E Corp.
Persulfates from China	Guandong Chemicals I/E Corp. Sinochem Trading Hamburg
Photo albums from Hong Kong	Climax Paper Converters Ltd.
Photo albums from Korea	Young Stationary Ltd. The More Stationary Ltd. Chin Sung Industrial Co. Ltd. Eu Jin Industrial Co. Ltd. Korea Enterprise Co. Ltd. Chung Woo Industries Co. Ltd. Hankook Trading Co. Deho Industries Corp. Sam Wang Industrial Co. Ltd. Hansang Industrial Co. Ltd. KMB Industries Corp. Woomi Industrial Co. Ltd. Donam Industries Co. Ltd. Dong In Industrial Co. Ltd. Shin La Industrial Co. Ltd. Raf Korea Ind. Co. Ltd. Eunsung Industrial Co. Little Prince Gift Co. Shin Song Co. Sungshim Industrial Co. Ltd. Korea Trading Co. Ltd. Daewoo Corp. Sambang Trading Co. Ltd. Yuhan Incorporated

Table 1 : Targets of ‘echoing’ in Europe and the US

<i>Product</i>	<i>Company</i>
Potassium Permanganate from China	C&G Corp.
Potato granules from Canada	Sinochem (China National Chemicals I/E Corp.)
	Vauxhall foods
	Mc Cain
	Carnation Inc.
Salmon from Norway	Skaarfish Florofryseri a/s
Silicon metal from Brazil	Rima Eletrometalurgica SA
	Eletroila SA
	Companhia Ferroligas Minas Gerais
	Camargo Correa Metais SA
	Companhia Brasileira Carbureto de Calcio
Steel pipe fittings from Thailand	Awaji Sangyo
Tungsten from China	China National Non-Ferrous Metal I/E Corp.
	China National Metals and Minerals I/E Corp.
Typewriters from Japan	Brother Industries Ltd.
	Nakajima All Co. Ltd.
	Canon Inc.
	Silver Seiko
	Tokyo Juki Industrial Co. Ltd.
	Towa Sankiden Corp.
Urea from USSR	Soyuzpromexport
Urea from GDR	Chemie-Export-Import
Urea from Romania	ICE Chimica

Nota: only cases with seemingly identical firms targeted are shown above. Cases with missing information and non matching firms are ignored.
Source: EC official Journal, US Federal Register.

Table 2: Antidumping investigations named in an 'echoing' suit

<i>EUROPE</i>	<i>USA</i>
<u>in the context of the diversion argument:</u>	
<ul style="list-style-type: none">• DRAMs from Korea• Coumarin from China• Paint brush from China• Barium chloride from China• Ball bearings from Japan & Romania • Magnesium from China	<ul style="list-style-type: none">• DRAMs from Korea• Bicycle from China• Magnesium from Russia & Ukraine• Persulfates from China• Disposable lighters from China & Thailand
<u>in the context of the critical circumstances determination:</u>	
	<ul style="list-style-type: none">• Silicon carbide from China• Silicon metal from China• Urea from USSR & GDR• Photo albums from Korea & Hong Kong• Ball bearings from Japan• Tapered roller bearings from Romania• Disposable lighters from China & Thailand• DRAMs from Korea• Bicycles from China• Paint brush from China
<u>in the context of a third market valuation:</u>	
<ul style="list-style-type: none">• Silicon carbide from China• Disposable lighters from China• Antimony trioxide from China• Coumarin from China	
<u>other:</u>	
<ul style="list-style-type: none">• Silicon metal from China	

Table 3: 'Echoing cases' between Europe and the U.S.

USA

EUROPE

Initiation (ITA)	Product	Countries targeted	Opening (OJEC)	Product	Countries targeted
12/4/73	Tapered roller bearings	Japan	9/18/79	Ball, tapered bearings (> 30 mm)	Japan - Romania - (Poland) - (USSR)
9/19/86	Tapered roller bearings	Romania – Japan - (China) - (Hungary) - (Italy) - (Yugoslavia)	7/2/94	Tapered roller bearings	Japan
4/7/88	Antifriction bearings	Japan - Romania - Singapore - Thailand - (Sweden) - (UK) - (France) - (FRG) - (Italy)	7/14/83	Ball bearings (< 30 mm)	Japan – Singapore
3/28/90	Atlantic salmon, fresh and chilled	Norway	7/7/84	Ball bearings (< 30 mm)	Thailand
11/18/83	Barium chloride	China	6/4/88	Ball bearings (< 30 mm)	Thailand
4/25/95	Bicycles	China	2/2/90	Atlantic salmon, fresh and chilled	Norway
2/23/78	Bicycles tires and tubes	Taiwan – Korea	8/10/82	Barium chloride	China - (GDR)
6/1/82	Bicycles tires and tubes	Taiwan	12/3/88	Barium chloride	China - (GDR)
11/30/84	Cellular mobile phones	Japan	10/12/91	Bicycles	China – (Taiwan)
5/27/83	Color television receivers	Korea - (Taiwan)	4/14/77	Bicycles tires and tubes	Taiwan - Korea
1/27/94	Coumarin	China	7/15/87	Cellular mobile phones	Japan – (Canada) – (Hongkong)
6/7/94	Disposable lighters whether or not refillable	China - Thailand	2/17/88	Color television receivers (small)	Korea
5/12/92	DRAM of 1MB and above	Korea	11/25/92	Color television receivers (small)	(Hongkong) - (China)
7/19/85	64K DRAM	Japan	5/20/94	Color television receivers (>6")	Korea - (Malaysia) - (China) - (Singapore) - (Thailand) - (Turkey) - (Japan) - (Hongkong)
12/17/85	256K and above DRAM	Japan	4/7/90	Coumarin	China
10/28/85	EPROM	Japan	5/20/94	Lighters (gas fuelled, non refillable pocket flint lighters)	China - Thailand - (Korea) - (Japan) - (Mexico) - (Philippines)
2/8/93	Ferrosilicon	Brazil - Egypt	3/6/91	DRAM	Korea
6/7/92	Ferrosilicon	China	7/9/87	DRAM	Japan
6/7/92	Ferrosilicon	Venezuela - (Argentina) - (Mexico)	4/14/87	EPROM 64K->4MB	Japan
6/7/92	Ferrosilicon	Russia	6/8/82	Ferrosilicon	Venezuela - (Island) - (Norway) - (Sweden) - (Yugoslavia)
6/7/92	Ferrosilicon	Kazakhstan - Ukraine	9/12/86	Ferrosilicon	Brazil
6/27/94	Furfuryl alcohol	China - Thailand - (South.Afr.)	3/24/87	Ferrosilicon	USSR
4/26/94	Magnesium, pure (unwrought)	Russia - Ukraine - China	5/8/91	Ferrosilicon 10-96%	Egypt - (Poland)
3/17/88	3.5" Microdisks	Japan	9/7/92	Ferrosilicon 20-96%	China - (SouthAfr.)
3/15/85	Paint brushes and brushes heads	China	4/19/95	Furfuryl alcohol	China - Thailand
8/6/96	Persulfate	China	1/15/94	Magnesium, unwrought	(Kazakhstan) - Russia - Ukraine
2/25/85	Photo albums	Korea - Hongkong	8/21/97	Magnesium, unwrought	China
5/24/90	PET film	Korea - (China) - (Japan)	7/5/91	Magnetic disks (3.5" microdisks)	Japan - (China) - (Taiwan) - (Hongkong) - (Korea) - (Malaysia) - (Mexico) - (USA) - (Canada) - (Indonesia) - (Macao) - (Thailand)
5/18/79	Portable electric typewriters	Japan	4/30/86	Paint brushes	China
11/25/86	Portland cement	Spain	3/2/94	Persulfate > 99%	China
3/14/83	Potassium permanganate	China - (Spain)	12/15/88	Photo albums	Korea – Hongkong – (China)
9/28/71	Potato granules, instant	Canada	1/12/88	PET film	Korea
5/22/91	Refined antimony trioxide	China	1/2/90	PET film	Korea
7/16/93	Silicon carbide 20-98%	China	3/24/84	Electronic typewriters	Japan
9/20/90	Silicon metal 96 - 99.99%	China - Brazil - (Argentina)	4/2/85	Portland cement	Spain – (GDR) – (Poland) – (Yugoslavia)
2/19/86	Stainless cooking ware	Korea - (Taiwan)	3/16/86	Potassium permanganate	China - (Czechoslovakia) - (GDR) - (USSR)
5/22/91	Steel butt-weld pipe fittings	Thailand - China	8/29/80	Potato granules	Canada
2/28/94	Steel butt-weld pipe fittings	Thailand	3/21/92	Refined antimony trioxide	China
2/20/91	Tungsten ores and concentrates	China	8/1/84	Silicon carbide	China - (Norway) - (Poland) - (USSR) - (Yugoslavia) - (Czechoslovakia)
8/12/86	Urea (solid)	Romania - USSR - GDR	2/1/89	Silicon metal	China
			11/27/90	Silicon metal < 99.99%	Brazil
			5/23/85	Stainless cooking ware	Korea
			2/3/94	Steel pipe fittings	Thailand - China - (Croatia) - (Slovak Rep.) - (Taiwan)
			1/4/89	Tungsten ores and concentrates	China - (Hongkong)
			10/11/86	Urea	USSR - GDR - (Czechoslovakia) - (Yugoslavia) - (Kuwait) - (Trinidad and Tobago) - (Lybia) - (Saud.Arab.)
			10/9/87	Included in the investigation	Romania - (Austria) - (Hungary) - (Malaysia) - (USA) - (Venezuela)
Total 56 cases			Total 54 cases		

Source: EC Official Journal, US Federal Register - Own compilations

Note: In parantheses are countries subject to investigation in only one of the two countries. The initiation date regards only countries subject to double investigation

Table 4: Initiation of New Antidumping Investigations in Canada, Europe and the U.S.

Antidumping investigations initiated in Europe

	1980	1981	1982	1983	1984	1985	1986	1987 ^a	1988 ^b	1989 ^c	1990 ^d	1991	1992	1993	1994	1995	1996	1997	Total
<i>Investigations initiated</i>	25	47	55	36	48	36	24	39	41	27	43	20	38	21	43	32	24	36	635
- China	1	2	4	2	2	1	2	0	7	5	4	4	7	4	5	5	6	4	65
- Japan	1	1	3	4	4	1	1	7	4	2	3	5	0	1	2	0	0	1	40
- f-Yugoslavia	0	2	2	3	4	5	4	3	3	2	3	1	0	0	2	0	1	0	35
- USSR/f-republics	1	3	3	3	4	1	1	2	1	1	2	1	3	1	4	1	1	2	35
- South Korea	0	1	0	0	0	1	1	5	7	1	5	1	3	2	0	3	1	2	33
- Turkey	0	0	1	1	0	2	1	3	0	2	7	1	2	1	2	0	1	1	25
- Brazil	2	0	4	1	1	2	2	1	0	0	4	1	0	1	0	0	0	2	21
- Thailand	0	0	0	0	1	1	0	0	2	0	2	0	1	2	5	4	0	2	20
- Indonesia	0	0	0	0	0	0	0	0	1	1	1	0	0	0	4	4	1	1	13

Source: EC Official Journal, own compilations. Former republics of Yugoslavia and USSR are counted as one per case.

Antidumping investigations initiated in the United States

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Total
<i>Investigations initiated</i>	16	14	35	46	38	69	83	16	42	24	35	66	84	37	51	14	21	691
- China	1	0	3	4	0	6	1	0	1	1	7	6	5	7	11	2	7	59
- Japan	1	3	4	6	6	5	9	7	8	4	6	3	7	4	3	3	3	82
- Taiwan	0	2	2	3	1	7	4	2	4	3	3	4	4	2	1	1	2	44
- South Korea	0	1	2	6	3	1	4	0	1	4	1	3	9	3	2	1	1	42
- Brazil	0	0	2	3	4	5	6	0	2	1	2	2	6	5	2	0	0	40

source: International Trade Administration website (<http://www.doc.ita.gov>), file CASELIST

Antidumping investigations initiated in Canada

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	Total
<i>Investigations initiated</i>	27	24	76	30	23	36	17	32	14	13	15	11	34	24	2	11	5	394

source: WTO committee on antidumping practices

Notes:

a) Differs from Messerlin (1995) who includes 3 anti-circumvention cases. Two Spanish cases are ignored.

b) Differs from Messerlin (1995) who includes 3 anti-circumvention cases. The two cases of indirect exports of glutamic acid through Swiss and Austria are taken into account.

- c) Differs from Messerlin (1995) who includes 1 anti-circumvention case. Two cases (tungsten and silicon metal) involving Hongkong are included.
- d) One USSR case (potassium chloride) has been later split into three cases (Russia, Ukraine and Belarus); this case is counted as one.

Table 5: Countries most frequently hit by 'echoing' antidumping cases

	<i>Canada/U.S.</i>		<i>Europe/U.S.</i>	
	<i>Canada</i>	<i>U.S.</i>	<i>E.C.</i>	<i>U.S.</i>
China	4	4	16	15
Japan	7	7	8	9
Korea	8	8	8	6
Brazil	5	6	2	2
European Community:	7	8	-	-
- Germany/FRG	5	4	-	-
- France	3	2	-	-
- Italy	2	2	-	-
- Belgium	1	1	-	-
- Spain	1	1	1	1
Thailand	1	1	5	5
USSR/Russia	2	2	3	3
Taiwan	2	4	1	2
Romania	1	1	2	3
Hong Kong	2	1	1	1
Venezuela	1	2	1	1
India	2	3		
Argentina	2	2		
Ukraine			1	2
East Germany	1	1	1	1
Australia	1	1		
Canada			1	1
Egypt			1	1
Norway			1	1
Poland	1	1		
Sweden	1	1		
Singapore			1	1
South Africa	1	1		
Turkey	1	1		
Yugoslavia	1	1		
Kazakhstan				1
Total	56	58	54	56

Source : EC Official Journal, US Federal Register, Dutz [1994], own compilations.

Table 6: Sequence of initiation of 'echoing' cases USA-Europe

<i>USA Initiation ITA</i>		<i>EUROPE Opening (OJ)</i>	<i>Product</i>	<i>Countries Targeted</i>	<i>Lag (months)</i>
2.90		2.90	Atlantic salmon	Norway	0.7
8.86	⇒	10.86	Urea	USSR - GDR	2
9.90	⇒	11.90	Silicon metal	Brazil	2
6.92	⇒	9.92	Ferrosilicon	China	3
4.94		1.94	Unwrought magnesium	Russia - Ukraine	3
1.94	⇒	5.94	Coumarin	China	4
11.85		4.85	Portland cement	Spain	8
5.85	⇒	2.86	Stainless cooking ware	Korea	9
6.94	⇒	4.95	Furfuryl alcohol	China - Thailand	10
5.91	⇒	3.92	Antimony trioxide	China	10
3.85	⇒	4.86	Paint brushes	China	13
8.86	⇒	9.87	Urea	Romania	13
5.92		3.91	DRAMs	Korea	14
11.83		8.82	Barium chloride	China	15
10.85	⇒	4.87	EPROMs	Japan	18
9.90		2.89	Silicon metal	China	19
2.93		5.91	Ferrosilicon	Egypt	21
2.91		1.89	Tungsten ores and concentrates	China	23
7.85	⇒	7.87	DRAM	Japan	24
5.90		1.88	PET film	Korea	28
8.96		3.94	Persulfate	China	29
11.84	⇒	7.87	Mobile phones	Japan	32
5.91	⇒	2.94	Pipe fittings	Thailand – China	33
3.83	⇒	3.86	Potassium permanganate	China	36
4.94	⇒	8.97	Unwrought magnesium	China	40
3.88	⇒	7.91	3.5" microdisks	Japan	40
4.95		10.91	Bicycles	China	42
4.88		7.84	Ball bearings	Thailand	45
2.85	⇒	12.88	Photo albums	Korea - Hongkong	46
5.79	⇒	3.84	Electronic typewriters	Japan	48
6.94		4.90	Lighters	China - Thailand	50
5.83	⇒	2.88	Color television receivers	Korea	57
4.88		7.83	Ball bearings	Singapore	57
6.92		3.87	Ferrosilicon	USSR	63
6.92		9.86	Ferrosilicon	Brazil	69
12.73	⇒	9.79	Tapered roller bearings	Japan	69
9.86		9.79	Ball bearings	Romania	84
4.88		9.79	Ball bearings	Japan	103
9.71	⇒	8.80	Potato granules	Canada	107
7.93		8.84	Silicon carbide	China	107
6.92		6.82	Ferrosilicon	Venezuela	120

Source: EC Official Journal, US Federal Register, own compilations