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ABSTRACT

The First Review of EU Antidumping Reviews*

The literature on antidumping (AD) has documented various aspects of this protectionist tool. However, a peculiar feature of AD has not received much attention: these measures are endogenous to the behavior of the exporting firms, which can adjust the dumping margin by changing their export price and ask the authority to amend the AD measures accordingly. The objective of this paper is to fill part of this gap in the literature by analyzing the AD reviews conducted by the European Union for affirmative petitions initiated in 1980-2009. To this end, a novel dataset of all such reviews has been assembled. Summary statistics reveal that more than a third of all petitions concluded with the imposition of AD measures are reviewed at least once before their expiration and most reviews lead to lower AD duties (still, almost 20% of the firms investigated through interim reviews see their duties increase). There are significant differences in the outcome of the reviews depending on the party requesting them (i.e., reviews lodged by European producers are less likely to lead to lower duties). These conclusions are confirmed by the econometric analysis, which also shows that Chinese firms see their duties reduced significantly less than those of firms from other countries.

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1. Introduction

It is well documented that antidumping (AD) is a modern form of trade protection now widely used by a large set of developed and developing countries (see, among others, Bown, 2011; Prusa, 2005; and Zanardi, 2004). Although it is supposed to eliminate the injurious effects caused to a domestic industry by imports priced below fair value (i.e., price below cost or export price below home price), the AD legal framework prescribed by the World Trade Organization (WTO) allows the application of these measures in a wide range of situations. As remarked by Finger already in the early 1990s, “Dumping is whatever you can get the government to act against under the antidumping law” (Finger, 1993; page viii).

The long literature on AD has documented various aspects of this protectionist tool, which works in quite a different way from standard import tariffs. For example, it is quintessential discriminatory in nature since it is only applied to some of the countries exporting the targeted product and each exporter can receive a firm-specific AD measure if it cooperates during the investigation (some exporters may also be found not guilty of dumping and will be exonerated from any measure). Furthermore, the initiative to request the imposition of AD measures rests with the domestic industry, which can give rise to various strategic effects (e.g., faking its own injury to increase the probability of an affirmative decision by the authority).¹ The survey by Blonigen and Prusa (2003) provides a detailed overview of the AD system and of the various effects that it can give rise to; let us only mention that AD measures are welfare reducing for the importing country with only the domestic industry gaining by such restrictions (see Gallaway et al., 1999).

However, there is a very peculiar feature of AD that has not received a lot of attention: AD measures are endogenous to the behavior of the exporting firms since they can adjust the dumping margin by changing their export price and ask the authority to amend the AD measures accordingly.² In other words, the AD duties imposed as a result of an affirmative final decision may be changed (in either direction) over time and they may also be eliminated before their stated expiration. And because of the discriminatory nature of AD, changes may occur for only a subset of the firms targeted in a given country.

Given the right of an interested party to request a review of AD measures,³ one may wonder whether AD duties are ever paid at all since it would be, in principle, profitable for

¹ Investigating authorities can initiate investigations on their own initiative but this rarely happens (e.g., only 2 investigations were initiated by the European Commission *ex-officio* in over twenty years; see footnote 10).

² Obviously, exporting firms can affect dumping margins also by altering their home price. This seems a less likely scenario since firms usually have larger market shares and more market power in their home country, reducing the incentive to change home prices.

³ Article 11.2 of the WTO AD Agreement establishes this right.

the dumping firms to raise their export prices to pocket what would otherwise constitute tariff revenue for the importing country. As a matter of fact, measures can take the form of price undertakings (also called ‘suspension agreements’) whereby exporters commit to raise their prices and formal duties are not introduced. Although some users, like the European Union, are more prone to the use of this remedy, undertakings still account for a small share of the AD measures imposed every year in the world.⁴

This brings us back to the questions of whether AD duties are actually paid and how often they are changed over their lifetime. Answers to these questions are extremely important to be able to characterize the efficacy of AD measures, to understand how firms react to them, and thus to quantify policy outcomes. Moreover, the possibility of such reviews may give rise to further strategic effects that have not yet been analyzed in the literature. For example, it seems that Chinese firms have regularly (and legally) paid US firms in order to be excluded from AD reviews in the United States for fear to have their duties increased (Wall Street Journal, 2011). At the same time, recent empirical evidence on the pricing behavior of targeted firms does not reach a consensus: Rovegno (2012) shows that South Korean firms subject to AD increase their export unit values while Lu et al. (2012) find no evidence of price adjustments by Chinese firms subject to US AD measures.

Thus, it is relevant to be able to verify to which extent AD duties are changed over time for individual exporters. Unfortunately, few papers have looked specifically at this issue, and only focusing on the United States. DeVault (1996) provides an overview of AD reviews conducted in the US during the period 1980-1994: about 55% of the duties were reviewed, leading to their decrease (on average from 29.5% to 15.9%). Interestingly, the average initial level of the duties for firms that were reviewed is quite lower than for those that were not reviewed (i.e., 29.5% versus 47.4%). DeVault (1996) also conducts an econometric analysis of the determinants of the party requesting the reviews (i.e., foreign or US firms) and of changes in the duties. On the first aspect, domestic and foreign firms are more likely to ask for a review the longer a duty has been in place and the greater the degree of industry competition is. Moreover, the probability of foreign firms asking a review is higher when the original AD duties were based only on the information provided by the petitioners since these cases usually lead to higher duties. As for the changes of the duties, it is not a surprise to see that requests by domestic (foreign) firms lead to increases (decreases) and that reviews based on the information provided by petitioners also lead to upward revisions of AD duties.

⁴ According to Zanardi (2004), price undertakings accounted for only 16.3% of worldwide AD measures imposed in the period 1981-2001.

Reynolds and Gourlay (2012) update the work of DeVault (1996) to the 1995-2010 period and arrive at very similar conclusions (both in terms of summary statistics and econometric results). Blonigen and Park (2004) start from the observation that about 45% of the US duties for cases filed in 1980-1995 were reduced through the review process while 6.4% were increased (and the remaining ones were unchanged). Then, they develop a dynamic pricing model and show that when AD enforcement is uncertain (as it is in reality), firms' ex-ante expectations of enforcement and its form (i.e., duties or export restraints) are the key determinants of how duties will be adjusted in the review process. And they find support for these predictions when they take the model to the data.

These papers offer some insights about the reviewing process of US duties.⁵ However, nothing is known about other countries since standard sources of AD data, like Bown (2011), do not report information about reviews. The objective of this paper is to fill part of this gap by providing summary statistics and econometric analysis for all the AD reviews conducted by the European Union (EU) by 2011 for the AD investigations initiated in 1980-2009. To this end, a novel dataset of all such reviews has been assembled so that the entire history of any EU AD petition concluded with the imposition of final measures can be tracked.⁶

Summary statistics reveal that more than a third of all petitions concluded with the imposition of AD measures are reviewed at least once before their expiration. In terms of firms, the figures show that about 30% of firms cooperating in the original investigations are reviewed. Most of these reviews lead to lower AD duties although almost 20% of the firms investigated through interim reviews see their duties increase. Also, there are significant differences in the outcome of the reviews depending on the identity of the party requesting them (i.e., reviews lodged by European producers are less likely to lead to lower duties). The econometric analysis confirms differences in the determinants of initiations of reviews and of their outcomes between the Commission, European producers, and foreign producers. Among the results, Chinese firms do not appear to be reviewed more or less often than others but their duties are reduced significantly less than those of firms from other countries.

The remainder of the paper is organized as follows. Section 2 presents the most important aspects of the AD system of the European Union, with an emphasis on the reviews that can take place. Section 3 describes the construction of the novel dataset on the AD reviews conducted in the EU and provides some summary statistics. The econometric

⁵ Blonigen and Haynes (2002) show that reviews may lead to more than complete pass through of AD duties and they find supporting evidence by analyzing Canadian iron and steel products subject to US AD cases in 1992.

⁶ The study "Evaluation of the EU's trade defence instruments" (2012) commissioned by the European Commission contains some summary statistics of the reviews initiated in the years 2005-2010.

analysis of the reviews is discussed in Section 4 and conclusions follow in Section 5.

2. The AD system in the European Union

Article 91 of the Treaty of Rome signed in 1957 identifies AD as one aspect to be included in the new common external trade policy of the European Economic Community (EEC). With the completion of the customs union in 1968, the EEC formally adopted an AD policy to deal with unfair trade practices.⁷ Since then, AD regulations have been modified various times; the last major changes occurred in 1996 to transpose the provision of the WTO Anti-Dumping Agreement.⁸

The European Commission is the main body responsible for AD investigations. An AD complaint can be lodged by Community producers acting on behalf of the Community industry⁹ or, in the absence of any complaint, a Member State can communicate to the Commission if certain products are being dumped. The Commission can open an investigation also on its own initiative but it rarely happens.¹⁰ The applicant has to document the presence of dumping and evidence that material injury to the Community industry has occurred as a result of dumping actions into the single market.

2.1 Procedural aspects of an AD investigation

If a complaint provides prima facie evidence that foreign companies are dumping a particular product in the EU and causing injury to the Community industry, the Commission will start an investigation within the 45 days after the complaint is lodged. A ‘Notice of Initiation’ is

⁷ AD measures can only be applied to products (not services) imported from country outside the EU with the exception of Iceland, Liechtenstein and Norway, which are excluded (for most products) because they are members of the European Economic Area and have adopted European Community legislation in most areas, making them part of the single market.

⁸ See Müller et al. (2009) and Van Bael and Bellis (2011) for legal details of all EU AD procedures.

⁹ Before the official initiation of an AD investigation a “standing assessment” must be carried out by the Commission to examine whether there is sufficient support for initiation. The assessment consists of two tests: the 25% test according to which “no investigation shall be initiated when Community producers expressly supporting the complaint account for less than 25% of total production of the like product produced by the Community industry” (Article 5(4) of the basic AD regulation) and the 50% test according to which Community producers expressing support should be more than 50% of the total production of the Community producers that express support or oppose the initiation of the investigation. For example, assume that total production in the EU is 100 units and producers supporting the petition produce 30 while the output of opposing producers is 20. In this case both tests are satisfied since the 25% test = $30/100 = 30\%$ and the 50% test = $30/(20+30) = 60\%$.

¹⁰ Only 2 such investigations occurred since 1980. In 1998, the Commission initiated an investigation (resulting in final measures) about synthetic fibre ropes imported from India one month after the termination of an investigation concerning the same product from the same country on the basis of insufficient evidence to prove the existence of injury. In 1999, the Commission initiated an investigation about television camera systems from Japan based on information available in a circumvention investigation on the same products, which was terminated due to the withdrawal of the complaint. The Commission proposed to impose definitive duties but the Council failed to reach a decision within the deadline and no measures were ever imposed.

published in the EU's Official Journal and questionnaires are sent to exporting firms, Community producers, importers and users inside the EU. Cooperation from the part of foreign firms is highly recommended since non-cooperation likely leads to higher AD duties.

The Commission can decide i) to impose provisional AD duties for a period of six months; ii) to continue the investigation without the imposition of any provisional duty; iii) to terminate the investigation. If the AD investigation reveals that duties are not necessary to be imposed in order to protect the Community industry and no objection to that matter is raised by the Advisory Committee, the investigation will be declared terminated and no duties will be imposed. In case of objections from at least one Member State, the Commission has to submit to the Council a report containing the results of the investigation and the proposal that the proceedings should be terminated. The investigation will be declared terminated if the Council acting by a qualified majority has not decided otherwise within one month from the proposal submission.¹¹

If the investigation shows that dumping occurred and is causing injury to the Community industry, after consulting the Advisory Committee, the Commission will submit a proposal to the Council to impose a definitive duty within 15 months from the start of the investigation. The Council decides on the Commission's proposal within one month after its submission: it can choose by simple majority not to impose definitive measures; in case of no formal decision within the one-month deadline, the proceedings will be terminated.

In order to impose an AD duty to counteract dumping, certain conditions must be met. The provisions of the Council Regulation are similar to those laid down in the WTO AD Agreement: the EU authorities have i) to demonstrate the existence of dumped imports; ii) to provide evidence of material injury to the Community industry and of a causal link between the two; and iii) to demonstrate that the imposition of the measures is not against the Community interest.¹² In any event, a proceeding is terminated and AD duties will not be imposed if the dumping margin or the volume of imports is considered to be "de minimis"¹³ or if the applicant withdraws its request "unless such termination would not be in the Community Interest" (Article 9.1 of the Basic Regulation).

¹¹ Voting procedures in the Council have changed during our sample period; see Nordström (2011) for details.

¹² Few countries in the world include a 'public interest clause' in their AD framework. Besides the EU, Canadian AD rules include a public interest test while China and India only have a legal provision for the inquiry. Australia, New Zealand and South Africa do not mention such test in their legal frameworks but the Minister in charge of the application of trade defence measures can apply the test on a discretionary basis in the final determination of measures.

¹³ The margin of dumping shall be considered to be "de minimis" if this margin is less than 2% (of the export price). In terms of export volumes, no investigation will be initiated against countries with a market share below 1% unless those countries together account for 3% or more of the Community consumption.

The amount of the AD duty rate is the lowest between the dumping and injury margin (lesser duty rule)¹⁴ if such lesser duty would be sufficient to remove the injury caused to the Union industry. There are three basic forms of AD duties that the EU applies: ad valorem duties (i.e., a percentage of the net CIF price) are the most common form; specific duties (i.e., a fixed value for a certain amount of goods); and variable duties expressed as minimum import prices (MIPs) and for which importers are free of charge if the export price of the good is higher than MIP.

Notice that AD duties can be firm-specific. For companies that cooperated with the Commission during the original proceeding, AD duties are calculated on a case-by-case basis which means different levels of AD duty for each known company. For non-cooperating firms (and for those cooperating firms that did not provide enough or precise information), the level of the AD duty is equal to the country-wide duty, which is usually (much) higher.¹⁵ In addition, for new exporters the level of the AD duty imposed is equal to the country-wide duty even if their dumping margin is lower. In order to avoid the payment of higher AD duties, new exporters can request a new exporter review to determine their firm-specific AD measure (if any).

Individual exporters may request price undertakings, which aim at avoiding that the prices of exports decrease below a certain level. Price undertakings may be suggested by the Commission but no exporter has the obligation to enter in such commitment. The increase in prices should be no higher than it is necessary in order to eliminate the margin of dumping and it should be less than the dumping margin if such increase would be sufficient to remove the injury caused to the Union industry (i.e., a ‘lesser duty’ rule applies to price undertakings as well as to all other AD measures).

¹⁴ Article 9.1 of the WTO AD Agreement specifies that “[i]t is desirable...that the duty be less than the margin if such lesser duty would be adequate to remove the injury to the domestic industry.” However, only some WTO Members (e.g., Argentina, Australia, Brazil, EU, India, New Zealand, and Turkey) apply this rule.

¹⁵ The country-wide duty (also called residual duty) has the purpose to avoid rewarding non-cooperation to prevent circumvention of measures. Its calculation depends on the degree of cooperation of the targeted country, determined by comparing the volume of exports reported by the cooperating parties and the information collected from EUROSTAT (i.e., statistical office of the European Union). If the information provided by the parties matches the volume of exports from EUROSTAT, the level of cooperation is considered high and the residual duty is the highest duty determined for a cooperating producer. In the opposite case, the country-wide duty is the highest margin determined for a representative type, model or transaction of a cooperating exporting producer (while each cooperating firm receives a firm-specific duty, which is a trade-weighted average of the duties determined for the various types, models or transactions pertaining to that firm).

2.2 Procedural aspects of different AD investigations

Besides the investigation where provisional and definitive duties are imposed (which will be referred to as the “original investigation”), other types of AD investigations that can be initiated after the imposition of AD measures: anti-absorption reinvestigation, circumvention investigation and anti-subsidy investigation. Each of these proceedings will be explained in detail in the following subsections and their main features are summarized in Figure 1.

2.2.1 Anti-absorption reinvestigations

AD duties are said to be absorbed if after the imposition of a final AD duty, export prices decrease or if there is an insufficient increase in the resale prices of imported goods. In these cases, the AD measures do not lead to the expected effect and need to be reinvestigated. An anti-absorption investigation can be initiated at the request of Community producers, exporters, importers, the Commission itself at its own initiative or at the request of a Member State, normally within two years from the entry into force of the AD measures.

The applicant has to provide sufficient information revealing the fact that there has been no change in the resale prices of the dumped product or, on the contrary, that export prices have decreased after the original investigation. If the conclusion of the investigation shows that AD measures imposed should have produced such changes in export prices, the Commission will proceed to a recalculation of the dumping margin. On the other hand, if the investigation shows that increased dumping has occurred, the measure in force will be amended by the Council, acting on a proposal from the Commission. According to the AD Regulation, the amount of the new AD duty will not exceed twice the amount of the AD duty imposed by the Council in the original investigation. The conclusion of an anti-absorption investigation should take no longer than 9 months. If the Council fails to take a decision within the deadline specified, the AD measures will remain unchanged.

2.2.2 Circumvention investigations

Circumvention can be defined as any activity pursued to avoid the payment of a final AD duty. Such practices may refer to slight modifications of the product so that it can be classified under a tariff code not subject to an AD duty, dishonest declaration regarding the country of origin of the product (not subject to AD duties) or assembly operations realized in non-EU countries. Furthermore, firms may export into the EU market through another producer subject to a lower duty rate or export a product in different parts and assemble it in the EU due to inexistent AD duty for product parts. In order to be qualified as a

circumvention action, there should be evidence of injury of the Union industry or that the effect of duties for the concerned product is undermined in terms of prices or quantities and evidence of dumped imports in the internal market.

A circumvention investigation can be initiated by the Commission itself at its own initiative, requested by a Member State or any other interested party providing sufficient evidence of a circumvention action. Moreover, it should be concluded within 9 months from its initiation date. If the investigation shows that a circumvention practice was pursued, the AD duty in force will be extended to imports from the company found to circumventing them and will be levied retroactively from the date on which the circumvention investigation began. Companies from the exporting country which are not engaged in circumvention practices must contact the Commission and provide sufficient evidence that they do not pursue circumvention actions and that are not related to any producer subject to the AD duties. The decision to impose circumvention measures is taken by the Council on the basis of a proposal submitted by the Commission. Measures will not be imposed if the Council decides by a simple majority to reject the Commission's proposal within a period of one month after its submission by the Commission. Notice that firms will either face the country-wide duty or no duty (in case there is no circumvention).

2.3 Procedural aspects of an AD review

A final AD measure is usually imposed for a period of 5 years. During this time, though, its level may be adjusted, or measures eliminated altogether, when interested parties request a review presenting evidence of an increase or decrease in export prices charged by the foreign firms. Moreover, (new) exporters that were not exporting during the period of the original investigation can request a review in order to determine their firm-specific AD measures. Community producers may lodge a request to the Commission to extend the AD duties after the completion of the 5 years period if they bring enough evidence that the injurious dumping is likely to continue or may recur. Finally, AD measures may be changed as a result of the review of countervailing duties imposed on the same goods exported by the same firms that are also dumping. This section will provide details regarding these different types of reviews, which are summarized in Figure 1.^{16, 17}

¹⁶ In comparison, the set of reviews conducted in the United States are similar to those in the EU. A major difference is that expiry reviews are automatically launched. Until 1985, each AD duty was also automatically reviewed each year. See Reynolds and Gourlay (2012) for more details.

¹⁷ AD reviews are also initiated for very specific reasons (e.g., analyzing the appropriateness of measures for imported goods that have been damaged before entry into the EU; appropriateness of MIP measures which do

3.3.1 AD interim reviews

Interested parties may request an interim review if they consider that an adjustment of the AD duty is necessary in order to offset dumping. Such reviews can be requested by any exporter, importer or Community producer but only if the AD measures have been applied for at least one year since the conclusion of the original investigation.¹⁸ However, the Commission itself through *ex-officio* interim review investigations or at least one Member State can make a request for such a review at any time. Reviews are always initiated, after consultation of the Advisory Committee, by the Commission either at its own initiative or at the request of interested parties.

The applicant should state the reason for the review and provide enough evidence that the maintenance of the AD duty in force is no longer necessary to counteract dumping or that the injury would be less likely to continue if the measures in force were removed. Moreover, a request for an interim review may be lodged if the applicant considers that the AD duties in force are not sufficient to correct dumping actions. The scope of an interim review can cover the examination of dumping, injury, and Community interest or it can be limited to one single aspect of the entire AD investigation process. The former type of review is a full interim review and can cover all countries in an AD case. Those reviews covering only some aspects of the original investigation are referred to as partial interim reviews and can cover all countries in an AD case, all foreign firms investigated in an AD petition or one foreign firm.

The review process begins with the publication of a 'Notice of Initiation' in the EU's Official Journal. At the same time, the Commission sends questionnaires to different companies with the purpose of gathering information. The review has to be concluded within 15 months from its initiation. The outcome of an interim review is that AD measures can be repealed, amended or maintained at the same level as before the initiation of the review. The Commission has to submit a proposal to the Council no later than one month before the expiry of the 15 months deadline. If the investigation is not concluded within the deadline, the measures remain unchanged at their initial level from the original investigations or any previous review.

not differentiate between sales made to related parties and sales made to unrelated parties or between first sales and successive sales to the EU; examining the effect on AD duties of the EU enlargement; analysing the acceptance of certain undertakings offered by foreign exporters, product scope reviews). These reviews (about 150 in the period 1980-2011) are not discussed in the following and are not part of the dataset.

¹⁸ This one-year requirement was introduced in 1982.

2.3.2 Anti-subsidy interim reviews

According to Council regulation (EC) No 597/2009, a subsidy is defined as “a financial contribution made by (or on behalf of) a government or public body which confers a benefit to the recipient”. Since subsidies distort competition, the WTO allows Member States to introduce countervailing duties (CVDs) to eliminate the effects of such unfair practices. However, article 14(1) from the Basic AD Regulation and article 24(1) for the Basic Anti-Subsidy (AS) Regulation clearly stipulate that “no product shall be subject to both anti-dumping and countervailing duties for the purpose of dealing with one and the same situation arising from dumping or from export subsidisation”. In other words, the level of AD duties to be imposed has to take into account the amount of export subsidies determined in a parallel AS investigation so that the definitive AD duty reflects the actual dumping margin remaining after the imposition of the definitive CVD offsetting the effect of the export subsidies.¹⁹

As it is the case for AD measures, CVDs are imposed for a period of 5 years with the possibility to re-examine the measures through interim review proceedings. AS interim reviews can be requested by Member States or the Commission at any time and by any exporter, EU producer or authority of an exporting country only after the CVD measures have been in force for at least one year. An AS review is normally concluded within 12 or 15 months of the initiation of the review. Since AD duties are related to CVDs, the initiation of an interim review regarding the level of CVDs also requires a reassessment of the AD duty determined in the original investigation. Just like in AD investigations, definitive CVDs are imposed by the Council on a proposal submitted by the Commission. The Council may decide to reject the proposal by a simple majority and not to impose definitive measures.

2.3.3 New exporter reviews

A new exporter review is initiated with the scope of determining individual margins of dumping for new exporters which were not included in the investigation because they had not exported the product in question during the original examination process.

To be considered as a new exporter, the firm lodging the request should not be related to any producer or exporter in the exporting country liable to the payment of the AD measures and should not have exported to the EU during the original investigation of the product under review. Furthermore, the applicant has to demonstrate that it had exported the product into the domestic market after the conclusion of the original proceeding or that it is a

¹⁹ Note that in a parallel AD and AS investigation, preference is given for the imposition of CVD to counteract the total subsidy margin and the level of the AD duty is determined at a later stage.

party to an irrevocable contract that obliges it to export a certain quantity of products to the EU. New exporter reviews have to be concluded within 9 months of the date of initiation. If this deadline is not respected, the AD measures will remain unchanged. New exporter reviews can be concluded with measures being repealed, maintained or amended (increase or decrease) and the final decision belongs to the Council acting on a proposal submitted by the Commission.

2.3.4 Expiry reviews

A definitive AD measure is due to expire 5 years after its imposition or 5 years from the date when the last full interim review was concluded.²⁰ A request for an expiry review can be lodged by the Community producers or by the Commission itself if the expiry of the AD measures is expected to lead to a continuation or recurrence of dumping and injury to the Community industry. In the final year of validity of AD measures, a ‘Notice of Impending Expiry’ is published in the EU’s Official Journal by the Commission, specifying the date when the AD measures will expire and the period left for EU producers to request a review. In any case, the request should not be made later than three months before the date of cessation of measures. If there is no request for an expiry review, the Commission publishes a ‘Notice of Expiry’ indicating that the AD measures will expire.

An expiry review is initiated if the applicant provides sufficient evidence that the removal of AD measures will lead to a continuation or recurrence of injurious dumping. Furthermore, the evidence should confirm that the removal of injury caused to the Community industry is partly or entirely due to the effect of the AD measures in force. After publishing a ‘Notice of Initiation’ in the EU’s Official Journal, the Commission begins the proceeding regarding the continuation or recurrence of dumping and injury if the AD measures are due to lapse. As in all investigation processes, the exporters, importers and the Community producers are given the opportunity to express their views regarding the issues laid down in the review request. Based on the evidence provided by the applicant of the review, the Commission concludes the expiry review within 15 months of initiation. Nonetheless, if an expiry review is initiated while an interim review is still in the process of investigation, the interim review will be concluded at the same time as the expiry review. Hence, some of the interim reviews will require more than 15 months of investigation to be concluded. The result of an expiry review can refer to the maintenance of the AD measures in

²⁰ The EU introduced a 5-year term (“sunset clause”) in 1984; measures can be extended only as a result of expiry or full interim reviews.

force for another 5 years or to the repealing of the AD duties. Only an interim review can lead to a change in the level or the form of the AD measures. As for all proceedings, the final decision belongs to the Council, which decides on the proposal submitted by the Commission.

3. The dataset

A novel dataset of AD reviews conducted by the European Union has been assembled from various sources. The dataset includes all the reviews conducted by the end of 2011 for AD investigations initiated in the period 1980-2009. Considering the average lag from the filing of a petition to the imposition of final AD measures and the statutory minimum time of one year in the initiation of reviews, it is not surprising that no petition filed in 2010 and resulting in measures has been reviewed to date. Thus, the dataset considers only investigations filed up to the end of 2009.

Since expiry reviews can only prolong the duration of AD measures without changing their level, they are excluded from the dataset.²¹ However, since anti-absorption reinvestigations and circumvention investigations can lead to a change in the level of AD measures, they are also included in the dataset. To our knowledge, this is the first comprehensive dataset that provides detailed information about specific aspects of the AD review process, including the party that requested the review, the dates of initiation and conclusion of the review, the change in the level of the (firm-specific) original AD duties and the identity of the foreign firms involved in the review.²² Moreover, it includes all foreign firms that participated in the original investigation, as well as foreign firms that decided to cooperate in subsequent proceedings.

3.1 Dataset construction

The sources employed in the construction of this novel dataset are the Official Journal of the EU (OJ), the Annual Reports of the Community's Anti-dumping, Anti-subsidy and Safeguard Activities (for the years 1980-2011), the Global Anti-dumping Database (GAD) by Bown (2011) and the AD dataset assembled by Moore and Zanardi (2009).

As a first step, a list of all AD petitions initiated by the EU in the period 1980-2009 has been generated by merging the data from Moore and Zanardi (2009) for the years 1980-

²¹ The duration of AD measures can be found in other publicly available datasets (e.g., Bown, 2011).

²² The Global Anti-dumping Database by Bown (2011) includes information on a couple of interim reviews, as such, while some other reviews are reported as original investigations.

1986 and from the GAD for the period 1987-2009. The accuracy of such list has been verified by consulting the Annual Reports on the Community's Anti-dumping, Anti-subsidy and Safeguard Activities, which also provide the OJ references for all the regulations published for each petition. The consultation of provisional and definitive regulations allows collecting information about the country and the product under investigation, as well as the date when the proceeding started and when it was concluded. From these sources, information on all foreign firms that were investigated and the type and level of the definitive AD measures imposed were added to the database.²³

With a comprehensive list of all AD petitions initiated over the period 1980-2009, the OJ references for the conclusion of AD reviews have been collected from the Annual Reports on the Community's Anti-dumping, Anti-subsidy and Safeguard Activities. A reading of the OJ publications allows identifying the foreign firms subject to a review, together with the date of initiation and conclusion of the review, the identity of the interested party requesting the review, the type and scope of the review, and the type and level of revised duty. Similar steps were also followed to collect information about anti-absorption reinvestigations, anti-circumvention investigations, and anti-subsidy reviews.

As a result of these steps, the database includes information on the history of any AD petition concluded with the imposition of final measures. It contains details about the original investigation when a complaint was initially filed and all the AD proceedings that followed the definitive imposition of duties (i.e., anti-absorption or anti-circumvention proceedings or different types of reviews). Notice that details are recorded for every foreign firm that cooperated in the original investigation or did not cooperate in the original proceeding but was investigated or cooperated in a subsequent procedure. Obviously, a petition (or a foreign firm) can be subject to multiple (types) of investigations following the initial imposition of final AD measures. All such events for each firm are recorded in the database.

Notice that some reviews were undertaken as a result of rulings of the Court of First Instance of the European Communities, which required an amendment of the existent AD duty.²⁴ These types of reviews are included in the database with the scope of assessing the outcome of subsequent reviews that were concluded after the ruling of the Court. However, these reviews are considered as a different type of interim reviews because the investigation

²³ The GAD database contains plenty of details on each petition but also some missing information, mistakes and typos, and it is not comprehensive for the year 1987. The dataset constructed by Moore and Zanardi (2009) does not report any information on firms and duty levels.

²⁴ When the Court of First Instance ruling requires an amendment of AD measures, the Commission has to open a review and amend the duty accordingly.

and the final decision regarding the re-evaluation of the AD duty are made by the Court of First Instance and not by the Commission.²⁵

3.2 A look at EU AD reviews

The first and most obvious question that can be answered with this newly constructed dataset relates to the use of AD reviews in the EU: how many have been conducted? Table 1 provides the summary statistics to answer this question and to put these figures into the context of AD usage in the EU over the sample period. It shows that 61.3% of AD petitions initiated in the EU are concluded with the imposition of measures and almost 36% of these affirmative findings are reviewed at least once by the time they expire (excluding expiry reviews). The middle three columns of Table 1 make it clear that interim reviews represent the lion's share (i.e., 77.2%) of the overall 320 reviews, with anti-subsidy reviews being particularly rare. These columns also make it obvious that, on average, those petitions that are reassessed are subject to 1.5 reviews.²⁶ Anti-absorption re-investigations and circumvention investigations are also not much used (i.e., 18 and 57 cases, respectively).

The figures in Table 1 are aggregated at the level of a petition, which may include a handful or a large number of targeted foreign firms. Thus, it is instructive to look at this dimension of AD reviews, as portrayed in Table 2. In total, 2,792 firms cooperated in the original investigations leading to AD measures and 30.1% of these firms were reviewed at least once before the expiration. As it is the case for petitions, some firms have been subject to multiple and different reviews.

In order to look at the time dimension of the total caseload of AD reviews, Figure 2 shows the number of interim and new exporter reviews concluded in each year (i.e., other types of investigations excluded because of their low occurrence). The first review was completed in 1983 and the number of concluded investigations varies dramatically from year to year with a slightly higher average from the late 1990s.

Considering that reviews are not automatically launched, it is interesting to analyze which interested party lodges the request for the reviews (new exporter reviews can only be demanded by a specific interested party – i.e., new exporter). Table 3 provides such a breakdown at the level of petitions while Table 4 looks at the issue in terms of investigated

²⁵ Notice that the dataset contains reviews concerning countries that were subject to AD measures as a result of circumvention investigations: 18 original AD petitions related to circumvention investigations concluded for 32 different countries to which AD duties were extended. For ease of data interpretation, these investigations are considered as part of the related initial AD petitions from which the definitive AD duties were extended. Out of these 18 AD petitions, only 5 were reviewed, 4 as a result of interim reviews and one in a new exporter review.

²⁶ In our sample, a firm has been reviewed at most 4 times.

firms. As a matter of fact, foreign producers account for the largest number of reviews since they are the only one that can ask for a new exporter review. If this type of reviews were excluded, the Commission would be the most active initiator of reviews, especially in terms of firms: on average, a review initiated by the Commission involves 9 firms while reviews from the European (foreign) producers include 6 (2.5) firms. But why does the Commission initiate so many reviews of its own initiative? Some anecdotal evidence suggests that the Commission begins its own reviews as a result of the information it learns from related investigations (e.g., expiry reviews) and when duties have been in place for a long time.²⁷

It is also instructive to consider the scope of interim reviews, since not all aspects of AD measures (i.e., dumping, injury, and Community interest) need to be re-examined. Table 5 presents the breakdown of the scope of interim reviews by requesting party. It is no surprise that dumping margins (by themselves or together with other aspects) represent the most important reason to lodge a review (i.e., almost 90% of reviews). Instead, it is curious to see that some interim reviews only focus on the Community interest test, which is rarely invoked in order not to impose AD measures. And seven foreign firms (out of 35) did see their AD duties reduced as a result of these reviews!

With a picture of the likely occurrence of various types of reviews, we can now characterize the impact of interim reviews on AD duties. Notice that we focus here on interim reviews in order to try to isolate the pricing behavior of targeted firms.²⁸ Thus, only firms cooperating in the original investigation are included,²⁹ although the average country-wide duties are also reported to provide a comparison. Moreover, only ad valorem duties are considered since it is not straightforward to understand the direction and magnitude of changes for specific duties or minimum import prices (which would require the calculation of a tariff equivalent).³⁰ The top rows of Table 6 report the average level of AD duties initially imposed, distinguishing between those that have been subsequently reviewed and those that have not. The average level of firm-specific AD duties imposed by the EU is 21.21%, while

²⁷ In April 2012, the European Commission initiated a process for the “Modernisation of Trade Defence Instruments”. One of the proposals put forth by the Commission is to combine second and further expiry reviews with an interim review in order to codify standard procedures.

²⁸ In particular, i) anti-absorption and circumvention investigations are rather special types of reviews (in the former case, the AD duty cannot be freely adjusted and in the latter measures can be imposed on firms from different countries); ii) new exporter reviews refer to firms that did not export during the period analyzed by the original investigation; and iii) the outcome of anti-subsidy reviews heavily depends on the changes of the subsidy margins.

²⁹ This explains why the minimum AD duty is zero (i.e., some targeted firms are not found guilty of dumping); if only positive values were considered, the average applied duty would be 22.59%. Also notice that petitions for which no foreign firm cooperated in the original investigation are not included in these calculations.

³⁰ Ad valorem duties account for more than 75% of all imposed measures (although some of these duties may then be replaced by price undertakings).

the average country-wide duty is 27.71%, which is significantly higher than the average MFN tariff of 5.1% applied by the EU in 2010 (WTO, 2011). Interestingly, the average level of the duties that are subsequently reviewed is (statistically) lower than the level of those that are not reviewed; a feature also highlighted by DeVault (1996) and Reynolds and Gourlay (2012) for the United States. When duties are reviewed, on average they are decreased by almost 41% but that still leaves duties of about 10%, which is not a negligible magnitude.³¹ The table also shows the role played by the lesser duty rule: on average imposed AD measures are 7 percentage points lower than dumping margins.³²

Table 6 also reports statistics for sectors that are known to be intensive users of AD (i.e., chemical, metal, textile) and countries that have been heavily targeted by European measures (i.e., China, India, Japan, US). By and large, the same qualitative observations apply to these subsamples with a few but important exceptions. First, it is no surprise to see that duties on Chinese firms are, on average, quite higher (i.e., 33.77% versus 21.21%). However, it is only through this novel dataset that we see that such duties are rarely reviewed (in 7.2% of the cases compared to 21.1% in the whole sample) and when they are reviewed they are actually increased, possibly because of China's non-market economy status that has been shown to bias duties upward.³³ Another difference with respect to the whole sample is that the duties on Indian and Japanese firms that are reviewed are higher than those that are not reviewed.

Having verified that interim reviews lead to a general decrease in the level of AD duties, Table 7 highlights differences in the likelihood of such outcome depending on the identity of the party requesting the reviews. First of all, almost 65% of all reviewed firms see their duty decreased (and completely eliminated in 33% of the cases). However, 19.8% of the firms have their duty increased, especially when the review is initiated by European producers (i.e., 42.6% of all reviews initiated by such party lead to an increase in AD measures). This figure is quite large, especially when compared to the US data used by Blonigen and Park (2004) where only 6.4% of the cases saw an increase in the duty. Interestingly, reviews requested by foreign producers lead to duty increases in 12.7% of the cases (a percentage very similar, 11.5%, to the share of reviews initiated by the Commission

³¹ If we consider duties that have been reviewed twice, we see that their original average is 13.24%, dropping to 8.70% after the first review and reaching 1.59% after the second review.

³² In comparison, Bown et al. (2003) reports that the average AD duty imposed in the United States over the period 1979-1998 was 46%, much higher than in the EU even considering the effect of the lesser duty rule. For the period 1995-2010, Reynolds and Gourlay (2012) report an average US AD duty of almost 43%.

³³ This observation is consistent with the anecdotal evidence discussed previously about Chinese firms paying for being excluded from AD reviews in the United States.

and concluded with higher measures). And since it would be difficult to imagine reasons whereby a foreign firm would ask to be re-assessed knowing that their dumping margin has increased, this figure points to the uncertainty surrounding the review process, which may discourage foreign firms to request reviews. In particular, this figure points to a lack of transparency and predictability of the AD review process.

Finally, Table 8 provides an overview of the changes occurring through all types of AD reviews. Almost 65% of firms part of reviews see their duties decreased or completely eliminated. However, almost 20% have their measures increased. New exporters review are even more likely to lead to lower duties, although it is very surprising that in few cases they are increased (since a new exporter would not request a review if it thought that its measure would be increased), thus emphasizing once again the uncertainty of the review process that already emerged from Table 7. The statistics for anti-absorption investigations show that AD measures are much more likely to be increased but this is due to the nature of these procedures, which are meant to counteract even larger dumping margins occurring after the introduction of final AD duties.

4. Empirical analysis

The previous section provides a general quantification of the reviewing process of AD measures. In particular, Tables 7 and 8 show that there are some substantial differences in terms of the outcome of the reviews depending on the party requesting a review. The objective of this section is to conduct an econometric analysis to uncover the determinants of the initiation of a review and the determinants of the outcome of a review. The sample includes all foreign producers that cooperated in the original investigations and were assigned an ad valorem AD duty for petitions initiated in the period 1980-2007, the end date chosen considering the average lag (i.e., slightly above 3 years) between the imposition of AD measures and the initiation of a review.³⁴ In particular, we focus on interim reviews since new exporter reviews can only be initiated by foreign exporters that were not part of the original investigation and thus we do not observe those that accepted the country-wide duty and decided not to make themselves known to the Commission. We also exclude anti-subsidy and anti-absorption investigations, since they are quite rare and present special features.

³⁴ In any case, no petition initiated after 2007 and concluded with AD measures has been reviewed by 2011.

4.1 Determinants of AD interim reviews

In order to highlight the determinants of AD reviews, we proceed in two steps. First, we estimate various specifications of a probit model where the dependent variable takes a value of 1 if a firm was subject to an interim review, and 0 otherwise. Second, we estimate a multinomial logit model where the dependent variable takes different values depending on the party requesting the interim review. In particular,

$$y = \begin{cases} 0 & \text{if no review} \\ 1 & \text{if review requested by the Commission} \\ 2 & \text{if review requested by European producers} \\ 3 & \text{if review requested by foreign producers} \end{cases}$$

In both exercises, we cluster standard errors by petition. As for the possible determinants, we consider different variables all from the novel dataset that we constructed. The level of the final AD duty could influence (possibly in opposite direction for European and foreign producers) the decision to request a review, although the summary statistics in Table 4 show that, on average, reviewed duties are not among the highest imposed by the Commission. The lesser duty rule applied in the EU can also have important effects: when the level of the imposed AD duty is lower than the dumping margin, AD measures would be changed only when facing, *ceteris paribus*, a much bigger change in the dumping margin (if the injury margin remains unchanged). Because of the costs to coordinate, we include the number of petitioners and foreign firms involved in each petition. And we control for the number of countries involved in a case since it can also capture some aspects of the competition among domestic and foreign firms for the good subject to duties.³⁵ Finally, in some specifications we include dummy variables for the sectors (i.e., chemical, machinery, metal) and countries (i.e., China, India, Japan) most often subject to AD measures.³⁶

Table 9 reports the marginal effects of 5 specifications of the probit model. The first column only includes the level of the duty, the lesser duty margin, and the number of foreign firms, petitions and countries as regressors. In the other columns, sector dummies and country dummies are added separately and jointly and in the last column also bi-annual year fixed

³⁵ Following DeVault (1996), we experimented with the inverse of the sum of the numbers of domestic and foreign firms as a proxy for the degree of competition in an industry. The significance of this ratio is identical to the regressors measuring the number of petitioners and foreign firms.

³⁶ We also experimented with adding a dummy variable equal to 1 when the Commission used “facts available” to make its determinations when the “interested party refuses access to, or otherwise does not provide, necessary information within the time-limits provided in this Regulation, or significantly impedes the investigation” (article 18 of EU antidumping Regulation). The estimated coefficient was never significant, possibly due to the noise in the measurement of this variable (since in many cases the OJ notices are not clear with regard to which firm has received such treatment). This result stands in stark contrast to the conclusions reached by DeVault (1996) and Reynolds and Gourlay (2012) who find that the use of “facts available” decreases the probability of a review being carried out.

effects are included.³⁷ Even a cursory look at the table shows that few marginal effects are significant, and the χ^2 tests at the bottom of the table do not systematically strongly reject the null hypothesis that none of the explanatory variables matter. The only significant effects indicate that the larger the number of countries targeted in a case and the more likely that firms involved in the case will be reviewed while larger lesser duty margins decrease the probability of a review. Indian firms are also more likely to be reviewed.

The results in Table 9 may not be able to capture the determinants of reviews since the interested parties that can request them behave differently. For example, European producers would not want to review very high AD duties, given the probability that they will be decreased, while the incentive for foreign producers is exactly the opposite. For this reason, Table 10 reports the marginal effects of two specifications of a multinomial logit model where the effects are allowed to be different among the set of parties requesting a review. Notice that observations for firms that have not been reviewed form the omitted category and the marginal effects measure the effect of the regressors compared to this group. Also, each specification comprises three columns, one for each of the parties that can request a review.

Considering the first specification, we see that various marginal effects are significant and the overall results are preferred to a model with only a constant (i.e., the χ^2 test is clearly rejecting the null hypothesis). With this more flexible estimator, it appears that the significance of the lesser duty margin and of the number of target countries seen in Table 9 comes from the decision of foreign producers, which are more likely to ask for a review the smaller the difference between dumping margin and AD duty and when the case involves various countries (possibly because of the possibility to present a stronger case if acting in coordination).³⁸ Instead (European and foreign) producers are less like to launch a review the higher the number of foreign firms involved in each petition. This result is consistent with a possible coordination cost on the part of foreign firms while it is odd for European producers.

The second specification of Table 10 includes sector, country, and bi-annual fixed effects. Compared to the previous set of results, the conclusions for the main regressors are broadly unchanged. As for the dummy variables, we do gain some insight compared to column (5) of Table 9. In particular, it is the Commission to be more likely to review Indian

³⁷ The inclusion of year fixed effects would create problem in the multinomial logit exercise because not all parties requested reviews in every year. Thus, in order to be consistent we include bi-annual year fixed effects also in this first exercise.

³⁸ Another possible explanation is that foreign firms find it more profitable to try to reduce their AD measures when many other firms in other countries are targeted. In order to verify this hypothesis, we constructed a variable measuring the total number of foreign firms involved in the same case in other countries. This regressor was never significant in the various specifications.

firms and firms from the metal sector. Instead, foreign producers from the chemical and machinery industries are less likely to file for a review while EU producers seem to be particularly prone to review Japanese firms.

Overall, the results point out some differences across the parties initiating a review with some unexpected results with regard to the level of the duties and the number of foreign firms. It is also worth emphasizing that, contrary to what we may have expected, the marginal effect of the Chinese dummy is never statistically significant.

4.2 Determinants of AD duty changes through interim reviews

The fact that an interim review is carried out does not necessarily mean that AD duties will be revised (upward or downward). In order to directly examine the outcome of such reviews, we now focus on the change of AD duties following the first interim review (for those firms that have been reviewed). In this case, the dependent variable is the change of an AD duty ($y = \text{original duty} - \text{reviewed duty}$; i.e., decreases are recorded as positive values) and the regressors are the same as those used in the previous section, with the addition of dummies for reviews initiated by the Commission or at the request of foreign producers (i.e., reviews requested by EU producers form the omitted category).

The results of five specifications are reported in Table 11 and clearly show that the change of the duties is higher, the higher the AD duty initially imposed. Instead, the lesser duty margin does not play any role. More interestingly, duties reviewed at the request of foreign producers or at the initiative of the Commission results in larger decreases of the duty compared to reviews requested by EU producers (i.e., the omitted category). As a matter of fact, the F tests at the bottom of the table show that the magnitudes for the Commission and foreign producers are not statistically different from each other. This conclusion may be somewhat surprising since a priori there could be reasons to believe that the Commission could align its behavior with EU producers (i.e., leading to increases of the duties). Clearly, this is not the case. The last three columns also show that Chinese firms see their duties reduced much less than firms from other countries, which is consistent with the descriptive statistics of Table 6 and the anecdotal evidence of Chinese firms paying in order to be excluded from reviews conducted in the US.

Notice that only firms that are subject to a review are part of the sample for this econometric analysis (i.e., 417 observations instead of 1,783 as in Tables 9 and 10), which assumes that there is no selection effect for which firms are reviewed. As a matter of fact, the results in Table 9 suggest that there is no strong predictor to identify which firm is reviewed.

Still, the estimates in Table 9 suggest a possible role for the lesser duty margin and the number of targeted countries. Thus, we have estimated Heckman selection models using these two regressors as instruments for the selection in the first stage.³⁹ The number of targeted countries is always statistically significant and positive while the lesser duty margin presents a negative coefficient, which is not always significant. The usual tests never reject the independence of the two equations (i.e., selection and change in AD duties), thus supporting the validity of the estimations reported in Table 11.

5. Conclusions

Although the issue of AD duty changes following imposition of such measures is relevant in order to understand the efficacy and the strategic effects of AD systems, little is known about the occurrences and extents of such changes. To our knowledge, this is the first paper to provide comprehensive information about all the reviews conducted by the European Union by the end of 2011 for all petitions initiated in the period 1980-2009 and concluded with the imposition of AD measures. The novel dataset that we constructed allows us to shed light on the entire history of AD duties in the European Union. Summary statistics and econometric analysis confirms that AD reviews are not a rare occurrence since they involve 36% of all AD measures and around 30% of firms that cooperated in the original investigation. On average, AD duties are reduced (and in many cases also eliminated) as a result of interim reviews but a sizeable 20% of foreign firms have their duties increased. And this occurs also for reviews launched by foreign producers, which suggest, to the minimum, the existence of some uncertainty in the reviewing process since foreign producers would not request reviews if they would not expect with reasonable confidence to see their measures reduced. Furthermore, we uncover systematic differences in the determinants and outcomes of reviews depending on whether the review is initiated “ex-officio” by the Commission or at the request of European and foreign producers. Among the results, we find robust evidence that when Chinese firms are reviewed, which occur much less frequently than for firms of other nationalities, their AD measures are reduced much less in comparison to other cases. On average, their duties are actually increased.

These results provide a first assessment of foreign firms’ responses to EU AD measures, which seem non trivial. Thus, some of the intended effects of AD policy may be (partly) offset by subsequent actions, which may also lead to further strategic effects (e.g.,

³⁹ Results not reported to save on space but available upon request.

collusion). The novel dataset that we assembled on the use of AD reviews in the EU can be used to delve deeper into these issues. In combination with data from the United States, the role of different institutional settings (e.g., lesser duty rule, facts available, retrospective versus prospective system to calculate duties) on foreign firms' reaction to AD could also be explored.

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Figure 1: Flow chart of AD investigations and review process following imposition of definitive measures

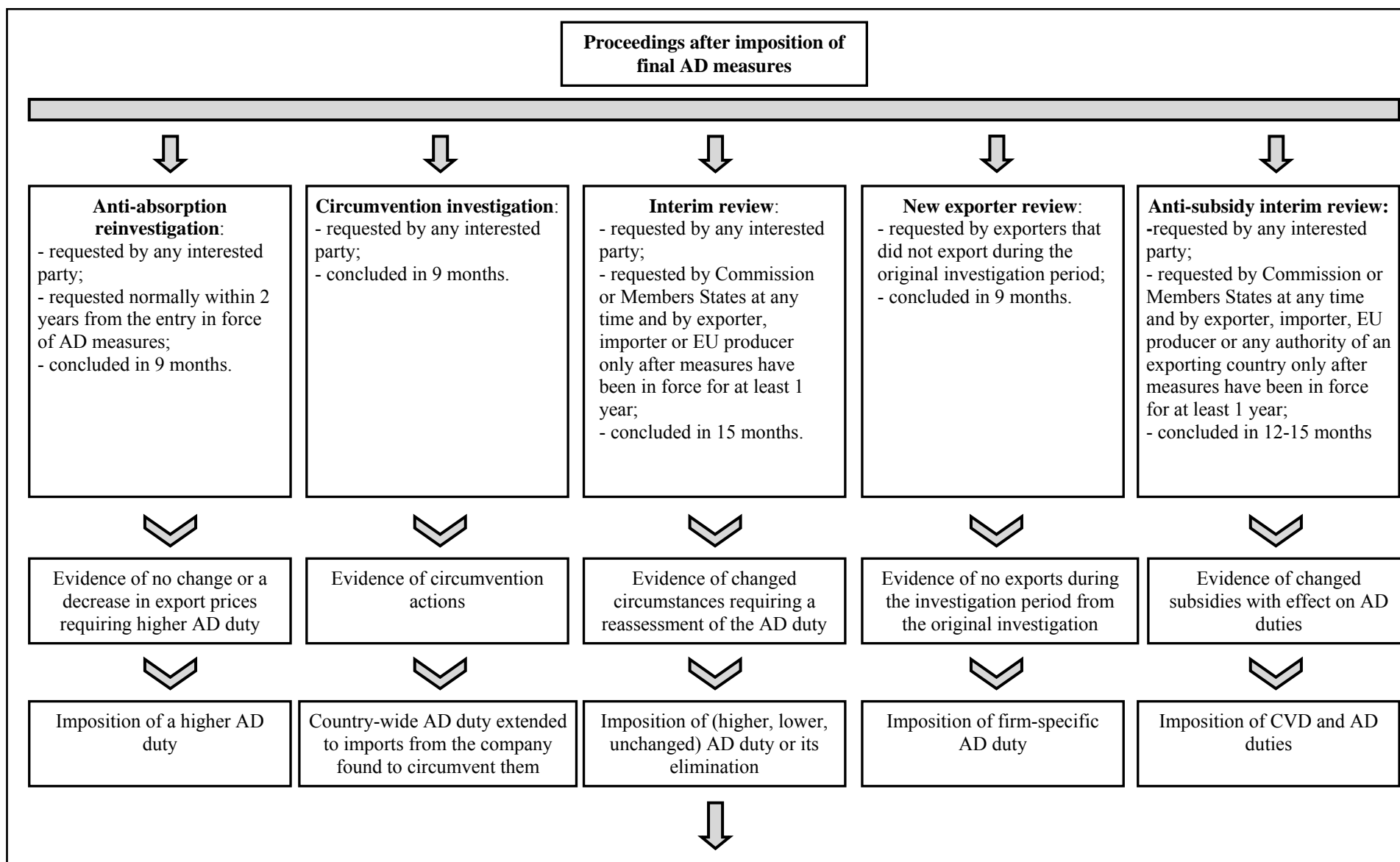


Figure 1: Flow chart of AD investigations and review process following imposition of definitive measures (cont.)

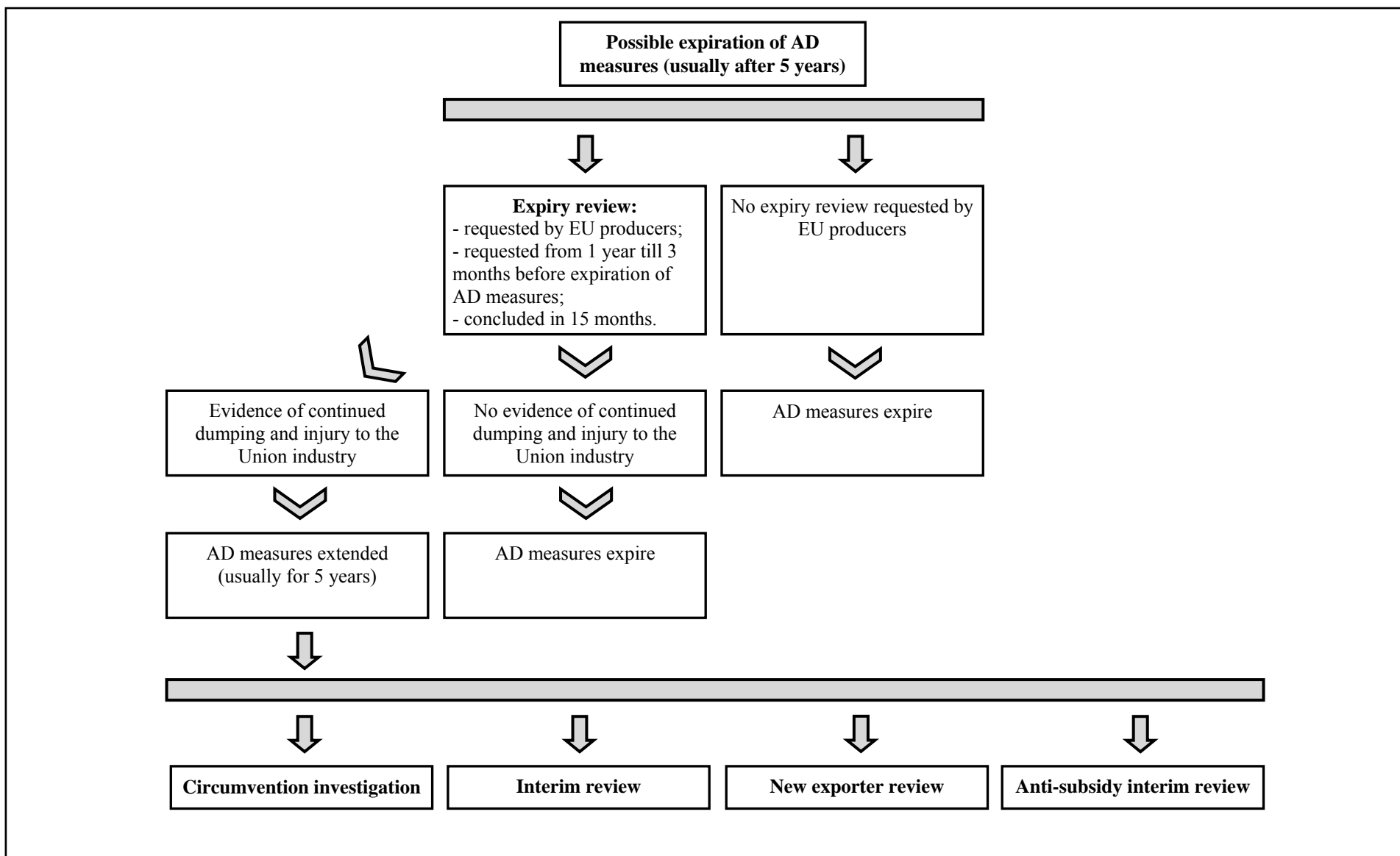


Figure 2: Number of interim and new exporter reviews concluded (by year)

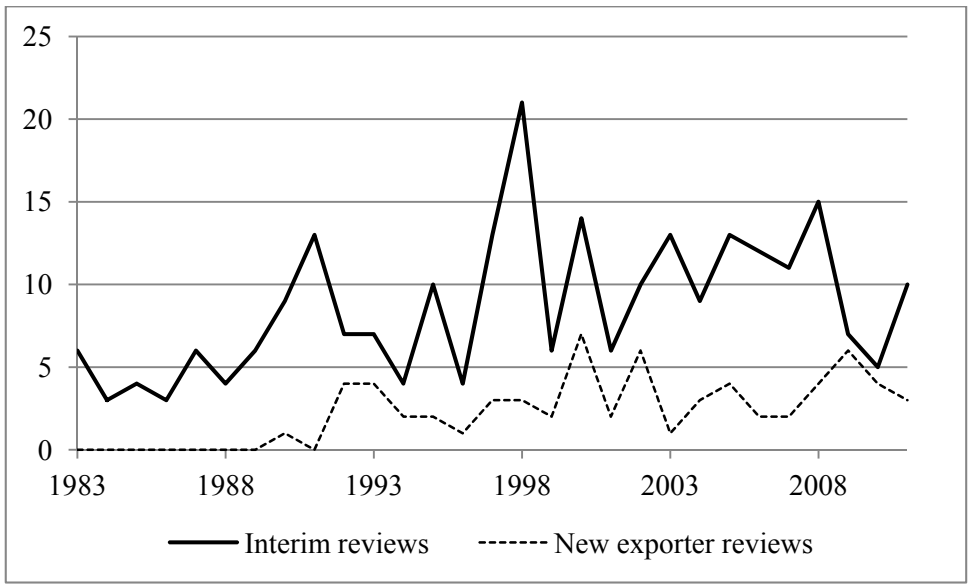


Table 1: Summary statistics of AD petitions and subsequent proceedings

| Initiated | AD petitions | | Interim reviews | New exporter reviews | Anti-subsidy interim reviews | TOTAL | Anti-absorption re-investigations | Circumvention investigations |
|-----------|-------------------------|------------------------|-----------------|----------------------|------------------------------|------------|-----------------------------------|------------------------------|
| | Concluded with measures | Reviewed at least once | | | | | | |
| 963 | 590 (61.3%) | 212 (35.9%) | 247 (77.2%) | 66 (20.6%) | 7 (2.2%) | 320 (100%) | 18 | 57 |

Notes: statistics refer to AD petitions initiated in the period 1980-2009 and subsequent investigations completed by the end of 2011; statistics on AD petitions 'Reviewed at least once' exclude anti-absorption and circumvention investigations.

Table 2: Firm-level summary statistics of AD petitions and subsequent proceedings

| Firms investigated in AD petitions | | | Interim reviews | New exporter reviews | Anti-subsidy interim reviews | TOTAL | Anti-absorption re-investigations | Circumvention investigations |
|------------------------------------|-------------------------|------------------------|----------------------------|----------------------|------------------------------|--------------|-----------------------------------|------------------------------|
| Investigated firms | Concluded with measures | Reviewed at least once | | | | | | |
| n.a. | 2,792 ^a | 840 (30.1%) | 1,617 ^b (88.0%) | 202 (11.0%) | 18 (1.0%) | 1,837 (100%) | 179 ^c | 110 ^d |

Notes: statistics refer to AD petitions initiated in the period 1980-2009 and subsequent investigations completed by the end of 2011; statistics on firms 'Reviewed at least once' exclude anti-absorption and circumvention investigations; the number of investigated firms in all filed petition is not available (n.a.) because it was not collected also due to the fact that this piece of information is not made public for petitions terminated by the Commission; a) the identity and number of foreign firms is not known for 58 petitions; b) the identity and number of foreign firms is not known for 10 petitions that were subsequently subject to interim reviews; c) the identity and number of foreign firms is not known for 1 anti-absorption investigation; d) the identity and number of foreign firms is not known for 19 circumvention investigations.

Table 3: Summary statistics on the interested parties requesting AD reviews

| | Interim reviews | New exporter reviews | Anti-subsidy interim reviews | TOTAL | Anti-absorption re-investigations | Circumvention investigations |
|---------------------|-----------------|----------------------|------------------------------|----------------|-----------------------------------|------------------------------|
| Commission | 91 | 0 | 1 | 92 (28.8%) | 0 | 6 |
| Community producers | 67 | 0 | 1 | 68 (21.3%) | 18 | 51 |
| Foreign producers | 78 | 66 | 2 | 146 (45.7%) | 0 | 0 |
| Others | 11 | 0 | 3 | 14 (4.4%) | 0 | 0 |
| TOTAL | 247 (77.2%) | 66 (20.6%) | 7 (2.2%) | 320 (100%) | 18 | 57 |

Notes: statistics refer to AD petitions initiated in the period 1980-2009 and subsequent investigations completed by the end of 2011; 'Others' includes Member States, Government of India, European users and importers.

Table 4: Firm-level summary statistics on the interested parties requesting AD reviews

| | Interim reviews | New exporter reviews | Anti-subsidy interim reviews | TOTAL | Anti-absorption re-investigations | Circumvention investigations |
|---------------------|-----------------|----------------------|------------------------------|-----------------|-----------------------------------|------------------------------|
| Commission | 862 | 0 | 1 | 863 (47.0%) | 0 | 30 |
| Community producers | 417 | 0 | 1 | 418 (22.8%) | 179 | 80 |
| Foreign producers | 160 | 202 | 2 | 364 (19.7%) | 0 | 0 |
| Others | 178 | 0 | 14 | 192 (10.5%) | 0 | 0 |
| TOTAL | 1,617 (88.0%) | 202 (11.0%) | 18 (1.0%) | 1,837 (100%) | 179 | 110 |

Notes: statistics refer to AD petitions initiated in the period 1980-2009 and subsequent investigations completed by the end of 2011; 'Others' includes Member States, Government of India, European users and importers; also see notes to Table 2 for number of petitions for which the identify and number of targeted foreign firms is unknown.

Table 5: Scope of all interim reviews, by requesting party, petition level

| | Commission | Community producers | Foreign producers | TOTAL |
|------------------------------------|------------|---------------------|-------------------|-------------|
| Dumping | 17 (18.6%) | 18 (26.9%) | 66 (84.6%) | 101 (42.7%) |
| Injury | 6 (6.6%) | 2 (3.0%) | 3 (3.9%) | 11 (4.7%) |
| Community interest | 5 (5.5%) | 0 (0.0%) | 0 (0.0%) | 5 (2.1%) |
| Dumping and injury | 23 (25.3%) | 8 (11.9%) | 6 (7.7%) | 37 (15.7%) |
| Dumping, injury and Union interest | 29 (31.9%) | 38 (56.8%) | 3 (3.8%) | 70 (29.7%) |
| Form of measures | 7 (7.7%) | 1 (1.4%) | 0 (0.0%) | 8 (3.4%) |
| Other reasons | 4 (4.4%) | 0 (0%) | 0 (0%) | 4 (1.7%) |
| TOTAL | 91 (38.6%) | 67 (28.4%) | 78 (33.0%) | 236 (100%) |

Notes: statistics refer to AD petitions initiated in the period 1980-2009 and subsequent interim reviews completed by the end of 2011; percentages calculated by column (except in the last row); "Other reasons" refer to import volumes and market share, circumvention, full subsidy and anti-dumping interim review.

Table 6: Effects of AD interim reviews on ad-valorem duties (cooperating firms)

| | Original AD duty (%) | | | | AD duty (%) after first interim review | | | |
|---------------------------|----------------------|----------------|-------|-------|--|-----|-------|-------|
| | Mean | Min | Max | Firms | Mean | Min | Max | Firms |
| All duties | 21.21 | 0 | 100 | 2,055 | | | | |
| All duties (country-wide) | 27.71 | 0 ^a | 100 | | | | | |
| Reviewed | 17.61 | 0 | 100 | 435 | 9.63 | 0 | 64.1 | 410 |
| Not reviewed | 22.19 | 0 | 97.5 | 1,620 | | | | |
| Lesser duty margin | 7.10 | 0 | 171 | 1,994 | | | | |
| Chemical duties | 20.81 | 0 | 97.5 | 223 | | | | |
| Reviewed | 13.70 | 0 | 45.9 | 46 | 4.05 | 0 | 22.7 | 28 |
| Not reviewed | 22.67 | 0 | 97.5 | 177 | | | | |
| Metal duties | 34.7 | 0 | 90.6 | 465 | | | | |
| Reviewed | 18.83 | 0 | 58.9 | 82 | 14.66 | 0 | 64.1 | 81 |
| Not reviewed | 38.10 | 0 | 90.6 | 383 | | | | |
| Textile duties | 12.27 | 0 | 60.8 | 459 | | | | |
| Reviewed | 10.95 | 0 | 49.7 | 175 | 6.80 | 0 | 49.7 | 177 |
| Not reviewed | 13.07 | 0 | 60.8 | 284 | | | | |
| Chinese duties | 33.77 | 0 | 100 | 636 | | | | |
| Reviewed | 26.32 | 4.9 | 100 | 46 | 27.08 | 0 | 49.7 | 41 |
| Not reviewed | 34.35 | 0 | 90.6 | 590 | | | | |
| Indian duties | 11.64 | 0 | 62.6 | 178 | | | | |
| Reviewed | 13.07 | 0 | 62.6 | 105 | 7.54 | 0 | 33.5 | 105 |
| Not reviewed | 9.58 | 0 | 55.6 | 73 | | | | |
| Japanese duties | 28.21 | 0 | 96.8 | 168 | | | | |
| Reviewed | 37.01 | 0 | 94.0 | 48 | 4.36 | 0 | 52.7 | 44 |
| Not reviewed | 24.70 | 0 | 96.8 | 120 | | | | |
| US duties | 10.00 | 0 | 97.5 | 122 | | | | |
| Reviewed | 5.02 | 0 | 14.47 | 47 | 1.72 | 0 | 19.05 | 43 |
| Not reviewed | 13.11 | 0 | 97.5 | 75 | | | | |

Notes: descriptive statistics based only on ad-valorem duties for firms cooperating in the original investigation; a) one petition received a country-wide duty of 0% because the full extent of the injury margin was compensated by a countervailing duty.

Table 7: Outcome of first interim review on ad-valorem duties, by requesting party

| | Commission | Community producers | Foreign producers | TOTAL |
|------------|-------------|---------------------|-------------------|-------------|
| Eliminated | 77 (32.8%) | 30 (27.8%) | 30 (42.3%) | 137 (33.1%) |
| Decreased | 95 (40.4%) | 20 (18.5%) | 11 (15.5%) | 126 (30.4%) |
| Unchanged | 36 (15.3%) | 12 (11.1%) | 21 (29.6%) | 69 (16.7%) |
| Increased | 27 (11.5%) | 46 (42.6%) | 9 (12.7) | 82 (19.8%) |
| TOTAL | 235 (56.8%) | 108 (27.1%) | 71 (17.1%) | 414 (100%) |

Notes: statistics based only on ad-valorem duties for firms cooperating in the original investigation and the outcome of their first interim review; percentages calculated by column (except in the last row).

Table 8: Outcome of first review on ad-valorem duties, by type of review

| | Interim reviews | New exporter reviews | Anti-subsidy interim reviews | Anti-absorption re-investigations | TOTAL |
|------------|-----------------|----------------------|------------------------------|-----------------------------------|-------------|
| Eliminated | 137 (33.1%) | 38 (22.8%) | 0 (0.0%) | 0 (0.0%) | 175 (23.9%) |
| Decreased | 126 (30.4%) | 106 (63.5%) | 0 (0.0%) | 1 (0.7%) | 233 (31.9%) |
| Unchanged | 69 (16.7%) | 19 (11.3%) | 1 (25.0%) | 67 (45.9%) | 156 (21.3%) |
| Increased | 82 (19.8%) | 4 (2.4%) | 3 (75.0%) | 78 (53.4%) | 167 (22.9%) |
| TOTAL | 414 (56.6%) | 167 (22.8%) | 4 (0.6%) | 146 (20%) | 731 (100%) |

Notes: statistics based only on ad-valorem duties for firms cooperating in the original investigation and the outcome of their first review; percentages calculated by column (except in the last row).

Table 9: Probit model of determinants of first interim review (marginal effects)

| | (1) | (2) | (3) | (4) | (5) |
|------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Final duty | -0.000 (0.002) | -0.000 (0.002) | 0.000 (0.001) | 0.000 (0.001) | -0.000 (0.001) |
| Lesser duty margin | -0.002* (0.001) | -0.002* (0.001) | -0.002* (0.001) | -0.002* (0.001) | -0.002* (0.001) |
| Number foreign firms | -0.001 (0.002) | -0.001 (0.002) | -0.002 (0.002) | -0.001 (0.002) | 0.000 (0.001) |
| Number petitioners | 0.011 (0.009) | 0.012 (0.009) | 0.005 (0.006) | 0.006 (0.006) | 0.005 (0.006) |
| Target countries | 0.040** (0.017) | 0.040** (0.017) | 0.035** (0.016) | 0.034** (0.016) | 0.032** (0.016) |
| Chemical | | 0.085 (0.089) | | 0.079 (0.080) | 0.013 (0.066) |
| Machinery | | 0.053 (0.087) | | 0.048 (0.081) | -0.042 (0.087) |
| Metal | | 0.026 (0.080) | | 0.026 (0.079) | 0.122 (0.075) |
| China | | | -0.024 (0.078) | -0.023 (0.078) | 0.112 (0.083) |
| India | | | 0.282* (0.144) | 0.283** (0.142) | 0.246** (0.125) |
| Japan | | | 0.055 (0.109) | 0.036 (0.109) | 0.082 (0.092) |
| Bi-annual year effects | No | No | No | No | Yes |
| Observations | 1,783 | 1,783 | 1,783 | 1,783 | 1,783 |
| Pseudo R^2 | 0.07 | 0.07 | 0.11 | 0.11 | 0.21 |
| Log likelihood | -916.70 | -913.11 | -873.38 | -870.18 | -775.70 |
| χ^2 | 15.25*** | 16.67** | 18.11** | 19.09* | 76.96*** |

Notes: Standard errors clustered by petition in parenthesis; *** denotes significance at 1% level; ** 5% level; * 10% level.

Table 10: Multinomial model of first interim review, by initiating party (marginal effects)

| | (1) | | | (2) | | |
|------------------------|-------------------|----------------------|----------------------|---------------------|--------------------|----------------------|
| | Commission | EU producers | Foreign producers | Commission | EU producers | Foreign producers |
| Final duty | 0.001 (0.001) | -0.000 (0.001) | -0.001 (0.001) | 0.000 (0.001) | -0.001 (0.001) | -0.001 (0.000) |
| Lesser duty margin | -0.001 (0.001) | -0.000 (0.001) | -0.002*** (0.001) | 0.000 (0.001) | -0.001 (0.001) | -0.002*** (0.001) |
| Number foreign firms | 0.002 (0.001) | -0.002*** (0.001) | -0.003** (0.001) | 0.002* (0.001) | -0.001 (0.001) | -0.002 (0.001) |
| Number petitioners | 0.008 (0.006) | 0.002 (0.002) | -0.001 (0.002) | 0.007 (0.004) | 0.000 (0.002) | -0.003 (0.003) |
| Target countries | 0.021 (0.014) | -0.001 (0.009) | 0.016** (0.007) | -0.003 (0.012) | 0.008 (0.009) | 0.021*** (0.006) |
| Chemical | | | | 0.119 (0.079) | -0.038 (0.039) | -0.045* (0.027) |
| Machinery | | | | 0.116 (0.094) | -0.021 (0.046) | -0.100*** (0.030) |
| Metal | | | | 0.199*** (0.064) | -0.008 (0.038) | -0.014 (0.021) |
| China | | | | 0.042 (0.059) | 0.063 (0.053) | 0.008 (0.025) |
| India | | | | 0.180*** (0.057) | 0.030 (0.052) | -0.060 (0.040) |
| Japan | | | | -0.060 (0.101) | 0.081** (0.041) | 0.047 (0.035) |
| Bi-annual year effects | No | No | No | Yes | Yes | Yes |
| Observations | | 1,783 | | | 1,783 | |
| Pseudo R^2 | | 0.11 | | | 0.34 | |
| Log likelihood | | -1,257.10 | | | -927.78 | |
| χ^2 | | 81.07*** | | | 141.62*** | |

Notes: Standard errors clustered by petition in parenthesis; *** denotes significance at 1% level; ** 5% level; * 10% level.

Table 11: Determinants of changes of AD duties

| | (1) | (2) | (3) | (4) | (5) |
|---|---------------------|---------------------|----------------------|---------------------|----------------------|
| Final duty | 0.415*** (0.133) | 0.428*** (0.134) | 0.479*** (0.110) | 0.494*** (0.117) | 0.488*** (0.091) |
| Lesser duty margin | -0.100 (0.127) | -0.084 (0.127) | -0.087 (0.139) | -0.082 (0.136) | -0.089 (0.103) |
| Number foreign firms | 0.050 (0.064) | 0.056 (0.063) | 0.065 (0.092) | 0.063 (0.093) | 0.061 (0.079) |
| Number petitioners | -0.313 (0.491) | -0.210 (0.473) | -0.522 (0.422) | -0.492 (0.434) | -0.088 (0.356) |
| Target countries | -0.386 (0.812) | -0.242 (0.857) | -1.026 (0.747) | -0.790 (0.845) | -0.215 (1.118) |
| Request Commission | 7.018 (5.104) | 6.982 (4.912) | 7.285 (4.706) | 7.140 (4.788) | 9.768** (4.779) |
| Request foreign producers | 9.428** (4.741) | 9.970* (5.390) | 9.573** (4.663) | 9.092* (4.897) | 11.060*** (3.866) |
| Chemical | | 4.164 (3.291) | | 2.750 (3.196) | 4.521 (4.203) |
| Machinery | | 4.128 (4.392) | | 0.798 (4.440) | -7.171 (5.921) |
| Metal | | -0.656 (4.536) | | -1.844 (4.410) | -11.078** (5.501) |
| China | | | -11.745** (5.869) | -11.570* (6.019) | -10.474** (4.075) |
| India | | | 0.258 (8.712) | 0.166 (8.655) | -2.909 (5.412) |
| Japan | | | 2.424 (4.631) | 1.644 (5.894) | 14.009 (9.378) |
| Bi-annual year effects | No | No | No | No | Yes |
| F- test 'Request Commission' = 'Request foreign producers' | 0.72 | 1.16 | 0.61 | 0.48 | 0.20 |
| Observations | 417 | 417 | 417 | 417 | 417 |
| R ² | 0.23 | 0.24 | 0.29 | 0.30 | 0.51 |
| F | 3.69*** | 3.15*** | 3.62*** | 3.20*** | 8.17*** |

Notes: Standard errors clustered by petition; *** denotes significance at 1% level; ** 5% level; * 10% level.