



## **UNITED STATES – CERTAIN METHODOLOGIES AND THEIR APPLICATION TO ANTI-DUMPING PROCEEDINGS INVOLVING CHINA**

RECOURSE TO ARTICLE 22.6 OF THE DSU BY THE UNITED STATES

DECISION BY THE ARBITRATOR

*Addendum*

*BCI redacted, as indicated [[\*\*\*]]*

This *addendum* contains Annexes A to E to the Decision of the Arbitrator to be found in document WT/DS471/ARB.

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**ANNEX A**

WORKING PROCEDURES OF THE ARBITRATOR

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## **ANNEX A-1**

### **WORKING PROCEDURES OF THE ARBITRATOR**

**Adopted on 15 November 2018**

***Amended on 13 February 2019***

#### **General**

1. (1) In this proceeding, the Arbitrator shall follow the relevant provisions of the Understanding on Rules and Procedures Governing the Settlement of Disputes ("DSU"). In addition, the following Working Procedures apply.
- (2) The Arbitrator reserves the right to modify these procedures as necessary, after consultation with the parties.

#### **Confidentiality**

2. (1) The deliberations of the Arbitrator and the documents submitted to it shall be kept confidential. Members shall treat as confidential information that is submitted to the Arbitrator by another Member which the submitting Member has designated as confidential.
- (2) Nothing in the DSU or in these Working Procedures shall preclude a party from disclosing statements of its own positions to the public.
- (3) If a party submits a confidential version of its written submissions to the Arbitrator, it shall also, upon request of a Member, provide a non-confidential summary of the information contained in its submissions that could be disclosed to the public. Non-confidential summaries shall be submitted no later than ten days after the written submission in question is presented to the Arbitrator, unless a different deadline is established by the Arbitrator upon written request of a party showing good cause.
- (4) Upon request, the Arbitrator may adopt appropriate additional procedures for the treatment and handling of confidential information after consultation with the parties.

#### **Submissions**

3. (1) Before the substantive meeting of the Arbitrator with the parties, China shall transmit to the Arbitrator and to the United States a communication explaining the basis for its request, including the methodology and data supporting it, in accordance with the timetable adopted by the Arbitrator.
- (2) Each party to the dispute shall also transmit to the Arbitrator a written submission in which it presents the facts of the case and its arguments as well as the economic and legal basis supporting them, if any, in accordance with the timetable adopted by the Arbitrator.
- (3) The Arbitrator may invite the parties to make additional submissions during the proceeding, including with respect to requests for preliminary rulings in accordance with paragraph 4 below.

#### **Preliminary rulings**

4. (1) If the United States considers that the Arbitrator should make a ruling before the issuance of the Decision that certain measures, claims or issues are not properly before the Arbitrator, the following procedure applies. Exceptions to this procedure shall be granted upon a showing of good cause.

- a. The United States shall submit any such request for a preliminary ruling at the earliest possible opportunity. China shall submit its response to the request at a time to be determined by the Arbitrator in light of the request.
- b. The Arbitrator may issue a preliminary ruling on the issues raised in such a preliminary ruling request before, during or after the substantive meeting, or the Arbitrator may defer a ruling on the issues raised by a preliminary ruling until it issues its Decision to the parties.
- c. If the Arbitrator finds it appropriate to issue a preliminary ruling before the issuance of its Decision, the Arbitrator may provide reasons for the ruling at the time that the ruling is made, or subsequently in its Decision.

(2) This procedure is without prejudice to the parties' right to request other types of preliminary or procedural rulings during the proceeding, and to the procedures that the Arbitrator may follow with respect to such requests.

### **Evidence**

5. (1) Each party shall submit all evidence to the Arbitrator no later than the substantive meeting, except evidence necessary for purposes of rebuttal, or evidence necessary for answers to questions or comments on answers provided by the other party. Additional exceptions may be granted upon a showing of good cause.  
  
(2) If any new evidence has been admitted upon a showing of good cause, the Arbitrator shall accord the other party an appropriate period of time to comment on the new evidence submitted.
6. (1) If the original language of an exhibit or portion thereof is not a WTO working language, the submitting party shall simultaneously submit a translation of the exhibit or relevant portion into the WTO working language of the submission. The Arbitrator may grant reasonable extensions of time for the translation of exhibits upon a showing of good cause.  
  
(2) Any objection as to the accuracy of a translation should be raised promptly in writing, preferably no later than the next filing or the meeting (whichever occurs earlier) following the submission which contains the translation in question. Any objection shall be accompanied by a detailed explanation of the grounds for the objection and an alternative translation.
7. (1) To facilitate the maintenance of the record of the dispute and maximize the clarity of submissions, each party shall sequentially number its exhibits throughout the course of the dispute, indicating the submitting Member and the number of each exhibit on its cover page. Exhibits submitted by China should be numbered CHN-1, CHN-2, etc. Exhibits submitted by the United States should be numbered USA-1, USA-2, etc. If the last exhibit in connection with a submission was numbered CHN-5, the first exhibit in connection with the next submission thus would be numbered CHN-6.  
  
(2) Each party shall provide an updated list of exhibits (in Word or Excel format) together with each of its submissions, oral statements, and responses to questions.  
  
(3) If a party submits a document that has already been submitted as an exhibit by the other party, it should explain why it is submitting that document again.  
  
(4) Insofar as a party considers that the Arbitrator should take into account a document already submitted as an exhibit in the prior panel proceedings, it should resubmit that document as an exhibit for the purpose of this proceeding. In its list of exhibits, it should refer to the number of the original exhibit in the original panel proceeding (OP), if applicable (example: USA-1 (USA-21-OP)).  
  
(5) If a party includes a hyperlink to the content of a website in a submission, and intends that the cited content form part of the official record, the cited content of the website shall be provided in the form of an exhibit.

**Editorial Guide**

8. In order to facilitate the work of the Arbitrator, each party is invited on a voluntary basis to make its submissions in accordance with the WTO Editorial Guide for Submissions (electronic copy provided).

**Questions**

9. The Arbitrator may pose questions to the parties at any time, including:

a. Before the meeting, the Arbitrator may send written questions, in addition to written questions already specified in the timetable, or a list of topics it intends to pursue in questioning orally or in writing during the meeting. The Arbitrator may ask different or additional questions at the meeting.

b. The Arbitrator may put questions to the parties orally or in writing during the meeting, and in writing following the meeting, as provided for in paragraph 16 below.

**Substantive meeting**

10. The Arbitrator shall meet in closed session.

11. The parties shall be present at the meetings only when invited by the Arbitrator to appear before it.

12. (1) Each party has the right to determine the composition of its own delegation when meeting with the Arbitrator.

(2) Each party shall have the responsibility for all members of its delegation and shall ensure that each member of its delegation acts in accordance with the DSU and these Working Procedures, particularly with regard to the confidentiality of the proceeding and the submissions of the parties.

13. Each party shall provide to the Arbitrator the list of members of its delegation no later than 5.00 p.m. (Geneva time) three working days before the first day of each meeting with the Arbitrator.

14. A request for interpretation by any party should be made to the Arbitrator as early as possible, preferably at the organizational stage, to allow sufficient time to ensure availability of interpreters.

15. There shall be one substantive meeting with the parties.

16. The substantive meeting of the Arbitrator with the parties shall be conducted as follows:

a. The Arbitrator shall invite the United States to make an opening statement to present its case first. Subsequently, the Arbitrator shall invite China to present its point of view. Before each party takes the floor, it shall provide the Arbitrator with a provisional written version of its statement, including any visual presentations. If interpretation is needed, each party shall provide additional copies for the interpreters.

b. Each party should avoid lengthy repetition of the arguments in its submissions. Each party is invited to limit the duration of its opening statement to not more than 60 minutes. If either party considers that it requires more time for its opening statement, it should inform the Arbitrator and the other party at least 10 days prior to the meeting, together with an estimate of the expected duration of its statement. The Arbitrator will accord equal time to the other party.

c. After the conclusion of the opening statements, the Arbitrator shall give each party the opportunity to make comments or ask the other party questions.

d. The Arbitrator may subsequently pose questions to the parties.

- e. Once the questioning has concluded, the Arbitrator shall afford each party an opportunity to present a brief closing statement, with the United States presenting its statement first. Before each party takes the floor, it shall provide the Arbitrator and other participants at the meeting with a provisional written version of its closing statement, if available.
- f. Following the meeting:
  - i. Each party shall submit a final written version of its opening statement no later than 5.00 p.m. (Geneva time) on the first working day following the meeting. At the same time, each party should also submit a final written version of any prepared closing statement that it delivered at the meeting.
  - ii. Each party shall send in writing, within the timeframe established by the Arbitrator before the end of the meeting, any questions to the other party to which it wishes to receive a response in writing.
  - iii. The Arbitrator shall send in writing, within the timeframe established by the Arbitrator before the end of the meeting, any questions to the parties to which it wishes to receive a response in writing.
  - iv. Each party shall respond in writing to the questions from the Arbitrator, and to any questions posed by the other party, within the time-frame established by the Arbitrator before the end of the meeting. The parties may be given time to comment on the other party's responses.

#### **Descriptive part and executive summaries**

17. The description of the arguments of the parties in the Decision of the Arbitrator shall consist of executive summaries provided by the parties, which shall be annexed as addenda to the Decision. These executive summaries shall not in any way serve as a substitute for the submissions of the parties in the Arbitrator's examination of the case.

18. Each party shall submit one integrated executive summary, which shall summarize the facts and arguments as presented to the Arbitrator in the party's submissions and statements, and if possible, its responses to questions and comments thereon following the substantive meeting.

19. Each integrated executive summary shall be limited to no more than 15 pages.

20. The Arbitrator may request the parties to provide executive summaries of facts and arguments presented in any other submissions to the Arbitrator for which a deadline may not be specified in the timetable.

#### **Service of documents**

21. The following procedures regarding service of documents apply to all documents submitted by parties during the proceeding:

- a. Each party shall submit all documents to the Arbitrator by submitting them with the DS Registry (office No. 2047).
- b. Each party shall submit 2 paper copies of all documents it submits to the Arbitrator by 5.00 p.m. (Geneva time) on the due dates established by the Arbitrator. The DS Registrar shall stamp the documents with the date and time of submission. The paper version submitted to the DS Registry shall constitute the official version for the purposes of submission deadlines and the record of the dispute. If any documents are in a format that is impractical to submit as a paper copy, then the party may submit such documents to the DS Registrar by email or on a CD-ROM, DVD or USB key only.
- c. Each party shall also send an email to the DS Registry, at the same time that it submits the paper versions, attaching an electronic copy of all documents that it submits to the



Arbitrator, preferably in both Microsoft Word and PDF format. All such emails to the Arbitrator shall be addressed to DSRegistry@wto.org, and copied to other WTO Secretariat staff whose email addresses have been provided to the parties during the proceeding. If it is not possible to attach all the Exhibits to one email, the submitting party shall provide the DS Registry with four copies of the Exhibits in electronic form on USB keys, CD-ROMs or DVDs.

- d. In addition, each party is invited to submit all documents through the Digital Dispute Settlement Registry (DDSR) within 24 hours following the deadline for the submission of the paper versions. If the parties have any questions or technical difficulties relating to the DDSR, they are invited to consult the DDSR User Guide (electronic copy provided) or contact the DS Registry at DSRegistry@wto.org.
- e. Each party shall serve any document submitted to the Arbitrator directly on the other party. A party may submit its documents to another party by email or on a CD-ROM or a DVD, unless the recipient party has previously requested a paper copy. Each party shall confirm, in writing, that copies have been served on the parties, as appropriate, at the time it provides each document to the Arbitrator.
- f. Each party shall submit its documents with the DS Registry and serve copies on the other party by 5.00 p.m. (Geneva time) on the due dates established by the Arbitrator.
- g. All communications from the Arbitrator to the parties will be via email.

#### **Correction of clerical errors in submissions**

22. The Arbitrator may grant leave to a party to correct clerical errors in any of its submissions (including paragraph numbering and typographical mistakes). Any such request should identify the nature of the errors to be corrected, and should be made promptly following the filing of the submission in question.

**ANNEX A-2****ADDITIONAL WORKING PROCEDURES OF THE ARBITRATOR CONCERNING  
BUSINESS CONFIDENTIAL INFORMATION****Adopted on 15 November 2018**

1. These procedures apply to any business confidential information (BCI) that a party wishes to submit to the Arbitrator, including BCI that was previously treated by the U.S. Department of Commerce as confidential or proprietary information protected by Administrative Protective Order in the course of the anti-dumping duty proceedings relevant to this dispute. However, these procedures do not apply to information that is available in the public domain. In addition, these procedures do not apply to any BCI if the person who provided the information in the course of the relevant proceedings agrees in writing to make the information publicly available.
  2. The first time that a party submits to the Arbitrator BCI, as defined above, from an entity that submitted that information in one of the relevant proceedings, the party shall also provide, with a copy to the other party, an authorizing letter from the entity. That letter shall authorize both China and the United States to submit in this dispute, in accordance with these procedures, any confidential information submitted by that entity in the course of those proceedings.
  3. If an entity refuses to grant the authorization letter, a party may bring the situation to the attention of the Arbitrator. The Arbitrator shall consider what steps to take, which may include requesting information pursuant to Article 13 of the DSU.
  4. No person may have access to BCI except a member of the Secretariat or the Arbitrator, an employee of a party, and an outside advisor for the purposes of this dispute to a party. An outside advisor may include a person providing to a party advice on any matter related to the dispute. However, an outside advisor is not permitted access to BCI if that advisor is an officer or employee of an enterprise engaged in the production, export, or import of the products that were the subject of the proceedings relevant to this dispute.
  5. A party having access to BCI shall treat it as confidential, i.e., shall not disclose that information other than to those persons authorized to receive it pursuant to these procedures. Each party shall have responsibility in this regard for its employees as well as any outside advisors used for the purposes of this dispute. BCI obtained under these procedures may be used only for the purpose of providing information and argumentation in this arbitration and for no other purpose.
  6. The party submitting BCI shall mark the cover and/or first page of the document containing BCI, and each page of the document, to indicate the presence of such information. The specific information in question shall be placed between double brackets, as follows: [[xx,xxx.xx]]. The first page or cover of the document shall state "Contains business confidential information on pages xxxxxx", and each page of the document shall contain the notice "Contains Business Confidential Information" at the top of the page.
  7. Where a party submits a document containing BCI to the Arbitrator, the other party referring to that BCI in its documents, including written submissions and oral statements, shall clearly identify all such information in those documents. All such documents shall be marked as described in paragraph 6. In the case of an oral statement containing BCI, the party making such a statement shall inform the Arbitrator before making it that the statement will contain BCI, and the Arbitrator will ensure that only persons authorized to have access to BCI pursuant to these procedures are in the room to hear that statement.
  8. The Arbitrator will not disclose BCI, in its decision or in any other way, to persons not authorized under these procedures to have access to BCI. The Arbitrator may, however, make statements of conclusion drawn from such information. Before the Arbitrator circulates its final decision to the Members, the Arbitrator will give each party an opportunity to review the decision to ensure that it does not contain any information that the party has designated as BCI.
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**ANNEX B**

ARGUMENTS OF THE PARTIES

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**ANNEX B-1****EXECUTIVE SUMMARY OF THE ARGUMENTS OF THE UNITED STATES****I. INTRODUCTION**

1. Contrary to the requirements of the *Understanding on Rules and Procedures Governing the Settlement of Disputes* ("DSU"), the level of suspension of concessions that China has requested is not equivalent to the level of nullification or impairment.

2. Pursuant to Article 22.7 of the DSU, the task of an arbitrator is to determine whether the requested level of suspension of concessions or other obligations is equivalent to the level of nullification or impairment of benefits accruing to the complaining party under the relevant covered agreement(s). The starting point in any analysis of a request for authorization to suspend concessions is to determine the extent to which the Member's WTO-inconsistent measure that is the subject of the Dispute Settlement Body's ("DSB") recommendations nullifies or impairs benefits accruing to the complaining party. Thus, an analysis of the level of nullification or impairment must focus on the benefit allegedly nullified or impaired as a result of the breach found by the DSB. Due to conceptual flaws and methodological errors, however, China has not provided a calculation that is equivalent to the level of nullification or impairment.

3. This proceeding requires that each of the 25 antidumping duty determinations specifically identified in China's methodology paper be separately analyzed to determine the most appropriate methodology to calculate the level of nullification or impairment. China appears to agree. Yet, China proposes a one-size-fits-all approach to estimating its requested level of suspension of concessions. China's proposed methodology is of no use to the Arbitrator for it cannot capture the impact of antidumping duty margins on trade flows, which is the key issue in this proceeding. China compounds its methodological error by relying on false assumptions and incorrect data to implement its approach.

4. Furthermore, China's methodology paper contains errors sufficient by themselves to establish that China's proposal is fundamentally flawed. For instance, China proposes an incorrect counterfactual, applies an economic method that is completely inappropriate, and makes numerous errors when compiling the data inputs it uses to estimate the level of nullification or impairment. As a result, China overestimates the level of nullification or impairment attributable to the maintenance following the expiration of the reasonable period of time ("RPT") of the U.S. antidumping measures about which the DSB adopted recommendations.

5. China bases its request on the assertion that the Arbitrator must use a counterfactual that assumes the complete removal of the U.S. antidumping duty measures following the expiration of the RPT, even U.S. antidumping duty measures that have not been found to be WTO-inconsistent. China's proposal is contrary to the DSU and results in a gross overestimation of the level of nullification or impairment. The proper counterfactual to be applied for the purpose of this proceeding is the elimination of the WTO-inconsistent aspects of the U.S. antidumping duty measures, not the revocation or complete removal of the antidumping duty orders themselves.

6. In response to the flawed one-size-fits-all methodology proposed by China, the United States proposes three approaches that accurately estimate the trade effects of the WTO-inconsistent U.S. antidumping duty measures following the expiration of the RPT.

**II. APPROPRIATE CALCULATION OF THE LEVEL OF NULLIFICATION OR IMPAIRMENT****A. Article 22 of the DSU Requires that the Proposed Level of Suspension Be Equivalent to the Level of Nullification or Impairment**

7. Pursuant to Article 22.4 of the DSU, the DSB is not to authorize the suspension of concessions or other obligations unless "the level" of suspension is "equivalent" to the level of nullification or

impairment. Article 22.7 of the DSU further provides that where a matter is referred to arbitration, the arbitrator "shall determine whether the level of . . . suspension is equivalent to the level of nullification or impairment." The starting point in the analysis of a suspension request is to determine the extent to which any WTO-inconsistent measure maintained following the expiration of the RPT nullifies or impairs benefits accruing to the complaining Member under the relevant covered agreement(s).

8. Thus, an analysis of the level of nullification or impairment must focus on the "benefit" accruing to the complaining Member under a covered agreement that is allegedly nullified or impaired as a result of the breach found by the DSB. Arbitrators in past proceedings have uniformly based their determinations on hard evidence and have refused to "accept claims that are 'too remote', 'too speculative', or 'not meaningfully quantified.'" As the arbitrators in *EC – Hormones (US)* (Article 22.6 – EC) and *EC – Hormones (Canada)* (Article 22.6 – EC) found, "we need to guard against claims of lost opportunities where the causal link with the inconsistent [measure] is less than apparent, i.e., where exports are allegedly foregone not because of the [inconsistent measure] but due to other circumstances."

9. In previous Article 22.6 proceedings, the arbitrator has compared the level of trade for the complaining party under the WTO-inconsistent measure to what the complaining party's level of trade would be expected to be where the Member concerned has brought the WTO-inconsistent measure into conformity following the expiration of the RPT. The situation in which the Member concerned has removed the WTO inconsistency is referred to as the "counterfactual." The difference in the level of trade under these two situations typically represents the level of nullification or impairment. Other Article 22.6 arbitrators have recognized that a counterfactual was an appropriate method in those proceedings to calculate a level of nullification or impairment, and China itself proposes the use of a counterfactual in this proceeding. China, however, has proposed an incorrect counterfactual.

10. The appropriate analysis requires consideration of the present trading relationship between China and the United States (as represented by the 2017 baseline), as well as what that relationship would be if the U.S. measures had been brought into compliance with the DSB recommendations following the expiration of the RPT (the counterfactual). As described below, the trade differential will be the level of nullification or impairment attributable to the maintenance of the U.S. measures.

## **B. The Appropriate Counterfactual Eliminates the WTO-Inconsistent Aspects of the U.S. Antidumping Duty Measures**

### **1. China's Counterfactual Has No Support in the DSU**

11. China proposes to estimate the level of nullification or impairment based on assuming the withdrawal of all of the U.S. antidumping duty orders, even parts of the U.S. antidumping duty measures that are not subject to the DSB's recommendations.

12. Article 22.1 of the DSU provides that compensation and the suspension of concessions is available in the "event that the recommendations" of the DSB "are not implemented within a reasonable period of time." Thus, Article 22.1 of the DSU directs an arbitrator to base an Article 22.6 decision on the "recommendations" of the DSB. Similarly, Article 22.2 of the DSU, which is explicitly referenced in the first sentence of Article 22.6, limits the role of an arbitrator to assessing the effects of the WTO-inconsistent U.S. antidumping duty measures in accordance with the DSB's recommendations. To go beyond the DSB recommendations, as China proposes, would be contrary to the DSU.

13. The DSB recommendations at issue in this proceeding relate to the use by the U.S. Department of Commerce ("USDOC") of the Single Rate Presumption ("SRP"), as well as the use in certain proceedings of an alternative, average-to-transaction comparison methodology and "zeroing" in conjunction with that alternative comparison methodology. To determine the equivalent level of nullification or impairment in this proceeding, it is necessary to correctly understand the findings adopted by the DSB. The DSB findings of WTO inconsistency relate to certain aspects of the U.S. antidumping measures, but other aspects of the U.S. antidumping measures have not been found to be WTO-inconsistent. As the United States will discuss in the following section, the antidumping

duty rates that apply to Chinese imports at issue in this proceeding can be broken down into four categories.

14. Similarly, for the three investigations and one administrative review for which the panel made findings concerning the USDOC's use of the alternative, average-to-transaction comparison methodology and "zeroing," only certain companies were assigned antidumping duty rates found to be WTO-inconsistent. Those rates can be isolated and the level of nullification or impairment resulting from their maintenance following the expiration of the RPT can be estimated accurately without incorrectly assuming, as China does, the total withdrawal of the U.S. antidumping duty measures.

**2. The Correct Counterfactual is Modification of the WTO-Inconsistent U.S. Antidumping Duty Measures To Eliminate the WTO-Inconsistencies Found by the DSB, Not the Total Withdrawal of the Antidumping Duty Measures**

15. In this proceeding, the correct counterfactual is the estimated value of exports of relevant products from China to the United States if the WTO-inconsistent U.S. antidumping duty measures were brought into compliance with U.S. WTO obligations, holding all other factors constant. The level of "nullification or impairment" to China is the difference between the value of China's exports to the United States as reflected in the 2017 trade data, and the estimated export value under the counterfactual scenario.

16. In other words, the question is: for each of the 13 products subject to "as applied" findings and for each of the 12 products China has identified in connection with the "as such" findings, how many additional exports from China would enter the United States under the separate duty rate (the rate that applies to what the United States calls Group 2) if the presumption of a China-government entity were eliminated. As discussed above, China's methodology paper applies an incorrect counterfactual. The key assumption in China's counterfactual is the removal of all antidumping duties, even the U.S. antidumping duties that were not found to be WTO-inconsistent. Under the correct counterfactual, however, those firms that are subject to the China-government entity rate and did not fail to cooperate would, instead, be assigned the separate duty rate. The correct estimate of the level of nullification or impairment is the difference in the value of trade that would be induced by changing—if, in fact, there were a difference between the rate assigned the China government entity and separate-rate respondents—the rate for these firms only. For most cases, this represents a small share of imports from China at any given period. To illustrate, Chinese imports are divided into four groups:

**Group 1:** Chinese imports from firms to which individual duty rates apply;

**Group 2:** Chinese imports from firms that were not individually examined yet received what is labeled as a "separate duty rate" (that is, a rate separate from the rate assigned to the China-government entity);

**Group 3:** Chinese imports from firms that are subject to the China-government entity antidumping duty rate for which there is evidence that they failed to cooperate with the USDOC's investigation, such that a rate based on facts available could have applied even if they were not part of the China-government entity; and

**Group 4:** Chinese imports from firms that are subject to the China-government entity antidumping duty rate for which there is no evidence that they failed to cooperate with the USDOC's investigation.

17. Under the correct counterfactual, the only modification is that duties on Group 4 imports are changed from the rate assigned to the China-government entity to a separate duty rate. With the exception of certain antidumping duty rates determined using the alternative, average-to-

transaction comparison methodology with "zeroing," all other antidumping duties would remain unchanged.

**C. The Correct Methodology for Determining the Level of Nullification or Impairment Must Be Determined Case by Case**

**1. Complying with the DSB Recommendations Concerning U.S. Antidumping Duty Measures on Corrosion-Resistant Steel and Diamond Sawblades Would Not Result in Any Increase in the Value of Exports of Those Products from China to the United States; the Level of Nullification or Impairment is Zero**

**a. The DSU Permits the Arbitrator to Find that a Measure Causes No Nullification or Impairment**

18. Article 3.8 of the DSU plainly provides for the possibility that the Member concerned may rebut the presumption of the existence of nullification or impairment by putting forth evidence that a breach of WTO obligations does not have an adverse impact on the complaining party. Additionally, nothing in Article 3.8 of the DSU, which is one of the "General Provisions" of the DSU, limits the opportunity of the Member concerned to make such a rebuttal only during the original panel phase of a dispute settlement proceeding. The more logical time for a Member concerned to make such a rebuttal would be in the context of an arbitration under Article 22.6 of the DSU, wherein the question of the level of nullification or impairment – and indeed, the question of the existence of any level of nullification or impairment at all following the expiration of the RPT – is placed squarely before the decision maker that is tasked by the DSU with evaluating that question and the question of the level of suspension – *i.e.*, the DSU Article 22.6 arbitrator. If no trade is foregone due to a WTO-inconsistent measure's continuing existence beyond the expiration of the RPT, *i.e.*, if the estimate of the trade foregone is zero, then the correct conclusion is that the level of nullification or impairment is zero.

19. Furthermore, the factual circumstances related to a WTO-inconsistent measure's impact on the complaining party might change over time, including after a panel report is circulated and before a suspension request is made under Article 22.2 of the DSU. In an arbitration under Article 22.6 of the DSU, it is incumbent upon the arbitrator to establish the level of nullification or impairment following the end of the RPT, so as to ensure that the level of suspension authorized by the DSB does not exceed the level of nullification or impairment.

20. Accordingly, it is necessary for the Arbitrator to determine in this proceeding the ongoing trade effects of the U.S. antidumping duty measures on corrosion-resistant steel and diamond sawblades from China (using 2017 as the baseline for the counterfactual). China suggests in its methodology paper that the "question that must be answered [in this proceeding] is what would have been the value of imports from China in 2017 'but for' the United States continued imposition of the WTO inconsistent measures." By this, China uses 2017 as a proxy (presumably for reasons of data availability) for the ongoing trade effects caused by the maintenance of WTO-inconsistent measures beyond the expiry of the RPT in August 2018. For purposes of the counterfactual, the United States has also used 2017 data.

**b. The Evidence Demonstrates that the Level of Nullification or Impairment from the Antidumping Duty Measures on Corrosion-Resistant Steel and Diamond Sawblades is Zero**

21. The evidence demonstrates that bringing the U.S. antidumping duty measures on corrosion-resistant steel and diamond sawblades from China into compliance would result in no increase at all in the value of corrosion-resistant steel or diamond sawblades exported from China to the United States.

22. In cases where the China-entity rate and a separate duty rate are the same, the level of nullification or impairment is zero because the counterfactual scenario in which the USDOC undertook a redetermination and changed the WTO-inconsistent rate for companies that form part of the China-government entity—an entity based on a presumption found to be WTO-inconsistent—from the China-government entity rate to the separate duty rate determined for those separate-rate

respondents subject to the relevant proceeding, would, in these cases, not result in any reduction of the antidumping duty rate. In *Corrosion-Resistant Steel*, the China-government entity rate is 199.43 percent and the separate rate is also 199.43 percent. In *Diamond Sawblades*, in 2017, the China-government entity rate was 82.03 percent and the separate rate also was 82.03 percent. Accordingly, the level of nullification or impairment is zero.

**2. An Armington-Based Imperfect Substitutes Partial Equilibrium Model is the Appropriate Method for Estimating the Level of Nullification or Impairment Resulting from the Maintenance Following the Expiration of the RPT of the WTO-Inconsistent U.S. Antidumping Duty Measures on Aluminum Extrusions, Shrimp, Steel Cylinders, Woven Ribbons, PET Film, Carrier Bags, Coated Paper, Steel Line and Pressure Pipe, Welded Carbon Steel Pipe, Welded Carbon Steel Line Pipe, Steel Nails, Stainless Steel Sheet and Strip, Cast Iron Pipe Fittings, Copper Pipe and Tube, Cold Rolled Steel Flat Products, Truck Tires, and Washers**

23. China recognizes that an "elasticities style trade model" or "a partial equilibrium model" "could be used for calculating" the level of nullification or impairment. Indeed, China characterizes such an approach as "an excellent short-run quantitative model."

24. Despite China's suggestion that "many policies have been found to be inconsistent with WTO rules" and "various and complicating issues" support the use of China's flawed approach – discussed further below – the analysis required in this proceeding actually is quite simple. Antidumping duty measures are tariffs. The simplest description of the correct counterfactual scenario here is that the tariffs imposed by the United States are assumed to be reduced. Partial equilibrium analysis is, to use China's term, an "excellent" tool for modeling the trade effects of a tariff reduction.

25. Under correct economic theory, the effect of the reduction or removal of the WTO-inconsistent U.S. antidumping duties applied to aluminum extrusions, shrimp, steel cylinders, woven ribbons, PET film, carrier bags, coated paper, steel line and pressure pipe, welded carbon steel, welded carbon steel line pipe, steel nails, stainless steel sheet and strip, cast iron pipe fittings, copper pipe and tube, cold rolled steel flat products, truck tires, and washers from China depends on the substitutability between (1) the domestic like product (the product made in the United States), (2) subject imports (the product imported from China that is subject to the WTO-inconsistent antidumping duty), (3) non-subject imports from China (the product imported from China that is not subject to the WTO-inconsistent antidumping duty), and (4) non-subject imports from the rest of the world (the product imported from countries other than China). To properly measure the effect of the reduction of the antidumping duties on aluminum extrusions, shrimp, steel cylinders, woven ribbons, PET film, carrier bags, coated paper, steel line and pressure pipe, welded carbon steel, welded carbon steel line pipe, steel nails, stainless steel sheet and strip, cast iron pipe fittings, copper pipe and tube, cold rolled steel flat products, truck tires, and washers from China, one would need to use for each product an economic model that accounts for the substitution effects on all four of these varieties.

26. An example of such a model – an Armington-based imperfect substitutes partial equilibrium model – that would be appropriate to use can be found in a 2017 paper by Ross Hallren and David Riker. The Hallren and Riker paper provides a convenient framework to undertake a partial equilibrium analysis of the trade effects of modifying import tariffs where the imported and domestic goods are imperfect substitutes. Indeed, the Hallren and Riker paper provides as an "illustrative application" an example of modeling the effects of "a reduction in the import ad-valorem tariff applied to subject imports from 5 to 0 percent," which corresponds to the modification of duties for purposes of this discussion. The partial equilibrium model in the Hallren and Riker paper is based on the Armington approach to trade, where products are differentiated by source countries and consumers view products from different countries as imperfect substitutes. As explained in *A Practical Guide to Trade Policy Analysis*, "most simulation models use the 'Armington assumption' whereby varieties of goods are differentiated by country of origin (Armington, 1969)."

27. The U.S. version of the model assumes that there are four varieties of products in the industry that are imperfect substitutes in demand. The four varieties are the domestic product, non-subject imports from rest of world, non-subject imports from China, and subject imports from China. As the Hallren and Riker paper explains, all source varieties are imperfect substitutes and consumers



substitute between each variety at a constant rate, which is the Armington elasticity. The Hallren and Riker paper points out that the Armington elasticity "is a key element in the model" because it tells how sensitive consumers are to changes in the relative prices of each of the source varieties.

28. The model detailed in the Hallren and Riker paper permits the estimation of the magnitudes of the changes in the prices of the four varieties of products, the industry's overall price index, and the quantities of the products as a result of a reduction in the *ad valorem* tariff on subject imports. The goal of the analysis is to quantify these changes given information on the duties and the initial values of trade and market shares in the respective industries in this proceeding.

**a. Reduction of Tariff Rates on Subject Imports from the China-Entity Rate to the Separate Duty Rate**

29. To use the four-country model, one first needs to define 2017 imports from subject imports versus non-subject imports from China. U.S. Customs and Border Protection ("CBP") is able to compile U.S. import data for all products subject to an antidumping order. The United States has provided a table with CBP-sourced data for each of the 13 products subject to "as applied" findings and for each of the 12 products subject to "as such" findings that are discussed in China's methodology paper. This CBP data is separated into total imports subject to an antidumping duty order as well as total imports subject to the China-government entity rate.

30. Finally, we note that the Armington model, like all other standard trade models, relies on the observed value of imports as a share of the market to characterize an entity's relative competitiveness given the conditions in the market, including the imposition of duties. In this context, an appropriate minimal trade share for subject China imports is at least one percent of total U.S. imports from China. If the share is lower than one percent, the United States uses a formula-based approach to calculate the level of nullification or impairment.

**b. Correct Data Inputs that Would Be Used in Applying an Armington-Based Imperfect Substitutes Partial Equilibrium Model**

31. The Hallren and Riker paper explains that the following data inputs would be used in applying the Armington-based imperfect substitutes partial equilibrium model that the paper describes: domestic shipments of domestic producers; trade value of subject imports from China; trade value of non-subject imports from China; trade value of non-subject imports from rest of world ("ROW"); supply elasticity for domestic producers; supply elasticity for subject imports from China; supply elasticity for non-subject imports from China; supply elasticity for non-subject imports from ROW; elasticity of substitution within the industry; price elasticity of total demand; change in tariff rates on subject imports.

**c. Results of Armington-Based Model**

32. As a result of applying the Armington-based model, the level of nullification or impairment from the maintenance following the expiration of the RPT of the U.S. antidumping duty measures on aluminum extrusions, shrimp, steel cylinders, woven ribbons, PET film, carrier bags, coated paper, steel line and pressure pipe, welded carbon steel, welded carbon steel line pipe, steel nails, stainless steel sheet and strip, cast iron pipe fittings, copper pipe and tube, cold rolled steel flat products, truck tires, and washers from China is no more than **\$24.03 million** per year. For these same products, China's one-size-fits-all approach estimated the level of nullification or impairment to be **\$8,638 billion** annually.

**3. A Formula-Based Approach is the Appropriate Method for Estimating the Level of Nullification or Impairment from the U.S. Antidumping Duty Measures on Wood Flooring, OCTG, CSPV Cells, and Off-the-Road Tires**

33. Total U.S. imports under the China-government entity rate as a share of total U.S. imports from China under the order for wood flooring, OCTG, CSPV cells, off-the-road tires, and bedroom furniture was less than one percent in 2017. That being the case, an Armington-based imperfect

substitutes partial equilibrium model cannot reliably be used to estimate the level of nullification or impairment for these products.

34. In light of the facts of these cases and the evidence available, the most appropriate methodology to estimate the level of nullification or impairment for wood flooring, OCTG, CSPV cells, off-the-road tires, and bedroom furniture is a formula-based approach. A formula-based approach examines China's historical import share of the U.S. market for Group 4 companies for the five products prior to the imposition of the WTO-inconsistent antidumping duty measure and applies that market share to the total value of imports of the goods from China in 2017. The United States observes that this approach reflects trade distorted by dumping and thus overestimates the level of nullification or impairment. Nevertheless, this approach is consistent with the approach taken by arbitrators in past Article 22.6 proceedings and fits well with the evidence on record for these five products.

35. Where the relevant data were available, previous Article 22.6 arbitrators have used historical export or import levels to determine the level of nullification or impairment caused by a measure. In *EC – Hormones*, for example, the arbitrator calculated the level of nullification or impairment in respect of edible beef offal by: (1) considering average U.S. exports of the covered product in the three years preceding the import ban at issue; (2) making a downward adjustment based on changing preferences; (3) multiplying the estimated figure by the estimated price of the products; and (4) deducting the value of current imports. In *EC – Bananas III*, the arbitrator calculated the effect of the EU measure based on the level of Ecuador's "best-ever exports," which occurred the year before the measure was enacted. In *US – Gambling*, the arbitrator used the difference between the complaining Member's revenues from supplying the services affected by the challenged measure the year before the measure came into effect and the average actual annual revenue in the years following to calculate the level of nullification or impairment.

36. A similar formula-based approach is appropriate in this proceeding because historical levels of U.S. imports of the five Chinese products are indicative of the level of nullification or impairment caused by the U.S. antidumping duty measures.

37. The United States starts with the maximum share of imports that may have been assigned the China-government entity rate during the period of investigation.

38. The United States calculated the level of trade during the period of investigation for the relevant U.S. Harmonized Tariff Schedule (HTS) codes. It then calculated the share of trade covered by the mandatory respondents and the separate rate respondents. The remainder would be the maximum share of imports covered by the China-government entity rate. The maximum or estimated share is then applied to U.S. imports from China for the specified product in 2017 to determine the level of nullification or impairment. Next, the United States calculated the share of companies that did not respond to the USDOC quantity and value questionnaire and would have correctly been assigned a rate based on facts available, which was the basis on which the China-government entity rate was determined. The maximum share was then reduced by this amount.

39. The level of nullification or impairment resulting from the U.S. antidumping duty measures on wood flooring, OCTG, CSPV cells, and off-the-road tires from China is no more than **\$176.733 million**. This contrasts with China's estimate of **\$6.036 billion** for these four products.

#### **4. Estimating the Level of Nullification or Impairment Related to Recommendations Adopted by the DSB Concerning the USDOC's Use of the Alternative, Average-to-Transaction Comparison Methodology and "Zeroing" in Certain Proceedings**

40. In the original dispute, China challenged, and the DSB adopted "as applied" recommendations concerning, the use of the alternative, average-to-transaction comparison methodology and "zeroing" in only three original investigations (*OCTG*, *Steel Cylinders*, and *Coated Paper*) and one administrative review (*PET Film*). The other antidumping proceedings at issue in this arbitration are not implicated by the findings related to the use of the alternative, average-to-transaction comparison methodology and "zeroing," so there can be no nullification or impairment related to those other proceedings as a result of the findings on the average-to-transaction comparison methodology and "zeroing."

**a. Steel Cylinders**

41. The level of nullification or impairment related to the USDOC's use of the alternative, average-to-transaction comparison methodology and "zeroing" during the original antidumping investigation of steel cylinders from China is zero. With respect to the *Steel Cylinders* antidumping investigation, China only challenged the USDOC's use of the alternative, average-to-transaction comparison methodology and "zeroing" with respect to the margin of dumping determined for BTIC, and BTIC is the only company for which there was an "as applied" finding concerning the use of the alternative, average-to-transaction comparison methodology and "zeroing." In response to a decision of the U.S. Court of International Trade, the USDOC revoked the antidumping duty measure with respect to BTIC effective August 27, 2017. The USDOC took this action prior to the expiration of the RPT and there is nothing else for the United States to do to implement the DSB's recommendations with respect to the findings related to the USDOC's use of the alternative, average-to-transaction comparison methodology and "zeroing" to determine the margin of dumping for BTIC in the *Steel Cylinders* antidumping investigation. Therefore, there is no nullification or impairment to China related to this finding.

**b. PET Film Administrative Review**

42. The level of nullification or impairment related to the USDOC's use of "zeroing" during the third administrative review of the antidumping order on PET film from China is zero. With respect to the third administrative review of PET film, China only challenged the USDOC's use of "zeroing" with respect to the margin of dumping determined for the DuPont Group, and the DuPont Group is the only entity for which there was an "as applied" finding concerning the use of "zeroing." However, the results of the third administrative review of PET film have been succeeded by the results of the fourth administrative review of PET film, which were published on July 2, 2014. In the fourth administrative review, the USDOC assigned the DuPont Group a margin of dumping that was not determined using "zeroing." The antidumping rate applicable to the DuPont Group at the end of the RPT (and during the baseline year 2017) would not be changed as a result of any redetermination of the results of the third administrative review that are the subject of findings adopted by the DSB. Therefore, there can be no nullification or impairment following the expiration of the RPT related to this finding.

**c. Coated Paper**

43. In the *Coated Paper* antidumping duty investigation, the USDOC found that the average-to-transaction rate in the investigation for APP China was 7.62 percent, and the average-to-average rate (without "zeroing") would have been *de minimis* ([[\*\*\*]] percent). Thus, there would not have been an antidumping duty imposed for APP China. The separate rate assigned by the USDOC was the APP China rate, which was determined using "zeroing." That rate was applied as a separate rate in 2017.

44. The level of nullification or impairment resulting from the maintenance of the antidumping duty rate determined using the average-to-transaction comparison methodology and "zeroing" following the expiration of the RPT can be estimated using the Armington-based imperfect substitutes partial equilibrium model. Specifically, the model can be used to estimate the trade effect of a reduction from the WTO-inconsistent rate of 7.62 percent to zero percent for the non-China-government entity imports in 2017, and to model a reduction of the China-government rate to zero for the China-government entity shipments. The result provides the level of nullification or impairment related to this finding, which is no more than \$0.19 million.

45. If the USDOC assigned facts available to any Chinese firms due to non-cooperation, this approach may overstate the level of nullification or impairment.

**d. OCTG**

46. In the *OCTG* antidumping duty investigation, the USDOC found that, for Chinese respondent TPCO, the margin of dumping calculated using the average-to-average comparison methodology was [[\*\*\*]] percent, while the margin of dumping calculated using the average-to-transaction comparison methodology with "zeroing," which is the WTO-inconsistent aspect of the measure, was 32.07 percent. Thus, there still would have been an antidumping duty imposed for TPCO. The

separate rate assigned by the USDOC was the TPCO rate, which was determined using "zeroing." That rate appears to have been applied as the separate rate in 2017.

47. There is not a sufficient level of subject imports from China in 2017 for the United States to apply the Armington-based model for this product. Nevertheless, given that the tariff modification that would apply in the counterfactual scenario is less than [[\*\*\*]], the impact would be so small that it cannot be "meaningfully quantified." An estimation of zero as the level of nullification or impairment is thus reasonable and plausible in this situation.

### **III. THE LEVEL OF SUSPENSION OF CONCESSIONS OR OTHER OBLIGATIONS PROPOSED BY CHINA FAR EXCEEDS THE LEVEL OF NULLIFICATION OR IMPAIRMENT**

#### **A. China Grossly Overstates the Level of Nullification or Impairment Because China's Proposed Approach Is Not Appropriate, It Is Premised on False Assumptions, and It Is Based on Incorrect Data Inputs**

##### **1. China's DID Tabular Methodology is Not Appropriate**

48. China justifies using Differences-in-Differences (DID) tabular analysis by alluding to its "simplicity." While simplicity can be a virtue, it does not justify using the tabular DID methodology in this proceeding. The tabular DID methodology cannot capture the impact of different antidumping duty margins on trade flows, which is the key issue to estimate any nullification or impairment in this proceeding. China's tabular DID methodology is only able to estimate termination of all antidumping duties on China, including WTO-consistent duties on imports from China (Group 1, Group 2, and Group 3).

49. Thus, it is not possible, as a legal matter, to use China's tabular DID analysis, because it would necessarily overestimate the level of nullification or impairment by including in the estimate the removal of WTO-consistent duties.

50. The United States observes that there is no support in the economics literature for using DID tabular analysis to estimate the effects of antidumping duties on imports. After an extensive search of the economics literature, the United States did not find any academic studies using DID tabular analysis to estimate the effects of antidumping duties or tariffs on imports.

##### **2. China's Methodology is Premised on False Assumptions and Is Fundamentally Flawed as a Result**

51. China's tabular DID methodology cannot provide accurate estimates of the level of nullification or impairment because it is premised on false assumptions. According to economic literature, the following three key assumptions must hold in a tabular DID analysis: (1) parallel trends (the comparison group is composed of exports that would be expected to follow the same trends as China's exports of the subject products in the absence of antidumping duties); (2) stability (the treated and comparison exports must remain the same over time); and (3) uniformity (the treatment or lack thereof (*i.e.*, antidumping duties) must be the same for all exports that comprise the treatment and control groups, respectively).

52. Together, the assumptions of parallel trends, stability, and uniformity mean that an appropriate comparison group must be comparable enough that its exports could reasonably be expected to follow the same trend as those from China without the "treatment" of the WTO-inconsistent U.S. antidumping duties, but distinct enough that the effects of imposing U.S. antidumping duties on China's imports will not "spillover" on their exports. If these three key assumptions do not hold, China's tabular DID methodology will produce estimates that are inaccurate. In this proceeding, all three assumptions do not hold in the comparison groups constructed by China.

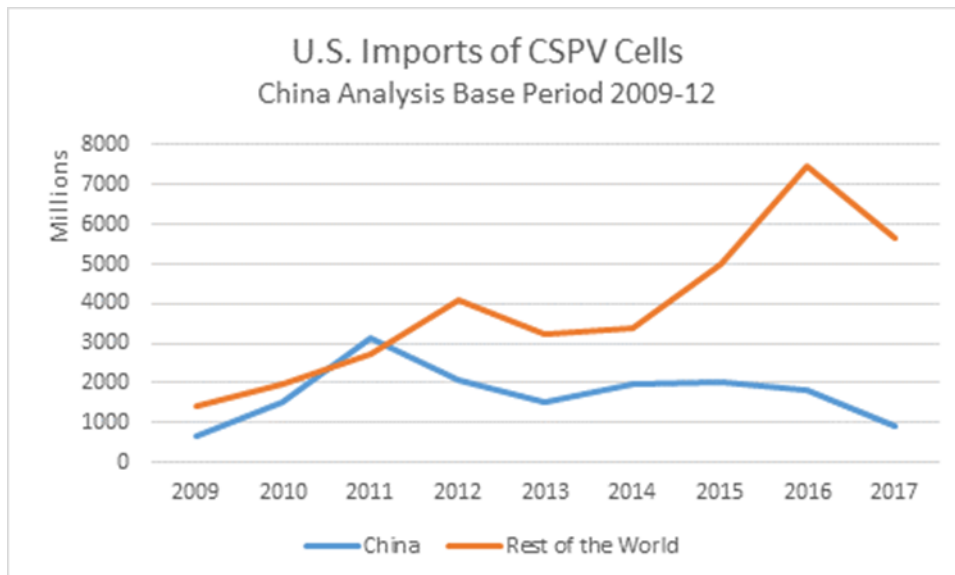
53. In its methodology paper, China acknowledges the importance of the parallel trends assumption, and asserts that it made a "considerable effort" to demonstrate that the parallel trends assumption holds for its control groups. While China's methodology paper provides a considerable

amount of discussion on the parallel trends assumption, China fails to demonstrate that the parallel trends assumption, in fact, holds in its control groups.

54. China entirely disregards the second (stability) and third (uniformity) assumptions. The stability assumption has two implications in this context. First, stability requires that the set of "treated" and "comparison" exports remains unchanged between the initial period and 2017. However, China's analysis incorrectly relies on HTS codes to define imports subject to each antidumping duty order, and in some significant cases (for example, *Aluminum Extrusions*), the set of HTS codes to which antidumping duties are applied in the initial period is not the same in 2017. Therefore, the stability assumption does not hold, and this is another reason why it is inappropriate to apply the tabular DID method.

55. The second implication of stability in this case requires China to design its comparison group such that the effects of U.S. antidumping duties on China's exports do not have spillover effects on comparison group exports. **Figure 1** below illustrates the likely spillover effects that can be seen in the CSPV case. In contrast to China's "treated" exports, exports from countries other than China increased in 2010 after U.S. antidumping duties were applied. Since it is likely that this is, at least partially, a result of the antidumping duties applied to Chinese exports, it is a spillover effect that invalidates DID analysis of this case.

**Figure 1 – U.S. Imports of CSPV Cells**



56. The uniformity assumption requires that the WTO-inconsistent U.S. antidumping duties be the same for all "treated" groups. This assumption is violated both in the design and in the implementation of China's tabular DID methodology. The uniformity assumption does not hold under China's incorrect counterfactual. Moreover, the uniformity assumption also requires that exports in the comparison group be equally "untreated." Erroneously, three of the four comparison groups that China considers are composed of total U.S. imports, including the "treated" imports from China and other countries subject to antidumping duties.

57. In short, a fundamental flaw in China's approach is China's failure to demonstrate that its comparison groups can reasonably be expected to satisfy the key assumptions of tabular DID methodology.

### **3. China's Final Estimates of Nullification or Impairment Are Fundamentally Biased and Mutually Exclusive**

58. The final estimates of nullification or impairment presented by China for each antidumping duty order are averages of estimates obtained from tabular DID analysis showing the differences in the level of import values and estimates obtained from tabular DID analysis showing the differences in the natural logarithm ("log") of import values.

59. As noted in China's Exhibit CHN-18, a DID model may be applied to a variable in levels or in logs, but the parallel trends assumption can only be met in either levels or logs. Put another way, the parallel trends assumption cannot be met in both levels and logs. China's estimates from these metrics are therefore biased. Contrary to China's assertions, the distortions attributable to China's incorrect application of tabular DID analysis do not average out. Rather, they accumulate.

#### **4. China's Methodology is Based on Incorrect Data Inputs**

60. China's approach to data – capturing total trade flows occurring under basket HTS categories – is unreasonable because it grossly over-estimates the value of trade of products subject to WTO-inconsistent aspects of U.S. antidumping measures. Many of the reference HTS codes are broad categories, of which the product subject to an antidumping duty order is just a subset.

61. China's data does not provide the Arbitrator a reliable basis to estimate nullification or impairment in this proceeding. If the Arbitrator were to use China's incorrect data, it would lead to a level of suspension that would be well in excess of the actual level of nullification or impairment.

#### **IV. CONCLUSION**

62. For the reasons set forth above, the United States respectfully requests that the Arbitrator find that the level of suspension of concessions or other obligations requested by China is not "equivalent" to the level of nullification or impairment. The United States requests that the Arbitrator find that the level of nullification or impairment is no more than **\$200.790 million** annually.

**ANNEX B-2****EXECUTIVE SUMMARY OF THE ARGUMENTS OF CHINA**

1. The United States has kept more than 100 WTO-inconsistent AD measures in place after the expiration of the reasonable period of time in the present dispute DS471. These measures continue to be in force today, causing significant monetary losses to multiple industries in China from reduced export revenues. Because the United States has refused to bring its unlawful measures in compliance with its WTO-obligations, China is seeking authorization to suspend concessions in the amount of \$7 billion. China's written submissions show that this is a conservative estimate of the N/I China is suffering.

**I. CHINA'S PROPOSED METHODOLOGY IS A REASONABLE AND APPROPRIATE WAY TO MEASURE THE N/I.**

2. The mandate of the Arbitrator under Article 22.6 is to determine whether the level of suspension requested by a complaining party is equivalent to its level of N/I. Based on past Article 22.6 decisions, the methodology proposed by the complaining party need only be reasonable and equivalent. Rather, the non-complaining party bears the burden of proving that an alternative calculation is more credible, verifiable, reasonable and equivalent.

3. In this proceeding, China has proposed the Arbitrator to use an econometric approach known as "difference-in-differences" (DID) to estimate the value of Chinese imports "but for" the WTO-inconsistent measures. This methodology compares the actual value of imports from China during year 2017 with a representative group using a counterfactual based on the elimination of the WTO-inconsistent measures. In this case, China used multiple alternative representative groups to show that its overall conclusion about the level of N/I was reasonable, equivalent and robust.

**A. The Appropriateness Of China's Counterfactual**

4. China's counterfactual consists of the complete elimination of the WTO-inconsistent measures. This counterfactual is in line with the treaty text and previous Article 22.6 DSU practice.

5. Article 3.7 of the DSU explicitly contemplates the withdrawal of the measure as the first objective of the dispute settlement mechanism in the absence of a mutually agreed solution. Furthermore, the predominant practice under Article 22.6 has been to adopt the elimination of the measure as the most appropriate counterfactual. This has been the case in 9 of the 11 Article 22.6 proceedings. The only two disputes where the Arbitrator adopted the modification of the measure - instead of its withdrawal- present significant differences with the dispute at hand. In *US – Gambling (Article 22.6 – US)*, the Arbitrator took into account public policy concerns when choosing its counterfactual. Similar concerns are not present in this dispute. The underlying circumstances of *US-Washing Machines (Article 22.6-US)* are also distant. Specifically, *US-Washing Machines (Article 22.6-US)* concerned only 1 AD order, a few producers and a single product (in contrast with the current dispute involving more than 100 AD orders, a vast number of exporters and multiple products). Also, in *US-Washing Machines (Article 22.6-US)* a WTO-consistent margin dumping was calculated during the administrative proceedings and communicated to the exporters (no similar calculation exists in the present dispute). Further still, while in *US-Washing Machines (Article 22.6-US)* the parties agreed as to the use of key underlying data and its reliability, the use of data is a matter of much controversy and debate in this case.

6. There are multiple considerations that make China's counterfactual the most "reasonable" and "plausible" in accordance with the requirements expressed in *US – Gambling (Article 22.6 – US)*.

7. First, the counterfactual suggested by China provides legal certainty as it eliminates the measures from a moment forward. This is a stable solution compared to the counterfactual suggested by the United States (separate rates) which rests on the weak assumption that a particular level of AD rate will continue to be applied in the future. The United States' proposal

however ignores the nature of its own retrospective system allowing for the modification of AD margins in yearly AD reviews.

8. Second, China's proposed counterfactual ensures WTO-consistency at all stages. Under the U.S. counterfactual both the AD rates resulting from the Article 22.6 proceeding and the rates resulting from administrative reviews are affected by WTO-inconsistency risks. This is all the more troubling considering that China has identified four likely WTO-inconsistencies that would affect the AD rates being proposed by the United States as benchmark AD rate to be used in the N/I calculation. China considers that the Arbitrator should take into account the WTO-consistency issue of a counterfactual to determine the reasonableness of the N/I calculation. At the same time, it will never be "reasonable" for the Arbitrator to adopt a counterfactual that is fraught with multiple WTO-inconsistencies. Other arbitrators have taken possible WTO-consistency into account.

9. Third, China's counterfactual provides a uniform solution, as the withdrawal applies in the same manner to every AD order. In contrast, the U.S. proposed counterfactual is highly speculative and complex as it involves different actions that the United States may or not adopt for each single AD order.

10. Moreover, the counterfactual consisting of the withdrawal of the measure creates the proper incentive to induce compliance with the Panel and Appellate Body findings. Within the context of the present dispute, the Arbitrator has to take into consideration all relevant factors (*Canada – Aircraft Credits and Guarantees (Article 22.6 – Canada)*, para. 3.28.), including the nature of the violations (use of the WA-T methodology; single rate presumption for a large number of AD proceedings) and the continuous passivity of the United States. The United States could have made use of the instruments that are available under the U.S. regulatory framework to bring its WTO-inconsistent orders under compliance. However, it has not taken a single step in the more than 24 months that have passed since the DSB recommendations and now ten months since the expiration of the RPT.

11. While acknowledging that the withdrawal of the measure would be the most appropriate counterfactual, China believes that the only real alternatives for the Arbitrator are either (1) set the dumping margins at 0.00%, or (2) use the suggested AD benchmark rates that China has proposed in Exhibit CHN-53. We note that for 11 of the AD cases, the AD rates proposed by China in Exhibit CHN-53 are the same as proposed by the United States. And for all other cases, China has proposed a benchmark AD rate that the United States itself calculated in a previous phase of the AD case.

## **B. Appropriateness Of The DID Economic Model**

12. China's DID methodology offers an accurate, reasonable, and conservative approach for determining the level of trade that would have occurred in the absence of WTO-inconsistent measures.

13. As a first step, China's DID methodology compares China's trade before WTO-inconsistent duties were imposed with China's 2017 level of trade. Later, the methodology compares the change in trade over the same period of time for a reasonable benchmark, which address the question of how would trade have evolved "but for" the WTO-inconsistent AD orders. Finally, the methodology compares the performance of China *vis-à-vis* the performance of the benchmark, which serves as a basis for the N/I calculation.

14. In applying the DID methodology, China uses as a baseline a multi-year average of trade for the period immediately preceding the imposition of AD duties. This multi-year average draws a conservative estimation compared to the adoption of the "year prior" when imports can be at their peak. The use of the period prior to the imposition of the AD orders is essential for obtaining trade volumes that are "untainted" by WTO-inconsistent measures. These levels are more accurate compared to actual volumes in 2017, showing depressed levels at a height of 70% (or 99% in the case of entities subject to the PRC-wide entity rate) because of the impact of the WTO-inconsistent measures.

15. As to the remedy date, both parties agreed to use 2017 for which a full year data are available, instead of 2018 which would have required annualization of partial year data. China used 2017 data despite 2018 and 2019 data showing higher volumes and reflecting the growth in trade over time.



16. In order to determine its N/I calculation, China considered several alternative approaches in construing the comparison group. Specifically, China considered (1) non-subject import suppliers for the HS10 digit level products subject to the WTO-inconsistent AD duties and (2) all-import suppliers (HS10) (including China for the purposes of completeness); (3) HS6 all suppliers; (4) HS4 all suppliers (5) HS2 all suppliers. The last three benchmarks permitted the elimination of collateral distortions caused by AD measures on specific products. The marginal variations between the different approaches strongly support the verifiability, robustness and reliability of China's estimates.

17. In addition to this, China conducted alternative N/I estimates taking into account the impact of CVD measures. To this end, China divided the cases assessed into three groups: (1) cases without companion CVD measures; (2) cases with companion CVD measures where the CVD margin is relatively large but the N/I is relatively small and (3) cases with companion CVD measures where the margin is relatively large and the N/I estimate is relatively large. These separate scenarios avoid the "double-counting" problem affecting the United States methodology and are in line with China's conservative approach.

18. China applied its different perspectives (HS10, HS6, HS4, HS2 or with and without CVD) both to the "as applied" and "as such" violations. For "as applied" violations China picked 13 representative cases out of the more than 100 AD WTO-inconsistent orders covering half of the trade to the United States. Calculations at HS10 digit level (both at trade level and growth level) showed averages between \$10 billion and \$7 billion. The estimations were confirmed at a more aggregated level of trade (HS6, HS4 and HS2) with an average across all "as applied" estimates of \$7,323 million.

19. China also calculated a N/I associated to the "as such" violation given that the United States continues maintaining a "single rate presumption" contrary to the DSB recommendations. China determined the N/I of "as such" violations based on 12 cases using the same methodology as the "as applied" cases. The different approaches (HS 10, HS6, HS4, and HS2 with and without CVD) showed averages ranging between \$7,577 million to \$4,571 million. Thus, summing the "as applied" and "as such" estimations, the resulting N/I will always be over \$10 billion even where the lowest ranges of the two groups are considered.

20. Besides being conservative, China's methodology presents numerous advantages. As an illustration, the DID methodology is robust as to the duration of the duties, changes in the competitive landscape (such as mergers and industry changes as well as other related follow-on remedy actions) and common systematic shocks (e.g. exchange rate shocks, a financial crisis, or broad changes in U.S. protectionism).

21. Another advantage is that the different estimates and benchmarks offer the Arbitrator the possibility to select the value it consider more reasonable. It is China's view that the most reasonable option would be adopting the "average-of-averages" scenario. However, even if the Arbitrator selected the lowest possible bound, the N/I will still be in excess of the \$7 billion requested by China. In any case, China's range of alternatives contrasts with the United States proposal which is based in a single estimate for each precise case.

22. Moreover, China's approach is based on publicly available data easily verifiable and replicable. China's approach utilizes official U.S. import statistics published by the United States providing import data for the very 10-digit HS tariff codes. Both the USDOC itself and the USITC have used these import statistics to present total values of the merchandise subject to the AD case. This can be seen for instance in the USDOC "Fact Sheets" presenting the total import value affected by the AD case. By contrast, the U.S. data are based on a mix of private (confidential) data (i.e. Census) and public data. This is particularly reprehensible, considering that the United States has specific information and data for the quantity of imports by each and every single exporter under each of the AD cases (and reviews).

23. In addition to this, China's proposed methodology anticipated and addressed all the concerns raised by the United States about the methodology.

24. First, the United States insisted the Arbitrator impose some type of statistical significance test. However, there are no previous Article 22.6 proceedings where the N/I calculations were subject to such a significance test. Most recently, in *US—Washing Machines (Article 22.6 – US)* proceeding

neither party proposed a methodology that included tests of statistical significance. Likewise, in that dispute the Arbitrator proposed a N/I method that did not include any formal metrics of statistical significance. Importantly, the United States has not provided evidence in the present dispute of statistical significance in applying its own approach.

25. Second, the United States argued that China's results were not robust. Nevertheless, China has presented ample proof of the robustness of its N/I approach through seven sets of benchmarks (four estimates based on HS10 data, "with or without CVD"; and three estimates based on more aggregated HS data). From the upper and lower bounds, each single scenario shows that the requested \$7 billion in countermeasures is a conservative request. In contrast, even if the U.S. scenario is conceptually similar to China's methodology, its implementation presents important flaws and mathematical mistakes. Also, the fact that the U.S. methodology is not subject to any robustness checks exposes it to possible bias.

26. Third, the United States has criticised China for not using a regression approach in its N/I methodology. However, China is not aware of any previous Article 22.6 proceeding where the Arbitrator insisted on regression techniques as a basis for N/I estimates. Furthermore, China has shown that its methodology produces exactly the same results as what would be produced under a basic regression model. However, the fact that the tabular approach is easily implementable makes it particularly attractive for this complex dispute. The dispute involves 100 AD orders, which is what prompted China to focus on two dozen AD orders. Moreover, there are not HS10 digit level detailed variables that can be used to predict trade patterns at product level for each country. Under these circumstances, there is no sufficient data for a detailed analysis of specific products using a regression technique as suggested by the United States. The fact that the United States itself does not adopt such a detailed a regression approach in its own N/I evidences the complexities involved. Indeed, the US' elasticity model is based on a handful (assumed) parameters and pieces of market information producing predictions. The United States assumes perfect competition and ignores market competitive conditions when running the model. Similarly, the formula approach adopted by the United States is based on very little data.

27. Fourth, the United States condemns the lack of parallel trends, uniformity and stability of China's model. These quibbles intend to obfuscate China's methodology but are not based on any supporting facts or in any more verifiable, credible or equivalent alternative methodology. The United States critiques ignore that China is not proposing any time series analyses in the methodology and that parallel trends are more discussed in regression techniques. In addition, China's meta-analysis of different scenarios washes out minor differences across multiple specifications. Also, the critiques as to changes of the product scope of HS codes are innocuous in China's methodology, but to the contrary, the variable HS codes would sustain the robustness of China's methodology.

28. Besides, much of the United States criticism confirms that China's estimation of N/I is conservative. An example of this can be found in the United States insistence that China's trade was growing faster than other countries. However, China's N/I approach understates China's 2017 trade as it considers China's trade flows to follow the overall market average.

### **C. The Ability Of China's DID Methodology To Reflect PRC-Wide Entity Volume Only And Changing AD Rates**

29. China fully believes that its initially proposed methodology is reasonable for calculating N-I for the AD cases at issue. However, should the Arbitrator desire to adopt the U.S. proposed limitations, China's proposed DID methodology can easily be adapted to do so. Specifically, China's proposed DID methodology can easily be adapted (a) to limit the N/I calculation only to PRC-wide entity import volume and (b) to reflect changes in AD rates, rather than complete withdrawal of the measure. China has presented the Arbitrator an analytical framework that allows one to adjust the DID N/I estimates to incorporate (a) and (b).

30. China has provided the Arbitrator with a revised N/I calculation that adopts both of these adjustments. Concerning limiting the N-I calculation only to PRC-wide entity imports, China note that it has adopted the very PRC-wide entity share of total China imports set forth by the United States (in Exhibit USA-54), even though China believes that the PRC-wide entity shares proposed by the United States are understated. Using the US's proposed PRC-wide entity shares China revised

N/I estimate is \$5.6 billion (a figure which China believes understates the actual N/I due to the flaws in the US's submission).

31. And concerning the changing AD rates, China notes that it agrees with the United States on many of the benchmark AD rates that should be used and for many others the China benchmark AD rate that China proposes reflects a past AD margin calculated by the USDOC itself. (See Exhibit CHN-53 and Exhibit CHN-57 (as corrected by China's 13 June 2019 letter). Adjusting its estimates for changing AD rates, rather than removal, China's revised N/I estimate is \$12 billion, well above the \$7 billion requested.

32. In short, China's proposed DID methodology can easily be adapted to reflect the two primary concerns of the United States; namely, limiting the N/I calculation to PRC-wide entity volume only and utilizing changing AD rates rather than complete withdrawal.

## **II. THE U.S. METHODOLOGY SUFFERS FROM SERIOUS FLAWS, AND MUST BE REJECTED**

### **A. U.S. Proposed N/I Calculation Approaches Are Premised On Using USDOC AD Determinations That Are WTO-Inconsistent.**

33. The United States' assumption is that it could remedy the use of the WTO-inconsistent PRC-wide rate simply by switching the PRC-wide entity AD rate to the "all others rates". This approach, however, ignores that the "all others" AD rates for 2017 being used are, in fact, infected by multiple WTO-inconsistencies.

34. First, the United States is aggressively applying "facts available" to many of the AD cases involving China. China has shown that at least eight of the AD orders under dispute involved an analysis inconsistent with Article 6.8 and Annex II of the Anti-Dumping Agreement for determining the underlying individual-company AD rates used by the USDOC to calculate the "all others" AD rate for 2017 imports.

35. Second, the United States has incurred improper double counting of AD and CVD duties in at least 15 of the AD cases under dispute, thus infringing Article 19.3 of the SCM Agreement.

36. Third, the United States has engaged in differential pricing practices in more than 13 AD cases under dispute in violation of the second sentence of Article 2.4.2 of the Anti-Dumping Agreement.

37. Fourth, the United States has improperly applied "zeroing" in at least five of the cases in contravention of Article 9.3 of the Anti-Dumping Agreement. This practice has been found by the DSB to be WTO-inconsistent (*US – Zeroing (Japan)*, *US – Stainless Steel (Mexico)*.)

38. Collectively these four legal theories alone apply to 22 of the 24 cases at issue, representing virtually all of the N/I calculated by either China or the United States. These are the most obvious WTO-inconsistencies. However China does not dismiss the possibility that a closer scrutiny on what the U.S. would actually do in the future could reveal further WTO violations.

### **B. U.S. Proposed N/I Calculation Approaches Have Serious Methodological Flaws**

39. Unlike China's use of a single, consistently applied methodology, the United States has presented a mixture of different approaches. Both the "elasticities approach" and the "formula-based" methodologies used for the single rate presumption have serious flaws. And the United States then compounds these flaws when it turns to yet another approach to address zeroing.

40. The "elasticity" approach used for 17 cases is deeply flawed. The United States starts with a tiny trade value for 2017 reflecting a severely trade-distorting effect of the WTO-inconsistent AD duties. Indeed, in *US-Washing Machines (Article 22.6-US)*, the Arbitrator rejected the approach proposed by the United States of adopting the actual and depressed level of trade. In these 17 AD cases the Chinese imports have been driven out of the market because of the effects of the WTO-inconsistent measures. However, the elasticity model does not predict the reinstatement of the imports to previous levels, but produces a very small change in the trade estimates as a result from the suppliers starting again from near zero levels.

41. Moreover, the United States does not establish a set of elasticities. For about half of the required elasticities the United States just asserts a value with no documentation or backup (with no distinction between import supply elasticity from subject China, non-subject China and all foreign sources). This contrasts with the practice of the USITC which runs its models on a range of elasticities in its injury investigations and never reports a single estimate. It is important to note that outcomes can vary drastically with relatively small changes in specific elasticities. In fact, elasticity models are not appropriate in cases with large AD duties and an estimated large reduction (in some cases of up to 100% and on an average of 72.9% for all cases assessed). The greater the reduction is, the less likely that the model will predict realistic trends in trade.

42. The United States further does not explain how it reaches these values for elasticities and neither does it provide sufficient data to replicate the results. Even worse, these older elasticities are inappropriately applied to heavily distorted 2017 market conditions. Other flaws on the elasticity model include reliance on inconsistent key data inputs, (including sales data), arbitrary adjustments and uncertainty of certain data (e.g. domestic shipments).

43. As to the "formula-based" approach applied to 5 of the cases, the United States asserts that the "elasticity" approach is not reliable when PRC-wide entity market shares are below 1%. However, the United States does not support this cutoff with any factual or scientific background.

44. The U.S. formula is premised on the wrong factual assumption: the application of the historic share of total imports for the PRC-wide entity is calculated by using import data from the original investigation. This approach does not take account of the fact that the USDOC revoked the original separate rate status of many Chinese exporters included under the PRC-wide rate in subsequent reviews. As a result, the calculation of the N/I is underestimated.

45. Also, the "formula based" methodology incorrectly determines the total volume of 2017 imports from China absent the WTO-inconsistent measures. According to the U.S. formula, compliance would not change the total value of imports from China. Under the United States' view, compliance would simply mean reallocating trade from one set of Chinese firms to others with no net increase in trade from China. This formula brings a biased downward result that omits any harm China has suffered from the United States' WTO-inconsistent policy in certain cases for more than a decade.

46. The U.S. approach for addressing *zeroing* in *Coated Paper* is also mistaken. At the outset, the United States recognizes that without zeroing the AD rate would have been negligible [\*\*\*\*] and that an AD order would not have been imposed. Nevertheless, the United State ignores its own assertion when calculating the level of N/I by adopting an approach that examines the difference in trade volume during 2017 between the imposition of 7.62% and an AD rate of *zero*. The United States adopts an untenable assumption that APP's 2017 import level would not have changed had the United States correctly not imposed any AD duty order on APP China's U.S. exports from the start. Additionally, the United States ignores that a reduction in AD duty rate is simply not the same as termination of the AD order. Under the U.S. system, the uncertainty of any AD order and the need to go through annual administrative reviews each year imposed a burden on the exporter and creates uncertainty about future trade flows.

47. Finally, the U.S. claim that it may calculate N/I that is *zero* for two AD orders (*Corrosion-Resistant Steel* and *Diamond Sawblades*) must be rejected because (i) the mere maintenance of a AD order would cause an "as such" violation which is presumed to carry certain level of N/I in accordance with WTO jurisprudence (*US— 1916 Act (Article 22.6 (EC))*) and (ii) even where the N/I could be zero and was not- the United States has not met its burden of proof demonstrating that the N/I was actually zero.

### **C. U.S. Failed To Provide Sufficient Data And Explanations To Allow Proper Assessment And Replication**

48. The U.S. methodology is based on the use of non-public data, which makes its replicability impossible. Among the most troubling examples of this is the use of confidential import values of "subject merchandise for 2017", since these values constitute the core for quantification under the U.S. approach.

49. Another piece of relevant information that can neither be verified by China or the Arbitrator is the amount of trade by the PRC-wide entity, and its entire underlying classification system (i.e., is a particular firm a PRC-wide entity or not?). This data was provided only at the very end of the proceeding, far too late for China to have any reasonable chance to verify the data.

50. What is perplexing is that the United States possesses this information and routinely provides such information in every AD review for the purpose of mandatory respondent selection. Thus the United States could have provided verifiable back-up data allowing China and the Arbitrator to check any possible mistakes in the compilation exercise. Instead, the United States has chosen to provide information that is not available from any public source.

51. The above contrasts with Article 22.6 practice (e.g. *EC – Bananas III (Article 22.6 – EC)* and USDOC preference (e.g. *Warmwater Shrimp from China*) to use publicly available information as it is more credible, factual and verifiable.

#### **D. The United States Has Not Met Its Burden Of Proof**

52. In an Article 22.6 proceeding, the non-complying party has the burden of proving that the requested countermeasures are not equivalent to the level of N/I. In doing so, the non-complying party should present a more reasonable methodology. Where both N/I calculation approaches are equally reasonable, the Arbitrator must rule in favor of the requesting party (*EC – Hormones (US) (Article 22.6 – EC)*).

53. The United States has not shown that the level of countermeasures proposed by China is not equivalent to the level of N/I. In addition, the United States has not presented reasoned estimates that rely on credible, verifiable and fact-specific information. As a result, the United States has not met its burden of proof for an alternative calculation of N/I.

### **III. THE TWO-STEP METHODOLOGY FROM US—WASHING MACHINES (ARTICLE 22.6-US) ALSO HAS FLAWS, BUT MAKES MORE SENSE THAN THE U.S. METHODOLOGY**

54. In addition to all the adjustments proposed, China has cooperated with the Arbitrator in exploring the option of adapting the two-step methodology used in *US-Washing Machines (Article 22.6 -US)* to the present dispute.

55. China continues to believe that its proposed DID methodology is more appropriate because it can easily cover all cases, and can be adapted to address concerns about focusing on only the PRC-wide entity trade and focusing on the change in the AD margins. But unlike the United States, China has provided the Arbitrator with sufficient data to apply the alternative two-step approach for 19 of 24 cases (18 of which from public sources and other available information on the case *Large Residential Washers.*).

#### **A. Reasons Why The Two-Step Methodology Is Less Appropriate For This Specific Dispute.**

56. There are many reasons why the *US-Washing Machines (Article 22.6-US)* two-step approach cannot be appropriately applied to the present proceeding.

57. In the first place, the N/I method used in *US-Washing Machines* requires the Arbitrator to have specific credible data about total market size both for the year prior to the order (which varies) and the remedy period (2017). In the U.S.'s methodology, such data do not even exist for some of the WTO-inconsistent measures. Moreover, the data provided by the United States are in many cases overly broad or even confidential. This is in contrast with *US-Washing Machines* where both Korea and United States agreed on some of the data inputs for the model (e.g., AHAM data used to estimate the total market size). China's DID methodology is more appropriate because it is less data intensive.

58. Further, the *US-Washing Machines (Article 22.6-US)* model requires specific data on the market share of those Chinese exporters who exported to the United States in the year prior to the AD case, but were part of the PRC-wide entity in 2017. The United States has only provided part of the required data following its oral statement and in many cases are subject to confidentiality. This

was not the situation in *US-Washing Machines (Article 22.6-US)* where both parties had access to the same information.

59. Additionally, elasticity models unreliably capture the impact of duties and duty rate changes of the magnitudes observed in the dispute. In *US-Washing Machines (Article 22.6-US)*, the WTO-inconsistent duty was approximately 11% and the remedy involved partial removal by percentage points. The present dispute involves hundreds of AD rates ranging from modest levels to over 200 percentage points with possible adjustments of similar magnitude. Accordingly, the accuracy of elasticity measures is paramount. China's DID methodology does not depend on accurate estimates of elasticities.

60. Also, it is particularly difficult to incorporate the maintenance of the WTO-inconsistent measures over time in the two-step methodology. More than a dozen of the 24 cases assessed had WTO-inconsistent duties in place for more than a decade and Armington-style elasticity models capture only the short-term impact of duties. As noted above, China's DID methodology does not depend on accurate estimates of elasticities.

61. On the top of that, there are multiple uncertainties that would affect the implementation of the two-step approach, namely (i) at which level will the AD be adjusted; (ii) the potential WTO-inconsistency of the AD rate; and (iii) the change in the exporter's status and its integration under the PRC-wide entity. Due to these uncertainties the two-step approach is inadequate under the circumstances

#### **B. If The Two-Step Approach Is Applied**

62. However, notwithstanding these uncertainties if the Arbitrator decides to use the two-step approach of *US-Washing Machines (Article 22.6-US)*, China would note the following. First, it is important to be very clear about what that methodology actually involved. To clarify, China has reviewed the computer programming code and would summarize those steps as follows:

63. Step 1: Identify the composition of the PRC-wide entity in 2017. Identification is determined by the producers' or exporters' status, not by whether or not the producer or exporter shipped any subject product in 2017.

64. Step 2: Identify, for the year preceding the imposition of the relevant AD duties, the value of imports from the producers or exporters that were included in the entity in 2017, i.e. the PRC-wide entity as composed in 2017. This should not be based on 2017 trade values.

65. Step 3: On that basis, find the market share of the PRC-wide entity (as defined by PRC-wide status in 2017) in the year preceding the imposition of the relevant AD duties. In the same way, calculate the market shares for the year preceding the imposition of the relevant AD duties for all other market participants, namely: domestic shipments, imports from the rest of China, and imports from the rest of the world.

66. Step 4: Using the market shares as calculated in step (3) apply the Armington-based model to calculate the market shares of the PRC-wide entity (as defined by PRC-wide status in 2017) as well as the other three sources, following the imposition of the WTO inconsistent AD duties

This step will produce the Armington model's short-run impact of the WTO inconsistent AD duties.

67. Step 5: Using the market share data as calculated in step (4), re-run the Armington-based model to calculate the market shares of the PRC-wide entity (as defined by PRC-wide status in 2017) as well as the other three sources, assuming the WTO inconsistent AD duties (as applied to the PRC-wide entity) are replaced by WTO consistent AD duties.

68. Step 6: Calculate the difference in market share for the PRC-wide as calculated in step (5) with the market share for the PRC-wide entity as calculated in step (4).

69. Step 7: Using a measure of the total market size for 2017, apply the difference in market shares calculated in step (6) to calculate the short-run loss in trade to China due to the US application

of WTO inconsistent AD measures. This final step requires multiplying the difference in market shares (step 6) by the size of total market. The most logical basis for the market size is the remedy year, which in this dispute is 2017. If accurate data for overall market size is not available for the remedy year, the Arbitrator could use market size in a prior year (adjusted for, say, GDP growth).

This step will produce the N/I for the case.

70. China has provided the necessary information to the Arbitrator from public sources for implementing the two-step approach in the case at hand. In this regard, China has been more forthcoming with the Arbitrator and more willing to provide the necessary data than the United States.

71. In addition, China has a number of observations in relation to the implementation of its proposed methodology.

72. Particularly, China considers that the Arbitrator must reject distorted trade values of 2017 for both the total volume of China trade and trade held by the PRC-wide entity. The 2017 trade volume figures are significantly depressed because of the maintenance of WTO-inconsistent measures spanning over more than a decade. In previous Article 22.6 disputes, Arbitrators have refused to use parameters distorted by WTO-inconsistent measures (*US-Washing Machines (Article 22.6-US)* para. 3.115; *US-Gambling (Article 22.6-US)* para. 3.134).

73. In the light of this, it is preferable for the Arbitrator to use a reasonable estimate based on the data for "year prior", which is not affected by WTO-inconsistencies. China provided public "year prior" data (total market size, US domestic shipments and all other imports) included in USITC injury reports for 18 cases. In addition, China submitted other available information on the case *Large Residential Washers*.

74. As to the market share held by the PRC-wide entity, the Arbitrator could use the percentage for the year prior to the AD measures. This percentage is conservative as it understates the true share of Chinese exporters that are part of the PRC-wide entity rate in 2017. The Arbitrator can determine the PRC-wide entity share in the year prior through (a) total imports from China of subject merchandise (as presented by China both in the HS code data for "year prior" in every single case or in the USITC injury reports) and (b) through the best estimate of the PRC-wide entity share of imports (as presented by United States in Exhibit USA-54). As to the information provided by the United States, China disagrees with distinguishing between Group 3 and Group 4 exporters as no evidentiary justification supports this contrived separation within the PRC-wide entity import volume.

75. For the total size of the U.S. market, the Arbitrator could use the data on the size of the market for the year prior to the AD measures adjusted using U.S. GDP growth. China has strongly recommended rejecting the problematic U.S. data which resorts in a variety of *ad hoc* unverifiable sources and extrapolations (including the combination of private data and aggregated SEC financial reports).

76. As to the elasticities, China suggested using the midpoint of N/I estimates included in the USITC reports instead of a midpoint elasticities as proposed by the United States. The Armington model is highly sensitive to elasticities, which makes it necessary to include the high and low end of elasticity estimates in order to avoid distorting the N/I.

77. Finally, as regards the N/I calculation, China provided the Arbitrator specific rates that could be used, and agreeing with the rates suggested by the United States for 11 out of 24 cases.

#### **IV. DESPITE THE REMOVAL OF THE AD ORDER ON OTR TIRES, THE ARBITRATOR SHOULD CALCULATE A N/I FOR THE PERIOD IT WAS IN PLACE FOLLOWING THE EXPIRY OF THE IMPLEMENTATION PERIOD.**

78. In the case at hand, the United States had not withdrawn the inconsistent measures contained in *OTR Tires* by August 2018 – the end of reasonable period of time established by the Article 21.3(c) Arbitration. On the contrary, the measures remained effective for six additional months – until February 2019, covering most of the duration of the Article 22.6 of DSU proceeding.

79. China's considers that imposing a level of N/I on *OTR Tires* for the period it was in place after the expiry of the implementation period is particularly important for inducing compliance in this case.

**Conclusion**

80. China has presented a methodology which is sound, supported by academic and scientific background and which is based on a counterfactual that is in line with prior Article 22.6 practice. The most conservative minimum estimate for each benchmark and alternative adjustments totals \$8 billion.

81. The United States has not met its burden of proving that China's requested countermeasures do not equal the level of N/I by presenting a more reasonable and verifiable alternative. Further, in the view of the lack of any action shown by the United States in the 24 months that passed since the adoption of the DSB recommendations, the Arbitrator should approach the United States' methodology sceptically; bearing in mind that it is based on mere hypotheticals and speculations about what might be done and that remain fraught with WTO-inconsistencies.

82. In conclusion, China notes that its requested N/I of \$7 billion is conservative and reasonable.

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**ANNEX C**

PROCEDURAL RULING OF THE ARBITRATOR

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## ANNEX C-1

### PROCEDURAL RULING ON THE UNITED STATES' REQUEST TO PARTIALLY OPEN THE ARBITRATOR'S MEETING TO PUBLIC OBSERVATION

#### 1 INTRODUCTION

1.1. The United States requests the Arbitrator to partially open the meeting with the parties in this proceeding, by adopting "procedures that allow WTO Members and the public to observe U.S. statements during the arbitration meeting."<sup>1</sup> The United States makes this request after China opposed the United States' request to fully open the meeting in this proceeding. China also disagrees with the United States' request to partially open the meeting.<sup>2</sup> Below, we set out the main arguments of the parties, followed by our analysis and ruling on the United States' request.

#### 2 MAIN ARGUMENTS OF THE PARTIES

2.1. The United States contends that opening the Arbitrator's meeting with the parties would enhance transparency of WTO dispute settlement proceedings and heighten confidence in the WTO.<sup>3</sup> The United States substantiates its request by relying on the second sentence of Article 18.2 of the DSU, which allows parties to a dispute to disclose "statements of its own positions to the public".<sup>4</sup> In addition, the United States contends that the DSU does not require an Arbitrator to close its meeting in proceedings under Article 22.6 of the DSU.<sup>5</sup> Further, the United States relies on the Arbitrator's statement in *US – Tuna II (Mexico) (Article 22.6 – US)* that "due process requires that 'all parties must be given the opportunity to lift the confidentiality of statements of their own positions at partially open meetings.'"<sup>6</sup>

2.2. China, for its part, relies on the language of the first sentence of Article 18.2 of the DSU, which states that submissions shall remain confidential.<sup>7</sup> In China's view, this obligation concerns not only written submissions, but also extends to "proceedings to discuss those submissions".<sup>8</sup> China also points to the panel working procedures contained in Appendix 3 to the DSU, which in paragraph 3 refer to the confidentiality of the deliberations and submitted documents, and in paragraph 2 refer to the panel meeting in closed session.<sup>9</sup> Seen in that context, Article 18.2 of the DSU cannot, according to China, provide a basis to force a partially open meeting over China's objection.<sup>10</sup>

2.3. China submits that confidentiality of statements is particularly appropriate in Article 22.6 proceedings, which involve very technical economic and legal issues.<sup>11</sup> In China's view, having a closed meeting would not prevent the United States from making public statements of its own positions in line with the second sentence of Article 18.2 of the DSU.<sup>12</sup> To that end, China argues that the transparency objective invoked by the United States could be achieved through publication of the Arbitrator's decision together with the executive summaries of the parties' arguments.<sup>13</sup>

<sup>1</sup> United States' comments on the Arbitrator's draft timetable and Working Procedures, p. 4; and comments on China's comments on the Arbitrator's draft timetable and Working Procedures, pp. 3-4.

<sup>2</sup> China's comments on the Arbitrator's draft timetable and Working Procedures, pp. 4-5; and comments on the United States' comments on the Arbitrator's draft timetable and Working Procedures, pp. 1-3.

<sup>3</sup> United States' comments on the Arbitrator's draft timetable and Working Procedures, pp. 3-4.

<sup>4</sup> United States' comments on the Arbitrator's draft timetable and Working Procedures, p. 4.

<sup>5</sup> United States' comments on China's comments on the Arbitrator's draft timetable and Working Procedures, p. 3.

<sup>6</sup> United States' comments on the Arbitrator's draft timetable and Working Procedures, p. 4 (quoting Decision by the Arbitrator, *US – Tuna II (Mexico) (Article 22.6 – US)*, para. 2.26).

<sup>7</sup> China's comments on the Arbitrator's draft timetable and Working Procedures, p. 4.

<sup>8</sup> China's comments on the Arbitrator's draft timetable and Working Procedures, p. 4.

<sup>9</sup> China's comments on the United States' comments on the Arbitrator's draft timetable and Working Procedures, p. 2.

<sup>10</sup> China's comments on the United States' comments on the Arbitrator's draft timetable and Working Procedures, p. 3.

<sup>11</sup> China's comments on the Arbitrator's draft timetable and Working Procedures, p. 4.

<sup>12</sup> China's comments on the Arbitrator's draft timetable and Working Procedures, p. 4.

<sup>13</sup> China's comments on the Arbitrator's draft timetable and Working Procedures, p. 4.

### 3 ANALYSIS BY THE ARBITRATOR

3.1. Pursuant to paragraph 2 of the working procedures contained in Appendix 3 to the DSU, panels by default meet in "closed session". However, Article 12.1 of the DSU provides that "[p]anels shall follow the Working Procedures in Appendix 3 unless the panel decides otherwise after consulting the parties to the dispute." WTO adjudicators, therefore, enjoy some discretion in establishing their own working procedures. However, this discretion "does not extend to modifying the substantive provisions of the DSU"<sup>14</sup>, and therefore cannot be exercised in a manner that is inconsistent with those provisions.

3.2. In this case, the United States argues that providing for a partially open meeting would serve to facilitate the United States' right under Article 18.2 of the DSU to disclose statements of its own positions to the public.<sup>15</sup> China disagrees, and invokes its right to confidentiality under Article 18.2. The parties thus have differing views on the scope of the obligation to protect confidential information under Article 18.2.<sup>16</sup>

3.3. We observe that although Article 18.2 of the DSU authorizes a party to a dispute to disclose statements of its own positions to the public, nothing in the DSU provides that this right must be exercised through the holding of fully or partially open meetings, especially when the parties disagree on the matter.<sup>17</sup> We do not consider that a WTO adjudicator that declined a party's request to hold partially open meetings would be depriving that party of its rights under Article 18.2 or under any other provisions of the DSU. There are other ways in which parties can make statements of their positions public: for example, some WTO Members post their submissions and the written versions of their statements at WTO dispute settlement meetings on the internet.<sup>18</sup> Therefore, it is within our discretion to grant or deny the United States' request.

3.4. When faced with requests to exercise their discretion to partially open their meetings to public observation, WTO adjudicators have taken into account a number of considerations in determining whether partially open meetings would be appropriate in the specific circumstances.<sup>19</sup> In exercising our discretion, we have carefully considered the competing interests of the parties as well as the need for prompt settlement of this dispute. In this context, we take into account that, to safeguard China's right to maintain the confidentiality of its statements and the business confidential information submitted in this proceeding, the partial opening of our meeting would call for the adoption and implementation of complex working procedures, which would require the participation of both parties and may affect our ability to issue a timely decision. We have also taken into account that with the exception of three proceedings, all in the same dispute<sup>20</sup>, WTO adjudicators have declined to fully or partially open substantive meetings for public viewing where one party was not in agreement.<sup>21</sup> In the current proceeding, we consider that the disagreement between the parties on the proposal to partially open the meeting, as well as the parties' conflicting views on the scope of the obligation to protect confidential information in the context of a partially open meeting, give rise to concerns that counsel against holding a partially open meeting.

<sup>14</sup> Appellate Body Report, *India – Patents (US)*, para. 92.

<sup>15</sup> See above para. 2.1.

<sup>16</sup> See above paras. 2.2-2.3.

<sup>17</sup> This view has been consistently affirmed in prior WTO dispute settlement proceedings. (See, e.g. Decision by the Arbitrator, *US – Gambling (Article 22.6 – US)*, para. 2.29; and Appellate Body Report, *EU – Biodiesel (Argentina)*, Annex D-2, paras. 6-7.

<sup>18</sup> See, e.g. Panel Reports, *US – OCTG (Korea)*, Annex E-1, para. 3.4; and *US – Upland Cotton (Article 21.5 – Brazil)*, para. 8.20.

<sup>19</sup> For example, the arbitrator in *US – Tuna II (Mexico) (Article 22.6 – US)* identified four factors that guide the evaluation of whether to grant a request to partially open a meeting: "(a) a non-disclosing party's right to confidentiality protection of statements of its own position, (b) due process, (c) the prompt settlement of disputes, or (d) the careful and efficient discharge, or the integrity, of the adjudicative function." (Decision by the Arbitrator, *US – Tuna II (Mexico) (Article 22.6 – US)*, para. 2.31).

<sup>20</sup> Panel Reports, *US – Tuna II (Mexico) (Article 21.5 – US) / US – Tuna II (Mexico) (Article 21.5 – Mexico II)*, paras. 7.16-7.34; and Decision by the Arbitrator, *US – Tuna II (Mexico) (Article 22.6 – US)*, paras. 2.17-2.34.

<sup>21</sup> See, e.g. Appellate Body Report, *EU – Biodiesel (Argentina)*, Annex D-2, paras. 6-7; Panel Reports, *US – Upland Cotton (Article 21.5 – Brazil)*, para. 8.20, and *US – OCTG (Korea)*, Annex E-1, paras. 3.1-3.4 and fn 1; and Decision by the Arbitrator, *US – Gambling (Article 22.6 – US)*, para. 2.29.

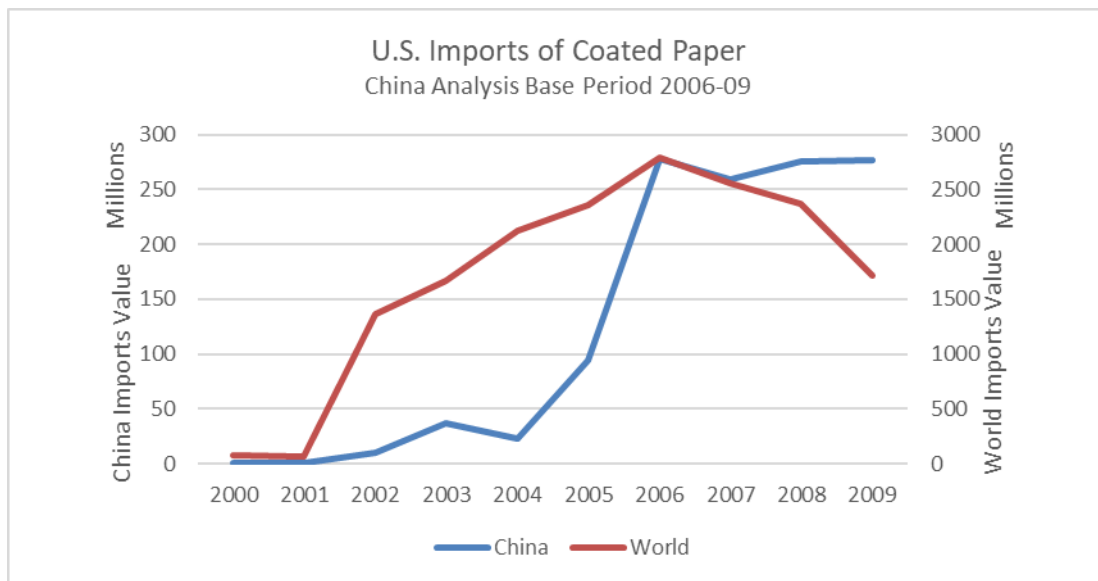
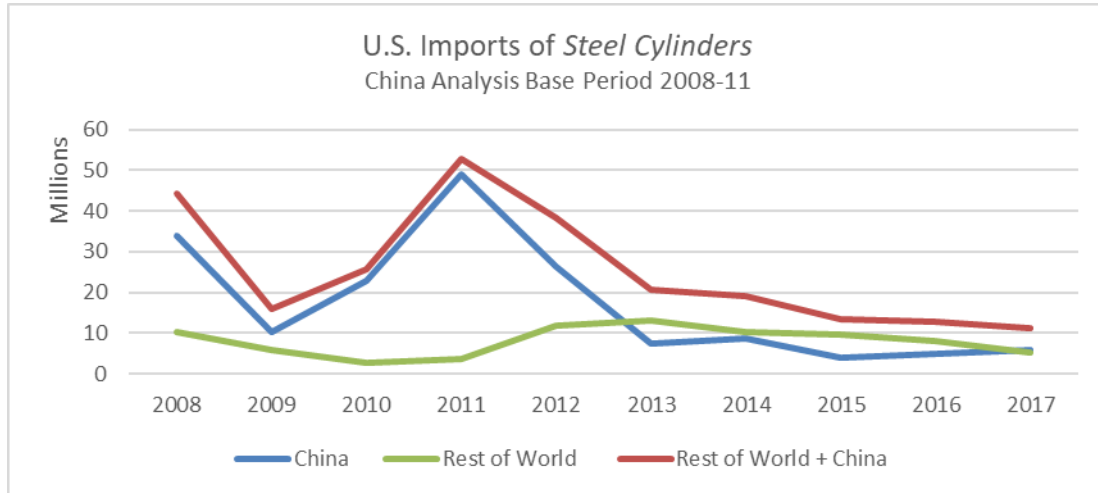
#### **4 CONCLUSION**

4.1. Based on the reasons set out above, we deny the United States' request to partially open our meeting with the parties to public observation.

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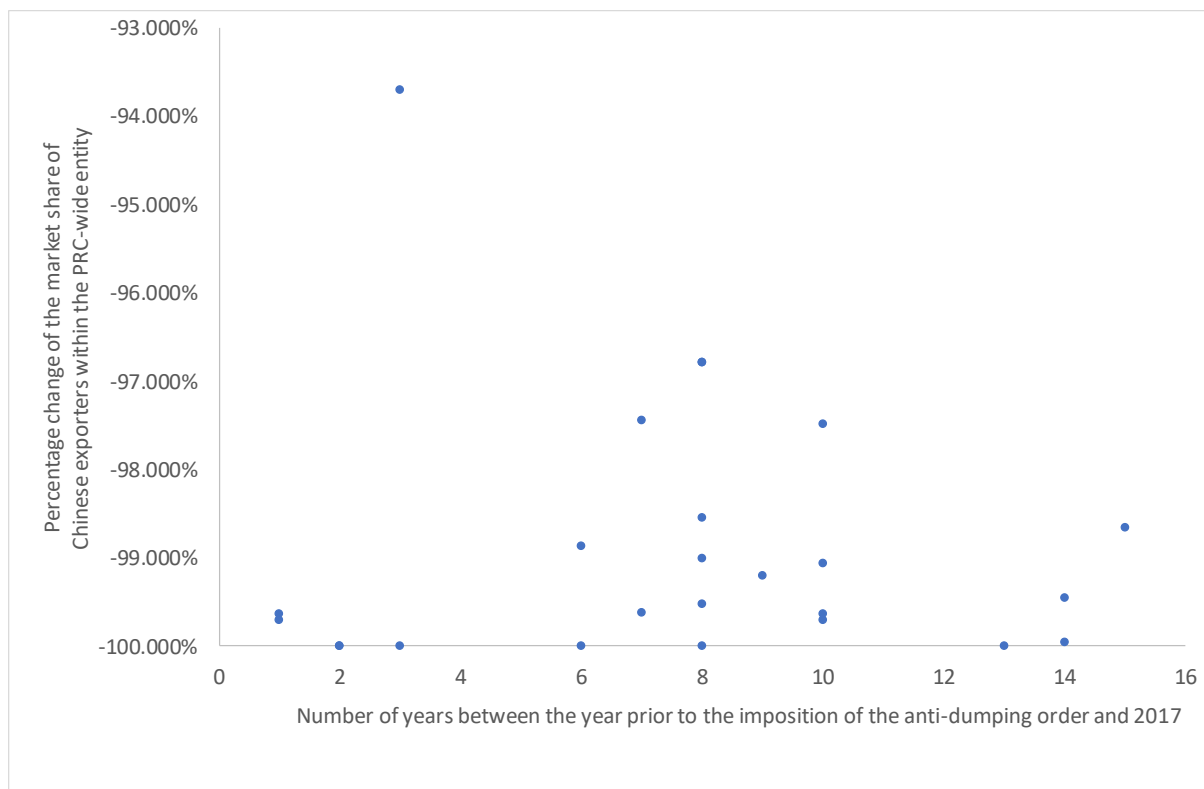
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**ANNEX D-1****CHINA'S PROPOSED DID TABULAR APPROACH: GRAPHICAL ILLUSTRATIONS OF THE FAILURE TO MEET THE PARALLEL TRENDS ASSUMPTION PROVIDED BY THE UNITED STATES**

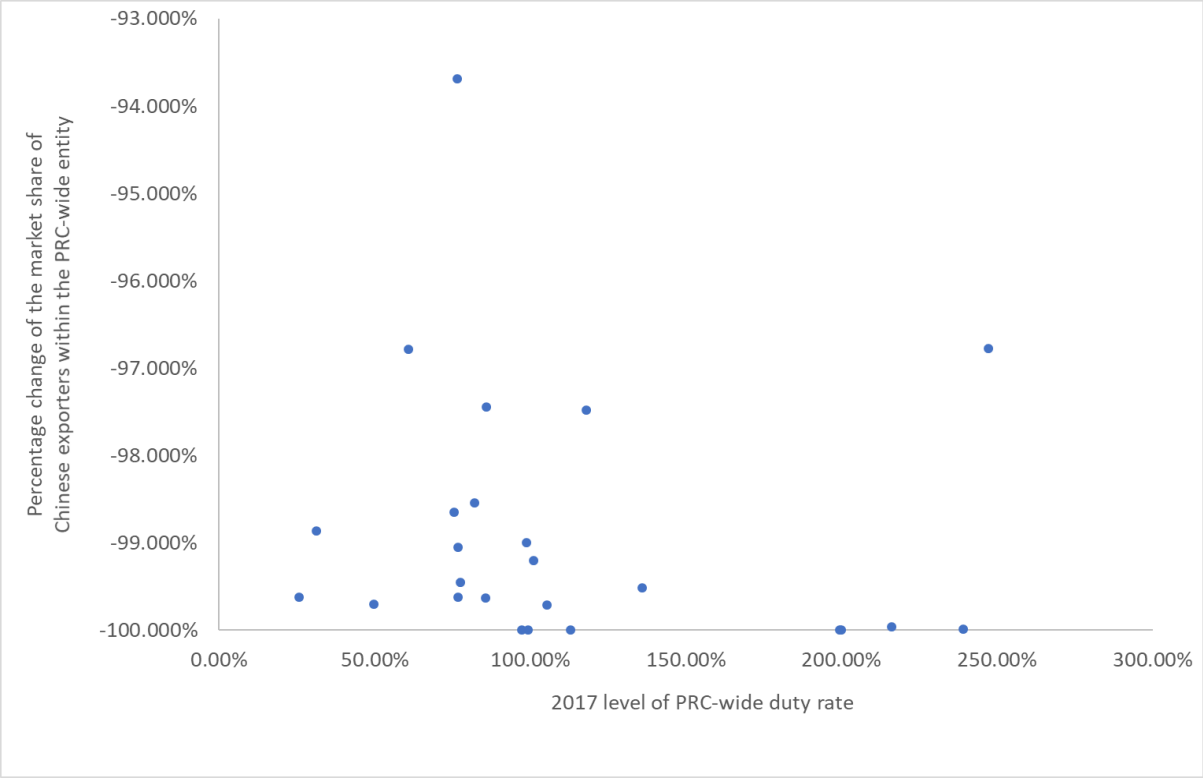
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UNITED STATES' PROPOSED ARMINGTON MODEL: RELATIONSHIP BETWEEN THE CHANGE IN THE MARKET SHARE OF CHINESE EXPORTERS WITHIN THE PRC-WIDE ENTITY AND THE DURATION OF THE ANTI-DUMPING ORDERS



ANNEX D-3

UNITED STATES' PROPOSED ARMINGTON MODEL: RELATIONSHIP BETWEEN THE CHANGE IN THE MARKET SHARE OF CHINESE EXPORTERS WITHIN THE PRC-WIDE ENTITY AND THE LEVEL OF THE WTO-INCONSISTENT PRC-WIDE DUTY RATES





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## ANNEX E-1

### DATA INPUTS FOR US MARKET VALUES IN THE YEAR PRIOR TO THE IMPOSITION OF THE ANTI-DUMPING ORDERS

Anti-dumping order	Year prior to the imposition of the anti-dumping order	Total US market <sup>1</sup> (1,000 USD)	US shipments (1,000 USD)	US imports from China (1,000 USD)	US imports from the rest of the world (1,000 USD)	Data sources
<i>Aluminum Extrusions</i>	2010	4,606,386	3,557,906	537,498	510,982	All data from USITC publication 4677.
<i>Bags</i>	2003	995,491	772,295	[[***]]	[[***]]	Data on the value of US shipments from USITC publication 3710. Aggregated value of US imports from China based on company-specific data from US Customs (Exhibit USA-94 (BCI)). Value of US imports from the rest of the world estimated by subtracting the value of US imports from China, based on data from US Customs (Exhibit USA-94 (BCI)), from the total value of US imports reported in USITC publication 3710.
<i>Coated Paper</i>	2009	1,742,204	1,023,688	297,527	420,989	All data from USITC publication 4192.
<i>Diamond Sawblades</i>	2009	[[***]]	73,000	[[***]]	63,300	Value of US shipments provided by the United States based on adjusted data from USITC publication 4559 (Exhibit USA-58). Aggregated value of US imports from China based on company-specific data from US Customs (Exhibit USA-94 (BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).

<sup>1</sup> The value of the total US market is obtained by adding the value of US shipments, the value of US imports from China, and the value of US imports from the rest of the world.

Anti-dumping order	Year prior to the imposition of the anti-dumping order	Total US market <sup>1</sup> (1,000 USD)	US shipments (1,000 USD)	US imports from China (1,000 USD)	US imports from the rest of the world (1,000 USD)	Data sources
<i>Furniture</i>	2003	4,666,667	1,878,740	[[***]]	[[***]]	Data on the value of US shipments from USITC publication 3743. Aggregated value of US imports from China based on company-specific data from US Customs (Exhibit USA-94 (BCI)). Value of US imports from the rest of the world estimated by subtracting the value of US imports from China, based on data from US Customs (Exhibit USA-94 (BCI)), from the total value of US imports reported in USITC publication 3743.
<i>OCTG</i>	2009	[[***]]	1,844,564	[[***]]	1,338,100	Annualized value of US shipments based on data from USITC publication 4124. Aggregated value of US imports from China based on company-specific data from US Customs (Exhibit USA-94 (BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).
<i>OTR Tires</i>	2007	1,794,409	1,006,044	282,390	505,975	All data from USITC publication 4031.
<i>PET Film</i>	2007	[[***]]	1,157,356	[[***]]	259,200	Annualized value of US shipments based on data from USITC publication 3962. Aggregated value of US imports from China based on company-specific data from US Customs (Exhibit USA-94 (BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).

Anti-dumping order	Year prior to the imposition of the anti-dumping order	Total US market <sup>1</sup> (1,000 USD)	US shipments (1,000 USD)	US imports from China (1,000 USD)	US imports from the rest of the world (1,000 USD)	Data sources
<i>Ribbons</i>	2009	650,438	580,172	[[***]]	[[***]]	Value of US shipments provided by the United States based on adjusted data from the US Census Bureau's Annual Survey of Manufactures and USITC DataWeb (Exhibit USA-58). Aggregated value of US imports from China based on company-specific data from US Customs (Exhibit USA-94 (BCI)). Value of US imports from the rest of the world estimated by subtracting the value of US imports from China, based on data from US Customs (Exhibit-94 (BCI)), from the total value of US imports reported in USITC publication 4634.
<i>Shrimp</i>	2004	[[***]]	407,484	[[***]]	3,249,100	Annualized value of US shipments based on data from USITC publication 3748. <sup>2</sup> Aggregated value of US imports from China based on company-specific data from US Customs (Exhibit USA-94 (BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).
<i>Solar Panels</i>	2011	[[***]]	804,853	[[***]]	2,748,200	Data on the value of US shipments from USITC publication 4360. Aggregated value of US imports from China based on company-specific data from US Customs (Exhibit USA-94 (BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).

<sup>2</sup> China proposes to annualize the value of USD 12,434,000 of US shipments of selected US processors from USITC publication 3748 for January to June 2004 (USITC publication 3748, Table C-3). However, we note that according to the USITC report, this value excludes data for previously excluded, targeted related parties. For consistency, we use the annualized value of USD 407,484,000 of US shipments from USITC publication 3748 (USITC publication 3748, Table C-1).

Anti-dumping order	Year prior to the imposition of the anti-dumping order	Total US market <sup>1</sup> (1,000 USD)	US shipments (1,000 USD)	US imports from China (1,000 USD)	US imports from the rest of the world (1,000 USD)	Data sources
<i>Steel Cylinders</i>	2011	[[***]]	87,675	[[***]]	3,800	Value of US shipments provided by the United States based on data from the annual report by the only US producer, TriMas Corporation (Exhibit USA-58). Aggregated value of US imports from China based on company-specific data from US Customs (Exhibit USA-94 (BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).
<i>Wood Flooring</i>	2010	783,896	341,130	326,981	115,785	All data from USITC publication 4970.
<i>Copper Pipe and Tube</i>	2009	2,110,170	1,602,849	244,101	263,220	All data from USITC publication 4193.
<i>Iron Pipe Fittings</i>	2002	[[***]]	276,200	[[***]]	43,900	Value of US shipments based on data from the US Census Bureau's Annual Survey of Manufactures and USITC DataWeb adjusted by the United States (Exhibit USA-58). Aggregated value of US imports from China based on company-specific data from US Customs (Exhibit USA-94 (BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).
<i>Passenger Vehicle and Light Truck Tires</i>	2014	22,154,265	11,740,621	2,561,898	7,851,746	All data from USITC publication 4545.

Anti-dumping order	Year prior to the imposition of the anti-dumping order	Total US market <sup>1</sup> (1,000 USD)	US shipments (1,000 USD)	US imports from China (1,000 USD)	US imports from the rest of the world (1,000 USD)	Data sources
<i>Residential Washers</i>	2016	[[***]]	[[***]]	[[***]]	639,000	Value of US shipments estimated by subtracting the value of US imports, based on data from US Customs (Exhibit USA-94 (BCI)) and data from the US Census Bureau (Exhibit USA-57), from the total value of the US market, based on data from the Association of Home Appliance Manufacturers (Exhibit CHN-56 (BCI)). Aggregated value of US imports from China based on data from US Customs (Exhibit USA-94(BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).
<i>Sheet and Strip</i>	2016	[[***]]	2,998,837	[[***]]	757,300	Annualized value of US shipments based on data from USITC publication 4676. Aggregated value of US imports from China based on company-specific data from US Customs (Exhibit USA-94(BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).
<i>Steel Flat Products</i>	2015	8,405,722	6,794,385	295,705	1,315,632	All data from USITC publication 4619.
<i>Steel Line Pipe</i>	2008	[[***]]	1,065,369	[[***]]	582,400	Annualized value of US shipments based on data from USITC publication 4055. <sup>3</sup> Aggregated value of US imports from China based on company-specific data from US Customs (Exhibit USA-94 (BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).

<sup>3</sup> We note that, although 2008 is the year prior to the imposition of the anti-dumping order, China proposes to use data on the value of US shipments in 2007 reported in USITC publication 4055 (Exhibit CHN-55 (BCI)). We consider this an inadvertent error and instead annualize the value of US shipments for January to September 2008 reported in USITC publication 4055.

Anti-dumping order	Year prior to the imposition of the anti-dumping order	Total US market <sup>1</sup> (1,000 USD)	US shipments (1,000 USD)	US imports from China (1,000 USD)	US imports from the rest of the world (1,000 USD)	Data sources
<i>Steel Nails</i>	2007	984,270	220,411	[[***]]	[[***]]	Data on the value of US shipments from USITC publication 4022. Aggregated value of US imports from China based on company-specific data from US Customs (Exhibit USA-94 (BCI)). Value of US imports from the rest of the world estimated by subtracting the value of US imports from China, based on data from US Customs (Exhibit USA-94 (BCI)), from the total value of US imports reported in USITC publication 4022.
<i>Steel Pipe</i>	2007	2,185,379	1,350,791	470,787	363,801	All data from USITC publication 4435.
<i>Steel Products</i>	2015	17,055,633	13,451,548	[[***]]	[[***]]	Data on the value of US shipments from USITC publication 4620. <sup>4</sup> Aggregated value of US imports from China based on company-specific data from US Customs (Exhibit USA-94 (BCI)). Value of US imports from the rest of the world estimated by subtracting the value of US imports from China, based on data from US Customs (Exhibit USA-94 (BCI)), from the total value of US imports reported in USITC publication 4620.
<i>Steel Standard, Line, and Pressure Pipe</i>	2009	683,206	199,357	135,240	348,609	All data from USITC publication 4595.

<sup>4</sup> We note that China proposes to use a value of USD 13,451,548 as the value of 2015 US shipments reported by the USITC (Exhibit CHN-55 (BCI)). However, USITC publication 4620 reports the value of 2015 US domestic shipments as USD 13,451,548,000. We consider China's proposed value to be an inadvertent error and use the value reported in USITC publication.

Anti-dumping order	Year prior to the imposition of the anti-dumping order	Total US market <sup>1</sup> (1,000 USD)	US shipments (1,000 USD)	US imports from China (1,000 USD)	US imports from the rest of the world (1,000 USD)	Data sources
<i>Steel Wire Rod</i>	2014	[[***]]	2,682,510	[[***]]	970,200	Annualized value of US shipments based on data from USITC publication 4509. Aggregated value of US imports from China based on company-specific data from US Customs (Exhibit USA-94 (BCI)). Data on the value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).

Note: The values in this table have been rounded for display purposes only. The actual values were used when implementing the Armington model under the two steps to estimate the level of nullification or impairment.



## ANNEX E-2

### DATA INPUTS FOR THE SHARE OF US IMPORTS FROM CHINA COVERED BY DIFFERENT CHINESE EXPORTERS IN THE YEAR PRIOR TO THE IMPOSITION OF THE ANTI-DUMPING ORDERS

Anti-dumping order	Share of Chinese exporters subject to WA-T duty rate	Share of Chinese exporters subject to PRC-wide duty rate	Share of remaining Chinese exporters	Data sources
<i>Aluminum Extrusions</i>	n/a	[[***]]%	[[***]]%	Share of remaining Chinese exporters outside the PRC-wide entity estimated by the United States based on company-specific trade data reported by the exporters. Share of Chinese exporters subject to the PRC-wide duty rate estimated by the United States by subtracting the share of Chinese exporters outside the PRC-wide entity from the total value of US imports from China, based on HTS aggregated monthly trade data from USITC Dataweb (United States' response to Arbitrator question No. 62, paras. 70-72).
<i>Bags</i>	n/a	[[***]]%	[[***]]%	Share of remaining Chinese exporters outside the PRC-wide entity estimated by the United States based on company-specific trade data reported by the exporters. Share of Chinese exporters subject to the PRC-wide duty rate estimated by the United States by subtracting the share of Chinese exporters outside the PRC-wide entity from the total value of US imports from China, based on HTS aggregated monthly trade data from USITC Dataweb (Exhibit USA-54 (BCI)).

Anti-dumping order	Share of Chinese exporters subject to WA-T duty rate	Share of Chinese exporters subject to PRC-wide duty rate	Share of remaining Chinese exporters	Data sources
<i>Coated Paper</i>	[[***]]%	[[***]]%	[[***]]%	Share of Chinese exporters subject to the PRC-wide duty rate estimated by the United States by subtracting the value of US imports from Chinese exporters outside the PRC-wide entity, based on company-specific trade data reported by the exporters, from the total value of US imports from China, based on HTS aggregated monthly trade data from USITC Dataweb (Exhibit USA-54 (BCI)). Share of Chinese exporters subject to WA-T duty rate estimated by identifying their names based on USDOC records for investigation A-570-958 (Annex E-4), and their corresponding shipments values based on confidential company-specific trade data compiled by US Customs (Exhibit USA-94 (BCI)). Share of remaining Chinese exporters estimated by identifying their names based on USDOC records for investigation A-570-958 (Annex E-4), and their corresponding shipments values based on confidential company-specific trade data compiled by US Customs (Exhibit USA-94 (BCI)).
<i>Diamond Sawblades</i>	n/a	[[***]]%	[[***]]%	Share of Chinese exporters subject to PRC-wide duty rate estimated by subtracting the aggregated value of shipments by Chinese exporters outside the PRC-wide entity from the total value of US imports from China. The aggregated value of shipments by Chinese exporters outside the PRC-wide entity estimated by identifying the names of all Chinese exporters outside the PRC-wide entity, based on USDOC records for investigation A-570-900 (Annex E-3), and their corresponding shipments values, based on confidential company-specific trade data compiled by US Customs (Exhibit USA-94 (BCI)). Share of remaining Chinese exporters estimated as the residual share.

Anti-dumping order	Share of Chinese exporters subject to WA-T duty rate	Share of Chinese exporters subject to PRC-wide duty rate	Share of remaining Chinese exporters	Data sources
<i>Furniture</i>	n/a	[[***]]%	[[***]]%	Share of Chinese exporters subject to PRC-wide duty rate estimated by subtracting the aggregated value of shipments by Chinese exporters outside the PRC-wide entity from the total value of US imports from China. The aggregated value of shipments by Chinese exporters outside the PRC-wide entity estimated by identifying the names of all Chinese exporters outside the PRC-wide entity, based on USDOC records for investigation A-570-890 (Annex E-3), and their corresponding shipments values, based on confidential company-specific trade data compiled by US Customs (Exhibit USA-94 (BCI)). Share of remaining Chinese exporters estimated as the residual share.
<i>OCTG</i>	[[***]]%	[[***]]%	[[***]]%	Share of Chinese exporters subject to the PRC-wide duty rate estimated by the United States by subtracting the value of US imports from Chinese exporters outside the PRC-wide entity, based on company-specific trade data reported by the exporters, from the total value of US imports from China, based on HTS aggregated monthly trade data from USITC Dataweb (Exhibit USA-54 (BCI)). Share of Chinese exporters subject to WA-T duty rate estimated by identifying their names based on USDOC records for investigation A-570-943 (Annex E-4), and their corresponding shipments values based on confidential company-specific trade data compiled by US Customs (Exhibit USA-94 (BCI)). Share of remaining Chinese exporters estimated by identifying their names based on USDOC records for investigation A-570-943 (Annex E-4), and their corresponding shipments values based on confidential company-specific trade data compiled by US Customs (Exhibit USA-94 (BCI)).
<i>OTR Tires</i>	n/a	[[***]]%	[[***]]%	Share of remaining Chinese exporters outside the PRC-wide entity estimated by the United States based on company-specific trade data reported by the exporters. Share of Chinese exporters subject to the PRC-wide duty rate estimated by the United States by subtracting the share of Chinese exporters outside the PRC-wide entity from the total value of US imports from China, based on HTS aggregated monthly trade data from USITC Dataweb (Exhibit USA-54 (BCI)).

Anti-dumping order	Share of Chinese exporters subject to WA-T duty rate	Share of Chinese exporters subject to PRC-wide duty rate	Share of remaining Chinese exporters	Data sources
<i>PET Film</i>	n/a	[[***]]%	[[***]]%	Share of remaining Chinese exporters outside the PRC-wide entity estimated by the United States based on company-specific trade data reported by the exporters. Share of Chinese exporters subject to the PRC-wide duty rate estimated by the United States by subtracting the share of Chinese exporters outside the PRC-wide entity from the total value of US imports from China, based on HTS aggregated monthly trade data from USITC Dataweb (Exhibit USA-54 (BCI)).
<i>Ribbons</i>	n/a	[[***]]%	[[***]]%	Share of Chinese exporters subject to PRC-wide duty rate estimated by subtracting the aggregated value of shipments by Chinese exporters outside the PRC-wide entity from the total value of US imports from China. The aggregated value of shipments by Chinese exporters outside the PRC-wide entity estimated by identifying the names of all Chinese exporters outside the PRC-wide entity, based on USDOC records for investigation A-570-952 (Annex E-3), and their corresponding shipments values, based on confidential company-specific trade data compiled by US Customs (Exhibit USA-94 (BCI)). Share of remaining Chinese exporters estimated as the residual share.
<i>Shrimp</i>	n/a	[[***]]%	[[***]]%	Share of Chinese exporters subject to PRC-wide duty rate estimated by subtracting the aggregated value of shipments by Chinese exporters outside the PRC-wide entity from the total value of US imports from China. The aggregated value of shipments by Chinese exporters outside the PRC-wide entity estimated by identifying the names of all Chinese exporters outside the PRC-wide entity, based on USDOC records for investigation A-570-893 (Annex E-3), and their corresponding shipments values, based on confidential company-specific trade data compiled by US Customs (Exhibit USA-94 (BCI)). Share of remaining Chinese exporters estimated as the residual share.

Anti-dumping order	Share of Chinese exporters subject to WA-T duty rate	Share of Chinese exporters subject to PRC-wide duty rate	Share of remaining Chinese exporters	Data sources
<i>Solar Panels</i>	n/a	[[***]]%	[[***]]%	Share of remaining Chinese exporters outside the PRC-wide entity estimated by the United States based on company-specific trade data reported by the exporters. Share of Chinese exporters subject to the PRC-wide duty rate estimated by the United States by subtracting the share of Chinese exporters outside the PRC-wide entity from the total value of US imports from China, based on HTS aggregated monthly trade data from USITC Dataweb (Exhibit USA-54 (BCI)).
<i>Steel Cylinders</i>	[[***]]%	[[***]]%	[[***]]%	Share of Chinese exporters subject to PRC-wide duty rate estimated by subtracting the aggregated value of shipments by Chinese exporters outside the PRC-wide entity from the total value of US imports from China. The aggregated value of shipments by Chinese exporters outside the PRC-wide entity estimated by identifying the names of all Chinese exporters outside the PRC-wide entity, based on USDOC records for investigation A-570-977 (Annex E-3), and their corresponding shipments values, based on confidential company-specific trade data compiled by US Customs (Exhibit USA-94 (BCI)). Share of Chinese exporters subject to WA-T duty rate estimated by identifying their names based on USDOC records for investigation A-570-977 (Annex E-4), and their corresponding shipments values based on confidential company-specific trade data compiled by US Customs (Exhibit USA-94 (BCI)). Share of remaining Chinese exporters estimated by identifying their names based on USDOC records for investigation A-570-977 (Annex E-4), and their corresponding shipments values based on confidential company-specific trade data compiled by US Customs (Exhibit USA-94 (BCI)).
<i>Wood Flooring</i>	n/a	[[***]]%	[[***]]%	Share of remaining Chinese exporters outside the PRC-wide entity estimated by the United States based on company-specific trade data reported by the exporters. Share of Chinese exporters subject to the PRC-wide duty rate estimated by the United States by subtracting the share of Chinese exporters outside the PRC-wide entity from the total value of US imports from China, based on HTS aggregated monthly trade data from USITC Dataweb (Exhibit USA-54 (BCI)).

Anti-dumping order	Share of Chinese exporters subject to WA-T duty rate	Share of Chinese exporters subject to PRC-wide duty rate	Share of remaining Chinese exporters	Data sources
<i>Copper Pipe and Tube</i>	n/a	[[***]]%	[[***]]%	Share of remaining Chinese exporters outside the PRC-wide entity estimated by the United States based on company-specific trade data reported by the exporters. Share of Chinese exporters subject to the PRC-wide duty rate estimated by the United States by subtracting the share of Chinese exporters outside the PRC-wide entity from the total value of US imports from China, based on HTS aggregated monthly trade data from USITC Dataweb (Exhibit USA-54 (BCI)).
<i>Iron Pipe Fittings</i>	n/a	[[***]]%	[[***]]%	Share of remaining Chinese exporters outside the PRC-wide entity estimated by the United States based on company-specific trade data reported by the exporters. Share of Chinese exporters subject to the PRC-wide duty rate estimated by the United States by subtracting the share of Chinese exporters outside the PRC-wide entity from the total value of US imports from China, based on HTS aggregated monthly trade data from USITC Dataweb (Exhibit USA-54 (BCI)).
<i>Passenger Vehicle and Light Truck Tires</i>	n/a	[[***]]%	[[***]]%	Share of remaining Chinese exporters outside the PRC-wide entity estimated by the United States based on company-specific trade data reported by the exporters. Share of Chinese exporters subject to the PRC-wide duty rate estimated by the United States by subtracting the share of Chinese exporters outside the PRC-wide entity from the total value of US imports from China, based on HTS aggregated monthly trade data from USITC Dataweb (Exhibit USA-54 (BCI)).
<i>Residential Washers</i>	n/a	[[***]]%	[[***]]%	Share of Chinese exporters subject to PRC-wide duty rate estimated by subtracting the aggregated value of shipments by Chinese exporters outside the PRC-wide entity from the total value of US imports from China. The aggregated value of shipments by Chinese exporters outside the PRC-wide entity estimated by identifying the names of all Chinese exporters outside the PRC-wide entity, based on USDOC records for investigation A-570-033 (Annex E-3), and their corresponding shipments values, based on confidential company-specific trade data compiled by US Customs (Exhibit USA-94 (BCI)). Share of remaining Chinese exporters estimated as the residual share.

Anti-dumping order	Share of Chinese exporters subject to WA-T duty rate	Share of Chinese exporters subject to PRC-wide duty rate	Share of remaining Chinese exporters	Data sources
<i>Sheet and Strip</i>	n/a	[[***]]%	[[***]]%	Share of remaining Chinese exporters outside the PRC-wide entity estimated by the United States based on company-specific trade data reported by the exporters. Share of Chinese exporters subject to the PRC-wide duty rate estimated by the United States by subtracting the share of Chinese exporters outside the PRC-wide entity from the total value of US imports from China, based on HTS aggregated monthly trade data from USITC Dataweb (Exhibit USA-54 (BCI)).
<i>Steel Flat Products</i>	n/a	[[***]]%	[[***]]%	Share of remaining Chinese exporters outside the PRC-wide entity estimated by the United States based on company-specific trade data reported by the exporters. Share of Chinese exporters subject to the PRC-wide duty rate estimated by the United States by subtracting the share of Chinese exporters outside the PRC-wide entity from the total value of US imports from China, based on HTS aggregated monthly trade data from USITC Dataweb (Exhibit USA-54 (BCI)).
<i>Steel Line Pipe</i>	n/a	[[***]]%	[[***]]%	Share of remaining Chinese exporters outside the PRC-wide entity estimated by the United States based on company-specific trade data reported by the exporters. Share of Chinese exporters subject to the PRC-wide duty rate estimated by the United States by subtracting the share of Chinese exporters outside the PRC-wide entity from the total value of US imports from China, based on HTS aggregated monthly trade data from USITC Dataweb (Exhibit USA-54 (BCI)).
<i>Steel Nails</i>	n/a	[[***]]%	[[***]]%	Share of remaining Chinese exporters outside the PRC-wide entity estimated by the United States based on company-specific trade data reported by the exporters. Share of Chinese exporters subject to the PRC-wide duty rate estimated by the United States by subtracting the share of Chinese exporters outside the PRC-wide entity from the total value of US imports from China, based on HTS aggregated monthly trade data from USITC Dataweb (Exhibit USA-54 (BCI)).

Anti-dumping order	Share of Chinese exporters subject to WA-T duty rate	Share of Chinese exporters subject to PRC-wide duty rate	Share of remaining Chinese exporters	Data sources
<i>Steel Pipe</i>	n/a	[[***]]%	[[***]]%	Share of remaining Chinese exporters outside the PRC-wide entity estimated by the United States based on company-specific trade data reported by the exporters. Share of Chinese exporters subject to the PRC-wide duty rate estimated by the United States by subtracting the share of Chinese exporters outside the PRC-wide entity from the total value of US imports from China, based on HTS aggregated monthly trade data from USITC Dataweb (Exhibit USA-54 (BCI)).
<i>Steel Products</i>	n/a	[[***]]%	[[***]]%	Share of remaining Chinese exporters outside the PRC-wide entity estimated by the United States based on company-specific trade data reported by the exporters. Share of Chinese exporters subject to the PRC-wide duty rate estimated by the United States by subtracting the share of Chinese exporters outside the PRC-wide entity from the total value of US imports from China, based on HTS aggregated monthly trade data from USITC Dataweb (Exhibit USA-54 (BCI)).
<i>Steel Standard, Line, and Pressure Pipe</i>	n/a	[[***]]%	[[***]]%	Share of remaining Chinese exporters outside the PRC-wide entity estimated by the United States based on company-specific trade data reported by the exporters. Share of Chinese exporters subject to the PRC-wide duty rate estimated by the United States by subtracting the share of Chinese exporters outside the PRC-wide entity from the total value of US imports from China, based on HTS aggregated monthly trade data from USITC Dataweb (Exhibit USA-54 (BCI)).
<i>Steel Wire Rod</i>	n/a	[[***]]%	[[***]]%	Share of remaining Chinese exporters outside the PRC-wide entity estimated by the United States based on company-specific trade data reported by the exporters. Share of Chinese exporters subject to the PRC-wide duty rate estimated by the United States by subtracting the share of Chinese exporters outside the PRC-wide entity from the total value of US imports from China, based on HTS aggregated monthly trade data from USITC Dataweb (Exhibit USA-54 (BCI)).



**ANNEX E-3****LIST OF CHINESE EXPORTERS OUTSIDE THE PRC-WIDE ENTITY USED TO ESTIMATE THE SHARE OF DIFFERENT CHINESE EXPORTERS FOR SIX ANTI-DUMPING ORDERS**

<b>Anti-dumping order</b>	<b>Exporter</b>	<b>Producer</b>	<b>Data source</b>
<i>Diamond Sawblades</i>	Advanced Technology & Materials Co., Ltd.	Advanced Technology & Materials Co., Ltd.	USDOC records for investigation A-570-900 (Exhibit USA-50)
	Bosun Tools Group Co., Ltd.	Bosun Tools Group Co., Ltd.	
	Danyang Huachang Diamond Tools Manufacturing Co., Ltd.	Danyang Huachang Diamond Tools Manufacturing Co., Ltd.	
	Danyang NYCL Tools Manufacturing Co., Ltd.	Danyang NYCL Tools Manufacturing Co., Ltd.	
	Danyang Youhe Tool Manufacturer Co., Ltd.	Danyang Youhe Tool Manufacturer Co., Ltd.	
	Fujian Quanzhou Wanlong Stone Co., Ltd.	Fujian Quanzhou Wanlong Stone Co., Ltd.	
	Guilin Tebon Superhard Material Co., Ltd.	Guilin Tebon Superhard Material Co., Ltd.	
	Hebei Jikai Industrial Group Co., Ltd.	Hebei Jikai Industrial Group Co., Ltd.	
	Huzhou Gu's Import & Export Co., Ltd.	Danyang Aurui Hardware Products Co., Ltd.	
	Huzhou Gu's Import & Export Co., Ltd.	Danyang Huachang Diamond Tools Manufacturing Co., Ltd.	
	Jiangsu Fengtai Diamond Tool Manufacture Co., Ltd.	Jiangsu Fengtai Diamond Tool Manufacture Co., Ltd.	
	Jiangyin Likn Industry Co., Ltd.	Jiangsu Fengtai Diamond Tool Manufacture Co., Ltd.	
	Jiangyin Likn Industry Co., Ltd.	Wuhan Wanbang Laser Diamond Tools Co.	
	Qingdao Shinhan Diamond Industrial Co., Ltd.	Qingdao Shinhan Diamond Industrial Co., Ltd.	
	Quanzhou Zhongzhi Diamond Tool Co., Ltd.	Quanzhou Zhongzhi Diamond Tool Co., Ltd.	
	Rizhao Hein Saw Co., Ltd.	Rizhao Hein Saw Co., Ltd.	
	Shanghai Deda Industry & Trading Co., Ltd.	Hua Da Superabrasive Tools Technology Co., Ltd.	

Anti-dumping order	Exporter	Producer	Data source
	Shanghai Robtol Tool Manufacturing Co., Ltd.	Shanghai Robtol Tool Manufacturing Co., Ltd.	
	Shijiazhuang Global New Century Tools Co., Ltd.	Shijiazhuang Global New Century Tools Co., Ltd.	
	Sichuan Huili Tools Co.	Chengdu Huifeng Diamond Tools Co., Ltd.	
	Sichuan Huili Tools Co.	Sichuan Huili Tools Co.	
	Weihai Xiangguang Mechanical Industrial Co., Ltd.	Weihai Xiangguang Mechanical Industrial Co., Ltd.	
	Wuhan Wanbang Laser Diamond Tools Co.	Wuhan Wanbang Laser Diamond Tools Co.	
	Xiamen ZL Diamond Tools Co., Ltd.	Xiamen ZL Diamond Tools Co., Ltd.	
	Zhejiang Tea Import & Export Co., Ltd.	Danyang Dida Diamond Tools Manufacturing Co., Ltd.	
	Zhejiang Tea Import & Export Co., Ltd.	Danyang Tsunda Diamond Tools Co., Ltd.	
	Zhejiang Tea Import & Export Co., Ltd.	Wuxi Lianhua Superhard Material Tools Co., Ltd.	
	Zhejiang Wanli Tools Group Co., Ltd.	Zhejiang Wanli Super-hard Materials Co., Ltd.	
	Zhenjiang Inter-China Import & Export Co., Ltd.	Danyang Weiwang Tools Manufacturing Co., Ltd.	
<i>Furniture</i>	Dongguan Lung Dong Furniture Co., Ltd., or Dongguan Dong He Furniture Co., Ltd (Lung Dong)	n/a	USDOC records for investigation A-570-890 (Exhibit USA-50)
	Rui Feng Woodwork Co., Ltd., or Rui Feng Lumber Development Co., Ltd. or Dorbest Limited (Dorbest)	n/a	
	Lacquer Craft Mfg. Co., Ltd	n/a	
	Markor International Furniture (Tianjin) Manufacturing Company, Ltd	n/a	
	Shing Mark Enterprise Co., Ltd., or Carven Industries Limited (BVI), or Carven I Industries Limited (HK), or Dongguan Zhenxin Furniture Co., Ltd., or Dongguan Yongpeng Furniture Co., Ltd (Shing Mark)	n/a	

Anti-dumping order	Exporter	Producer	Data source
	Starcorp Furniture (Shanghai) Co., Ltd., or Orin Furniture (Shanghai) Co., Ltd., or Shanghai Starcorp Furniture Co., Ltd.	n/a	
	Alexandre International Corp., or Southern Art Development Ltd., or Alexandre Furniture (Shenzhen) Co., Ltd., or Southern Art Furniture Factory	n/a	
	Art Heritage International, Ltd., or Super Art Furniture Co., Ltd., or Artwork Metal & Plastic Co., Ltd., or Jibson Industries Ltd., or Always Loyal International	n/a	
	Billy Wood Industrial (Dong Guan) Co., Ltd., or Great Union Industrial (Dongguan) Co., Ltd., or Time Faith Ltd	n/a	
	Changshu HTC Import & Export Co., Ltd	n/a	
	Cheng Meng Furniture (PTE) Ltd., or China Cheng Meng Decoration & Furniture Co., Ltd	n/a	
	Chuan Fa Furniture Factory	n/a	
	Classic Furniture Global Co., Ltd	n/a	
	Clearwise Co., Ltd	n/a	
	COE Ltd	n/a	
	Dalian Guangming Furniture Co., Ltd	n/a	
	Dalian Huafeng Furniture Co., Ltd	n/a	
	Dongguan Cambridge Furniture Co., or Glory Oceanic Co., Ltd	n/a	
	Dongguan Chunsan Wood Products Co., Ltd	n/a	
	Dongguan Creation Furniture Co., Ltd., or Creation Industries Co., Ltd	n/a	

Anti-dumping order	Exporter	Producer	Data source
	Dongguan Grand Style Furniture, or Hong Kong Da Zhi Furniture Co., Ltd	n/a	
	Dongguan Great Reputation Furniture Co., Ltd	n/a	
	Dongguan Hero Way Woodwork Co., Ltd., or Dongguan Da Zhong Woodwork Co., Ltd., or Hero Way Enterprises Ltd., or Well Earth International Ltd	n/a	
	Dongguan Hung Sheng Artware Products Co., Ltd., or Coronal Enterprise Co., Ltd	n/a	
	Dongguan Kin Feng Furniture Co., Ltd	n/a	
	Dongguan Kingstone Furniture Co., Ltd., or Kingstone Furniture Co., Ltd	n/a	
	Dongguan Liaobushangdun Huada Furniture Factory, or Great Rich (HK) Enterprise Co. Ltd	n/a	
	Dongguan Qingxi Xinyi Craft Furniture Factory (Joyce Art Factory)	n/a	
	Dongguan Singways Furniture Co., Ltd	n/a	
	Dongguan Sunrise Furniture Co., or Taicang Sunrise Wood Industry Co., Ltd., or Shanghai Sunrise Furniture Co., Ltd., or Fairmont Designs	n/a	
	Dongying Huanghekou Furniture Industry Co., Ltd	n/a	
	Dream Rooms Furniture (Shanghai) Co., Ltd	n/a	
	Eurosa (Kunshan) Co., Ltd., or Eurosa Furniture Co., (PTE) Ltd	n/a	
	Ever Spring Furniture Co. Ltd., or S.Y.C. Family Enterprise Co., Ltd	n/a	

Anti-dumping order	Exporter	Producer	Data source
	Fine Furniture (Shanghai) Ltd	n/a	
	Foshan Guanqiu Furniture Co., Ltd	n/a	
	Fujian Lianfu Forestry Co., Ltd., or Fujian Wonder Pacific Inc	n/a	
	Gaomi Yatai Wooden Ware Co., Ltd., or Team Prospect International Ltd., or Money Gain International Co	n/a	
	Garri Furniture (Dong Guan) Co., Ltd., or Molabile International, Inc., or Weei Geo Enterprise Co., Ltd	n/a	
	Green River Wood (Dongguan) Ltd	n/a	
	Guangming Group Wumahe Furniture Co., Ltd	n/a	
	Hainan Jong Bao Lumber Co., Ltd., or Jibbon Enterprise Co., Ltd	n/a	
	Hamilton & Spill Ltd	n/a	
	Hang Hai Woodcraft's Art Factory	n/a	
	Hualing Furniture (China) Co., Ltd., or Tony House Manufacture (China) Co., Ltd., or Buysell Investments Ltd., or Tony House Industries Co., Ltd	n/a	
	Jardine Enterprise, Ltd	n/a	
	Jiangmen Kinwai Furniture Decoration Co., Ltd	n/a	
	Jiangmen Kinwai International Furniture Co., Ltd	n/a	
	Jiangsu Weifu Group Fullhouse Furniture Manufacturing Corp	n/a	
	Jiangsu Yuexing Furniture Group Co., Ltd	n/a	
	Jiedong Lehouse Furniture Co., Ltd	n/a	

Anti-dumping order	Exporter	Producer	Data source
	King's Way Furniture Industries Co., Ltd., or Kingsyear Ltd	n/a	
	Kuan Lin Furniture (Dong Guan) Co., Ltd., or Kuan Lin Furniture Factory, or Kuan Lin Furniture Co., Ltd	n/a	
	Kunshan Lee Wood Product Co., Ltd	n/a	
	Kunshan Summit Furniture Co., Ltd	n/a	
	Langfang Tiancheng Furniture Co., Ltd Leefu Wood (Dongguan) Co., Ltd., or King Rich International, Ltd	n/a	
	Link Silver Ltd. (V.I.B.), or Forward Win Enterprises Co. Ltd., or Dongguan Haoshun Furniture Ltd	n/a	
	Locke Furniture Factory, or Kai Chan Furniture Co., Ltd., or Kai Chan (Hong Kong) Enterprise Ltd., or Taiwan Kai Chan Co., Ltd	n/a	
	Longrange Furniture Co., Ltd	n/a	
	Nanhai Baiyi Woodwork Co., Ltd	n/a	
	Nanhai Jiantai Woodwork Co., Ltd	n/a	
	Nantong Dongfang Orient Furniture Co., Ltd	n/a	
	Nantong Yushi Furniture Co., Ltd	n/a	
	Nathan International Ltd., or Nathan Rattan Factory	n/a	
	Orient International Holding Shanghai Foreign Trade Co., Ltd	n/a	
	Passwell Corporation, or Pleasant Wave Ltd	n/a	
	Perfect Line Furniture Co., Ltd	n/a	
	Prime Wood International Co., Ltd., or Prime Best	n/a	

Anti-dumping order	Exporter	Producer	Data source
	International Co., Ltd., or Prime Best Factory, or Liang Huang (Jiaxing) Enterprise Co., Ltd	n/a	
	PuTian JingGong Furniture Co., Ltd	n/a	
	Qingdao Liangmu Co., Ltd	n/a	
	Restonic (Dongguan) Furniture Ltd., or Restonic Far East (Samoa) Ltd	n/a	
	RiZhao SanMu Woodworking Co., Ltd	n/a	
	Season Furniture Manufacturing Co., or Season Industrial Development Co	n/a	
	Sen Yeong International Co., Ltd., or Sheh Hau International Trading Ltd	n/a	
	Shanghai Jian Pu Export & Import Co., Ltd	n/a	
	Shanghai Maoji Imp and Exp Co., Ltd	n/a	
	Sheng Jing Wood Products (Beijing) Co., Ltd., or Telstar Enterprises Ltd	n/a	
	Shenyang Shining Dongxing Furniture Co., Ltd	n/a	
	Shenzhen Forest Furniture Co., Ltd	n/a	
	Shenzhen Jiafa High Grade Furniture Co., Ltd., or Golden Lion International Trading Ltd	n/a	
	Shenzhen New Fudu Furniture Co., Ltd	n/a	
	Shenzhen Wonderful Furniture Co., Ltd	n/a	
	Shenzhen Xiande Furniture Factory	n/a	
	Shenzhen Xingli Furniture Co., Ltd	n/a	
	Shun Feng Furniture Co., Ltd	n/a	

Anti-dumping order	Exporter	Producer	Data source
	Songgang Jasonwood Furniture Factory, or Jasonwood Industrial Co., Ltd. S.A	n/a	
	Starwood Furniture Manufacturing Co. Ltd	n/a	
	Starwood Industries Ltd	n/a	
	Strongson Furniture (Shenzhen) Co., Ltd., or Strongson Furniture Co., Ltd., or Strongson (HK) Co	n/a	
	Sunforce Furniture (Hui-Yang) Co., Ltd., or Sun Fung Wooden Factory, or Sun Fung Co., or Shin Feng Furniture Co., Ltd., or Stupendous International Co., Ltd	n/a	
	Superwood Co., Ltd., or Lianjin Zongyu Art Products Co., Ltd Tarzan Furniture Industries Ltd., or Samso Industries Ltd	n/a	
	Teamway Furniture (Dong Guan) Ltd., or Brittomart Inc	n/a	
	Techniwood Industries Ltd., or Ningbo Furniture Industries Limited, or Ningbo Hengrun Furniture Co., Ltd	n/a	
	Tianjin Fortune Furniture Co., Ltd	n/a	
	Tianjin Master Home Furniture	n/a	
	Tianjin Phu Shing Woodwork Enterprise Co., Ltd	n/a	
	Tianjin Sande Fairwood Furniture Co., Ltd	n/a	
	Tube-Smith Enterprise (ZhangZhou) Co., Ltd., or Tube-Smith Enterprise (Haimen) Co., Ltd., or Billonworth Enterprises Ltd	n/a	
	Union Friend International Trade Co., Ltd	n/a	



Anti-dumping order	Exporter	Producer	Data source
	U-Rich Furniture (Zhangzhou) Co., Ltd., or U-Rich Furniture Ltd	n/a	
	Wanhengtong Nueevder (Furniture) Manufacture Co., Ltd., or Dongguan Wanengtong Industry Co., Ltd	n/a	
	Woodworth Wooden Industries (Dong Guan) Co., Ltd	n/a	
	Xiamen Yongquan Sci-Tech Development Co., Ltd	n/a	
	Jiangsu XiangSheng Bedtime Furniture Co., Ltd	n/a	
	Xingli Arts & Crafts Factory of Yangchun	n/a	
	Yangchun Hengli Co. Ltd	n/a	
	Yeh Brothers World Trade, Inc	n/a	
	Yichun Guangming Furniture Co., Ltd	n/a	
	Yida Co., Ltd., or Yitai Worldwide, Ltd., or Yili Co., Ltd., or Yetbuild Co., Ltd	n/a	
	Yihua Timber Industry Co., Ltd	n/a	
	Zhang Zhou Sanlong Wood Product Co., Ltd	n/a	
	Zhangjiagang Zheng Yan Decoration Co., Ltd	n/a	
	Zhangjiagang Daye Hotel Furniture Co., Ltd	n/a	
	Zhangzhou Guohui Industrial & Trade Co. Ltd	n/a	
	Zhanjiang Sunwin Arts & Crafts Co., Ltd	n/a	
	Zhong Shan Fullwin Furniture Co., Ltd	n/a	
	Zhongshan Fookyik Furniture Co., Ltd	n/a	
	Zhongshan Golden King Furniture Industrial Co., Ltd	n/a	

Anti-dumping order	Exporter	Producer	Data source
	Zhoushan For-Strong Wood Co., Ltd	n/a	
<i>Residential Washers</i>	Nanjing LG-Panda Appliances Co., Ltd  Suzhou Samsung Electronics Co., Ltd./Suzhou Samsung Electronics Co. Ltd-Export	Nanjing LG-Panda Appliances Co., Ltd  Suzhou Samsung Electronics Co., Ltd./Suzhou Samsung Electronics Co. Ltd-Export	USDOC records for investigation A-570-033 (Exhibit USA-50)
<i>Ribbons</i>	Yama Ribbons and Bows Co., Ltd (Yama)  Beauty Horn Investment Limited  Fujian Rongshu Industry Co., Ltd  Guangzhou Complacent Weaving Co., Ltd  Ningbo MH Industry Co., Ltd  Ningbo V.K. Industry & Trading Co., Ltd  Stribbons (Guangzhou) Ltd  Stribbons (Guangzhou) Ltd  Sun Rich (Asia) Limited  Tianjin Sun Ribbon Co., Ltd  Weifang Dongfang Ribbon Weaving Co., Ltd.  Weifang Yu Yuan Textile Co., Ltd.  Xiamen Yi He Textile Co., Ltd  Yangzhou Bestpak Gifts & Crafts Co., Ltd (Bestpak)	Yama Ribbons and Bows Co., Ltd. (Yama)  Tianjin Sun Ribbon Co., Ltd  Fujian Rongshu Industry Co., Ltd.  Guangzhou Complacent Weaving Co., Ltd.  Hangzhou City Linghu Jiacheng Silk Ribbon Co., Ltd  Ningbo Yinzhou Jinfeng Knitting Factory  Stribbons (Guangzhou) Ltd  Stribbons (Nanyang) MNC Ltd  Dongguan Yi Sheng Decoration Co., Ltd  Tianjin Sun Ribbon Co., Ltd  Weifang Dongfang Ribbon Weaving Co., Ltd  Weifang Yu Yuan Textile Co., Ltd  Xiamen Yi He Textile Co., Ltd  Yangzhou Bestpak Gifts & Crafts Co., Ltd	USDOC records for investigation A-570-952 (Exhibit USA-50)
<i>Shrimp</i>	Allied Pacific Group (Allied)  Yelin Entprise Co Hong Kong (Yelin)  Shantou Red Garden Foodstuff Co., Ltd. (Red Garden)	n/a  n/a  n/a	USDOC records for investigation A-570-893 (Exhibit USA-50)

Anti-dumping order	Exporter	Producer	Data source
	Zhanjiang Guolian Aquatic Products Co., Ltd. (Zhanjiang Guolian)	n/a	
	Asian Seafoods (Zhanjiang) Co., Ltd.	n/a	
	Beihai Zhengwu Industry Co., Ltd.	n/a	
	Chaoyang Qiaofeng Group Co., Ltd. (Shantou Qiaofeng (Group) Co., Ltd.) (Shantou/Chaoyang Qiaofeng)	n/a	
	Chenghai Nichi Lan Food Co., Ltd.	n/a	
	Dalian Ftz Sea-Rich International Trading Co., Ltd.	n/a	
	Dongri Aquatic Products Freezing Plants	n/a	
	Fuqing Dongwei Aquatic Products Industry Co., Ltd.	n/a	
	Gallant Ocean (Liangjiang) Co., Ltd.	n/a	
	Hainan Fruit Vegetable Food Allocation Co., Ltd.	n/a	
	Hainan Golden Spring Foods Co., Ltd./Hainan Brich Aquatic Products Co., Ltd.	n/a	
	Kaifeng Ocean Sky Industry Co., Ltd.	n/a	
	Leizhou Zhulian Frozen Food Co., Ltd.	n/a	
	Pingyang Xinye Aquatic Products Co., Ltd.	n/a	
	Savvy Seafood Inc.	n/a	
	Shanghai Taoen International Trading Co., Ltd	n/a	
	Shantou Long Feng Foodstuffs Co., Ltd. (Shantou Longfeng Foodstuffs Co., Ltd.)	n/a	
	Shantou Wanya Food Factory Co., Ltd.	n/a	

Anti-dumping order	Exporter	Producer	Data source
	Shantou Jinyuan District Mingfeng Quick-Frozen Factory	n/a	
	Shantou Ocean Freezing Industry and Trade General Corporation	n/a	
	Shantou Shengping Oceanstar Business Co., Ltd.	n/a	
	Shantou Yuexing Enterprise Company	n/a	
	Shantou Ruiyuan Industry Co., Ltd.	n/a	
	Shantou Freezing Aquatic Product Food Stuffs Co.	n/a	
	Shantou Jinhang Aquatic Industry Co., Ltd.	n/a	
	Xuwen Hailang Breeding Co., Ltd.	n/a	
	Yantai Wei-Cheng Food Co., Ltd.	n/a	
	Zhangjiang Newpro Food Co., Ltd.	n/a	
	Zhangjiang Bobogo Ocean Co., Ltd.	n/a	
	Zhanjiang Runhai Foods Co., Ltd.	n/a	
	Zhanjiang Go-Harvest Aquatic Products Co., Ltd.	n/a	
	Zhanjiang Universal Seafood Corp.	n/a	
	Zhanjiang Evergreen Aquatic Product Science and Technology Co., Ltd.	n/a	
	Zhoushan Huading Seafood Co., Ltd.	n/a	
	Zhoushan Cereals Oils and Foodstuffs Import and Export Co., Ltd.	n/a	
	Zhoushan Lizhou Fishery Co., Ltd.	n/a	
<i>Steel Cylinders</i>	Beijing Tianhai Industry Co., Ltd. (BTIC)	Beijing Tianhai Industry Co., Ltd.	USDOC records for investigation A-570-977 (Exhibit USA-50)
	Beijing Tianhai Industry Co., Ltd. (BTIC)	Tianjin Tianhai High Pressure Container Co., Ltd.	

Anti-dumping order	Exporter	Producer	Data source
	Beijing Tianhai Industry Co., Ltd. (BTIC)	Langfang Tianhai High Pressure Container Co., Ltd.	
	Shanghai J.S.X. International Trading Corporation (J.S.X)	Shanghai High Pressure Special Gas Cylinder Co., Ltd.	
	Zhejiang Jindun Pressure Vessel Co., Ltd. (Jindun)	Zhejiang Jindun Pressure Vessel Co., Ltd.	
	Shijiazhuang Enric Gas Equipment Co., Ltd. (Enric)	Shijiazhuang Enric Gas Equipment Co., Ltd.	

**ANNEX E-4**

**LIST OF CHINESE EXPORTERS SUBJECT TO THE WA-T DUTY RATES AND OTHER CHINESE EXPORTERS OUTSIDE THE PRC-WIDE ENTITY USED TO ESTIMATE THE SHARE OF DIFFERENT CHINESE EXPORTERS FOR THREE ANTI-DUMPING ORDERS**

Anti-Dumping order	Exporter	Producer	Data source
Coated Paper	<u>Exporters subject the WA-T duty rate</u>		USDOC records for investigation A-570-958
	APP-China covering:		
	Gold East Paper (Jiangsu) Co., Ltd.	Gold East Paper (Jiangsu) Co., Ltd.	
	Gold Huasheng Paper Co., Ltd.	Gold Huasheng Paper Co., Ltd.	
	Ningbo Zhonghua Paper Co., Ltd.	Ningbo Asia Pulp and Paper Co., Ltd.	
	Gold East (Hong Kong) Trading Co., Ltd.	n/a	
	Shandong Chenming Paper Holdings Ltd.	Shandong Chenming Paper Holdings Ltd.	
	<u>Remaining exporters outside the PRC-wide entity</u>		
	n/a	n/a	
OCTG	<u>Exporters subject the WA-T duty rate</u>		USDOC records for investigation A-570-943
	Tianjin Pipe International Economic and Trading Corp. (TPCO)	Tianjin Pipe (Group) Corporation (TPCO)	
	Angang Group Hong Kong Co., Ltd.	Angang Steel Co. Ltd.	
	Angang Steel Co., Ltd., and Angang Group International Trade Corporation	Angang Steel Co. Ltd.	
	Anhui Tianda Oil Pipe Co., Ltd.	Anhui Tianda Oil Pipe Co., Ltd.	
	Anshan Zhongyou Tipo Pipe & Tubing Co., Ltd.	Anshan Zhongyou Tipo Pipe & Tubing Co., Ltd.	
	Baotou Steel International Economic and Trading Co., Ltd.	Seamless Tube Mill of Inner Mongolia Baotou Steel Union Co., Ltd.	
	Benxi Northern Steel Pipes Co., Ltd.	Benxi Northern Steel Pipes Co., Ltd.	
	Chengdu Wanghui Petroleum Pipe Co. Ltd.	Chengdu Wanghui Petroleum Pipe Co. Ltd.	
	Dalipal Pipe Company	Dalipal Pipe Company	

Anti-Dumping order	Exporter	Producer	Data source
	Faray Petroleum Steel Pipe Co. Ltd.	Faray Petroleum Steel Pipe Co. Ltd.	
	Freet Petroleum Equipment Co., Ltd. of Shengli Oil Field, The Thermal Recovery Equipment, Zibo Branch	Freet Petroleum Equipment Co., Ltd. of Shengli Oil Field, The Thermal Recovery Equipment, Zibo Branch	
	Hengyang Steel Tube Group International Trading, Inc.	Hengyang Valin MPM Tube Co., Ltd.; Hengyang Valin Steel Tube Co., Ltd.	
	Huludao Steel Pipe Industrial Co., Ltd./Huludao City Steel Pipe Industrial Co., Ltd.	Huludao Steel Pipe Industrial Co., Ltd./Huludao City Steel Pipe Industrial Co., Ltd.	
	Jiangyin City Changjiang Steel Pipe Co., Ltd.	Jiangyin City Changjiang Steel Pipe Co., Ltd.	
	Pangang Group Beihai Steel Pipe Corporation	Pangang Group Beihai Steel Pipe Corporation	
	Pangang Group Chengdu Iron & Steel	Pangang Group Chengdu Iron & Steel	
	Qingdao Bonded Logistics Park Products International Trading Co., Ltd.	Shengli Oilfield Highland Petroleum Equipment Co., Ltd.; Shandong Continental Petroleum Equipment Co., Ltd.; Aofei Tele Dongying Import & Export Co., Ltd.; Highgrade Tubular Manufacturing (Tianjin) Co., Ltd.; Cangzhou City Baohai Petroleum Material Co., Ltd.	
	Qiqihaer Haoying Iron and Steel Co., Ltd. of Northeast Special Steel Group	Qiqihaer Haoying Iron and Steel Co., Ltd. of Northeast Special Steel Group	
	Shandong Dongbao Steel Pipe Co., Ltd.	ShanDong HuaBao Steel Pipe Co., Ltd.	
	ShanDong HuaBao Steel Pipe Co., Ltd.	ShanDong HuaBao Steel Pipe Co., Ltd.	
	Shandong Molong Petroleum Machinery Co., Ltd.	Shandong Molong Petroleum Machinery Co., Ltd.	
	Shanghai Metals & Minerals Import & Export Corp. / Shanghai Minmetals Materials & Products Corp.	Jiangsu Changbao Steel Pipe Co., Ltd.; Huludao Steel Pipe Industrial Co., Ltd.; Northeast Special Steel Group Qiqihaer Haoying Steel and Iron Co., Ltd.; Beijing Youlu Co., Ltd.	
	Shanghai Zhongyou Tipo Steel Pipe Co., Ltd.	Freet Petroleum Equipment Co., Ltd. of Shengli Oil Field, The Thermal Recovery Equipment, Zibo Branch; Faray Petroleum Steel Pipe Co., Ltd.; Shengli Oil Field Freet Petroleum Steel Pipe Co., Ltd.	

Anti-Dumping order	Exporter	Producer	Data source
	Shengli Oil Field Freet Petroleum Steel Pipe Co., Ltd.	Freet Petroleum Equipment Co., Ltd. of Shengli Oil Field, The Thermal Recovery Equipment, Zibo Branch; Anhui Tianda Oil Pipe Co., Ltd; Wuxi Fastube Dingyuan Precision Steel Pipe Co., Ltd.	
	Shengli Oilfield Highland Petroleum Equipment Co., Ltd.	Tianjin Pipe Group Corp.; Goods & Materials Supply Dept. of Shengli Oilfield SinoPEC; Dagang Oilfield Group New Century Machinery Co. Ltd.; Tianjin Seamless Steel Pipe Plant; Baoshan Iron & Steel Co. Ltd.	
	Shengli Oilfield Shengji Petroleum Equipment Co., Ltd.	Shengli Oilfield Shengji Petroleum Equipment Co., Ltd.	
	Tianjin Xingyuda Import and Export Co., Ltd. & Hong Kong Gallant Group Limited	Tianjin Lifengyuanda Steel Group Co., Ltd.	
	Tianjin Seamless Steel Pipe Plant	Tianjin Seamless Steel Pipe Plant	
	Tianjin Tiangang Special Petroleum Pipe Manufacturer Co., Ltd.	Tianjin Tiangang Special Petroleum Pipe Manufacturer Co., Ltd.	
	Wuxi Baoda Petroleum Special Pipe Manufacturing Co., Ltd.	Wuxi Baoda Petroleum Special Pipe Manufacturing Co., Ltd.	
	Wuxi Seamless Oil Pipe Co., Ltd.	Wuxi Seamless Oil Pipe Co., Ltd.	
	Wuxi Sp. Steel Tube Manufacturing Co., Ltd.	Wuxi Precese Special Steel Co., Ltd.	
	Wuxi Zhenda Special Steel Tube Manufacturing Co., Ltd.	Huai'an Zhenda Steel Tube Manufacturing Co., Ltd.	
	Xigang Seamless Steel Tube Co., Ltd.	Xigang Seamless Steel Tube Co., Ltd.; Wuxi Seamless Special Pipe Co., Ltd.	
	Yangzhou Lontrin Steel Tube Co., Ltd.	Yangzhou Lontrin Steel Tube Co., Ltd.	
	Zhejiang Jianli Co., Ltd. & Zhejiang Jianli Steel Tube Co., Ltd.	Zhejiang Jianli Co., Ltd.; Zhejiang Jianli Steel Tube Co., Ltd.	
	<u>Remaining exporters outside the PRC-wide entity</u>		
	Chengde Group covering:		
	(i) Jiangsu Chengde Steel Tube Share Co., Ltd.;	n/a	
	(ii) Taizhou Chengde Steel Tube Co., Ltd.; and	n/a	
	(iii) Yangzhou Chengde Steel Tube Co., Ltd.	n/a	



Anti-Dumping order	Exporter	Producer	Data source
Steel Cylinders	<u>Exporters subject the WA-T duty rate</u>		USDOC records for investigation A-570-977
	Shanghai J.S.X. International Trading Corporation	Shanghai High Pressure Special Gas Cylinder Co., Ltd.	
	Zhejiang Jindun Pressure Vessel Co., Ltd.	Zhejiang Jindun Pressure Vessel Co., Ltd.	
	Shijiazhuang Enric Gas Equipment Co., Ltd. (Enric)	Shijiazhuang Enric Gas Equipment Co., Ltd.	
	<u>Remaining exporters outside the PRC-wide entity</u>		
	Beijing Tianhai Industry Co., Ltd. (BTIC)	Beijing Tianhai Industry Co., Ltd. (BTIC)	
	Beijing Tianhai Industry Co., Ltd. (BTIC)	Tianjin Tianhai High Pressure Container Co., Ltd.	
	Beijing Tianhai Industry Co., Ltd. (BTIC)	Langfang Tianhai High Pressure Container Co., Ltd.	

## ANNEX E-5

### DATA INPUTS FOR ELASTICITIES<sup>1</sup>

Anti-dumping order	Total demand elasticity	Domestic supply elasticity	Elasticity of substitution	Data sources
<i>Aluminum Extrusions</i>	-0.375	4.000	5.000	Midpoint values from USITC publication 4677 (Exhibit USA-16).
<i>Bags</i>	-0.450	3.000	5.000	Midpoint values from USITC publication 4605 (Exhibit USA-16).
<i>Coated Paper</i>	-1.000	4.000	3.000	Midpoint values from USITC publication 4656 (Exhibit USA-16).
<i>Diamond Sawblades</i>	-0.750	5.000	3.000	Midpoint values from USITC publication 4559 (Exhibit USA-16).
<i>Furniture</i>	-0.750	4.500	4.500	Midpoint values from USITC publication 4665 (Exhibit USA-16).
<i>OCTG</i>	-0.875	3.000	4.000	Midpoint values from USITC publication 4124 (Exhibit USA-16).
<i>OTR Tires</i>	-0.250	7.500	4.000	Midpoint values from USITC publication 4031 (Exhibit USA-16).
<i>PET Film</i>	-0.750	3.500	4.500	Midpoint values from USITC publication 4512 (Exhibit USA-16).
<i>Ribbons</i>	-1.250	5.000	4.000	Midpoint values from USITC publication 4634 (Exhibit USA-16).
<i>Shrimp</i>	-2.000	3.500	4.000	Midpoint values from USITC publication 4688 (Exhibit USA-16).
<i>Solar Panels</i>	-0.875	6.000	4.000	Midpoint values from USITC publication 4360 (Exhibit USA-16).
<i>Steel Cylinders</i>	-0.500	7.500	4.000	Midpoint values from USITC publication 4328 (Exhibit USA-16).

<sup>1</sup> As discussed in paragraph 7.37 of the Decision, the supply elasticity for (i) US imports from the Chinese exporters subject to the WTO-inconsistent PRC-wide duty rates, (ii) US imports from the remaining Chinese exporters, and (iii) US imports from the rest of the world are all set to 10 for all of the anti-dumping orders at issue.

Anti-dumping order	Total demand elasticity	Domestic supply elasticity	Elasticity of substitution	Data sources
<i>Wood Flooring</i>	-1.000	5.500	4.000	Midpoint values from USITC publication 4746 (Exhibit USA-16).
<i>Copper Pipe and Tube</i>	-0.875	2.000	4.000	Midpoint values from USITC publication 4650 (Exhibit USA-16).
<i>Iron Pipe Fittings</i>	-1.250	4.500	4.500	Midpoint values from USITC publication 3586 (Exhibit USA-16).
<i>Passenger Vehicle and Light Truck Tires</i>	-0.375	3.000	4.000	Midpoint values from USITC publication 4545 (Exhibit USA-16).
<i>Residential Washers</i>	-0.550	7.000	4.000	Midpoint values from USITC publication 4666 (Exhibit USA-16).
<i>Sheet and Strip</i>	-0.750	5.000	4.000	Midpoint values from USITC publication 4676 (Exhibit USA-16).
<i>Steel Flat Products</i>	-0.500	6.000	4.000	Midpoint values from USITC publication 4619 (Exhibit USA-16).
<i>Steel Line Pipe</i>	-0.375	4.000	3.000	Midpoint values from USITC publication 4055 (Exhibit USA-16).
<i>Steel Nails</i>	-0.375	4.000	4.000	Midpoint values from USITC publication 4022 (Exhibit USA-16).
<i>Steel Pipe</i>	-0.625	4.000	5.000	Midpoint values from USITC publication 4019 (Exhibit USA-16).
<i>Steel Products</i>	-0.750	6.000	4.000	Midpoint values from USITC publication 4620 (Exhibit USA-16).
<i>Steel Standard, Line, and Pressure Pipe</i>	-0.750	7.500	3.000	Midpoint values from USITC publication 4190 (Exhibit USA-16).
<i>Steel Wire Rod</i>	-0.625	2.000	4.000	Midpoint values from USITC publication 4509 (Exhibit USA-16).

## ANNEX E-6

### DATA INPUTS FOR THE ACTUAL ANTI-DUMPING DUTY RATES

Product	WA-T duty rate	PRC-wide duty rate	Duty rate for remaining exporters	Data sources
<i>Aluminum Extrusions</i>	n/a	85.96%	[[***]]%	PRC-wide duty rate obtained from USDOC records for investigation A-570-967 (Annex E-7). Duty rate for remaining exporters outside the PRC-wide entity estimated as a simple average based on USDOC records for investigation A-570-967 (Annex E-7).
<i>Bags</i>	n/a	77.57%	[[***]]%	PRC-wide duty rate provided by the United States based on USDOC records for investigation A-570-886 (Exhibits USA-77 (BCI) and USA-92 (BCI)). Duty rate for remaining exporters outside the PRC-wide entity estimated by the United States as a simple average based on USDOC records for investigation A-570-886 (Exhibit USA-92 (BCI)).
<i>Coated Paper</i>	7.62%	135.8%	[[***]]%	WA-T duty rate provided by the United States based on USDOC records for investigation A-570-958 (United States' written submission, para. 104). PRC-wide duty rate provided by the United States based on USDOC records for investigation A-570-958 (Exhibits USA-77 (BCI) and USA-92 (BCI)). Duty rate for remaining exporters outside the PRC-wide entity estimated as a simple average based on USDOC records for investigation A-570-958 (Exhibit USA-92 (BCI)).
<i>Diamond Sawblades</i>	n/a	82.05%	[[***]]%	PRC-wide duty rate provided by the United States based on USDOC records for investigation A-570-900 (Exhibits USA-77 (BCI) and USA-92 (BCI)). Duty rate for remaining exporters outside the PRC-wide entity estimated by the United States as a simple average based on USDOC records for investigation A-570-900 (Exhibit USA-92 (BCI)).

Product	WA-T duty rate	PRC-wide duty rate	Duty rate for remaining exporters	Data sources
<i>Furniture</i>	n/a	216%	[[***]]%	PRC-wide duty rate provided by the United States based on USDOC records for investigation A-570-890 (Exhibits USA-77 (BCI) and USA-92 (BCI)). Duty rate for remaining exporters outside the PRC-wide entity estimated by the United States as a simple average based on USDOC records for investigation A-570-890 (Exhibit USA-92 (BCI)).
<i>OCTG</i>	32.07%	99.14%	[[***]]%	WA-T duty rate provided by the United States based on USDOC records for investigation A-570-943 (United States' written submission, para. 108; and Exhibit USA-14). PRC-wide duty rate provided by the United States based on USDOC records for investigation A-570-943 (Exhibits USA-77 (BCI) and USA-92 (BCI)). Duty rate for remaining exporters outside the PRC-wide entity estimated as a simple average based on USDOC records for investigation A-570-943 (Exhibit USA-92 (BCI)).
<i>OTR Tires</i>	n/a	105.3%	[[***]]%	PRC-wide duty rate provided by the United States based on USDOC records for investigation A-570-912 (Exhibits USA-77 (BCI) and USA-92 (BCI)). Duty rate for remaining exporters outside the PRC-wide entity estimated by the United States as a simple average based on USDOC records for investigation A-570-912 (Exhibit USA-92 (BCI)).
<i>PET Film</i>	n/a	76.72%	[[***]]%	PRC-wide duty rate provided by the United States based on USDOC records for investigation A-570-924 (Exhibits USA-77 (BCI) and USA-92 (BCI)). Duty rate for remaining exporters outside the PRC-wide entity estimated by the United States as a simple average based on USDOC records for investigation A-570-924 (Exhibit USA-92 (BCI)).
<i>Ribbons</i>	n/a	247.3%	[[***]]%	PRC-wide duty rate provided by the United States based on USDOC records for investigation A-570-952 (Exhibits USA-77 (BCI) and USA-92 (BCI)). Duty rate for remaining exporters outside the PRC-wide entity estimated by the United States as a simple average based on USDOC records for investigation A-570-952 (Exhibit USA-92 (BCI)).

Product	WA-T duty rate	PRC-wide duty rate	Duty rate for remaining exporters	Data sources
<i>Shrimp</i>	n/a	112.8%	[[***]]%	PRC-wide duty rate provided by the United States based on USDOC records for investigation A-570-893 (Exhibits USA-77 (BCI) and USA-92 (BCI)). Duty rate for remaining exporters outside the PRC-wide entity estimated by the United States as a simple average based on USDOC records for investigation A-570-893 (Exhibit USA-92 (BCI)).
<i>Solar Panels</i>	n/a	239%	[[***]]%	PRC-wide duty rate provided by the United States based on USDOC records for investigation A-570-979 (Exhibits USA-77 (BCI) and USA-92 (BCI)). Duty rate for remaining exporters outside the PRC-wide entity estimated by the United States as a simple average based on USDOC records for investigation A-570-979 (Exhibit USA-92 (BCI)).
<i>Steel Cylinders</i>	6.62%	31.21%	[[***]]%	WA-T duty rate provided by the United States based on USDOC records for investigation A-570-977 (United States' response to Arbitrator question No. 7, para. 33; and Exhibit USA-50). PRC-wide duty rate provided by the United States based on USDOC records for investigation A-570-977 (Exhibits USA-77 (BCI) and USA-92 (BCI)). Duty rate for remaining exporters outside the PRC-wide entity estimated as a simple average based on USDOC records for investigation A-570-977 (Exhibit USA-92 (BCI)).
<i>Wood Flooring</i>	n/a	25.62%	[[***]]%	PRC-wide duty rate provided by the United States based on USDOC records for investigation A-570-970 (Exhibits USA-77 (BCI) and USA-92 (BCI)). Duty rate for remaining exporters outside the PRC-wide entity estimated by the United States as a simple average based on USDOC records for investigation A-570-970 (Exhibit USA-92 (BCI)).
<i>Copper Pipe and Tube</i>	n/a	60.85%	[[***]]%	PRC-wide duty rate provided by the United States based on USDOC records for investigation A-570-964 (Exhibits USA-77 (BCI) and USA-92 (BCI)). Duty rate for remaining exporters outside the PRC-wide entity estimated by the United States as a simple average based on USDOC records for investigation A-570-964 (Exhibit USA-92 (BCI)).

Product	WA-T duty rate	PRC-wide duty rate	Duty rate for remaining exporters	Data sources
<i>Iron Pipe Fittings</i>	n/a	75.5%	[[***]]%	PRC-wide duty rate provided by the United States based on USDOC records for investigation A-570-875 (Exhibits USA-77 (BCI) and USA-92 (BCI)). Duty rate for remaining exporters outside the PRC-wide entity estimated by the United States as a simple average based on USDOC records for investigation A-570-875 (Exhibit USA-92 (BCI)).
<i>Passenger Vehicle and Light Truck Tires</i>	n/a	76.46%	[[***]]%	PRC-wide duty rate provided by the United States based on USDOC records for investigation A-570-016 (Exhibits USA-77 (BCI) and USA-92 (BCI)). Duty rate for remaining exporters outside the PRC-wide entity estimated by the United States as a simple average based on USDOC records for investigation A-570-016 (Exhibit USA-92 (BCI)).
<i>Residential Washers</i>	n/a	49.72%	[[***]]%	PRC-wide duty rate provided by the United States based on USDOC records for investigation A-570-033 (Exhibits USA-77 (BCI) and USA-92 (BCI)). Duty rate for remaining exporters outside the PRC-wide entity estimated by the United States as a simple average based on USDOC records for investigation A-570-033 (Exhibit USA-92 (BCI)).
<i>Sheet and Strip</i>	n/a	76.64%	[[***]]%	PRC-wide duty rate obtained from USDOC records for investigation A-570-042 (Annex E-7). Duty rate for remaining exporters outside the PRC-wide entity estimated as a simple average based on USDOC records for investigation A-570-042 (Annex E-7).
<i>Steel Flat Products</i>	n/a	199.8%	[[***]]%	PRC-wide duty rate provided by the United States based on USDOC records for investigation A-570-029 (Exhibits USA-77 (BCI) and USA-92 (BCI)). Duty rate for remaining exporters outside the PRC-wide entity estimated by the United States as a simple average based on USDOC records for investigation A-570-029 (Exhibit USA-92 (BCI)).
<i>Steel Line Pipe</i>	n/a	101.1%	[[***]]%	PRC-wide duty rate provided by the United States based on USDOC records for investigation A-570-935 (Exhibits USA-77 (BCI) and USA-92 (BCI)). Duty rate for remaining exporters outside the PRC-wide entity estimated by the United States as a simple average based on USDOC records for investigation A-570-935 (Exhibit USA-92 (BCI)).

Product	WA-T duty rate	PRC-wide duty rate	Duty rate for remaining exporters	Data sources
<i>Steel Nails</i>	n/a	118%	[[***]]%	PRC-wide duty rate provided by the United States based on USDOC records for investigation A-570-909 (Exhibits USA-77 (BCI) and USA-92 (BCI)). Duty rate for remaining exporters outside the PRC-wide entity estimated by the United States as a simple average based on USDOC records for investigation A-570-909 (Exhibit USA-92 (BCI)).
<i>Steel Pipe</i>	n/a	85.55%	[[***]]%	PRC-wide duty rate provided by the United States based on USDOC records for investigation A-570-910 (Exhibits USA-77 (BCI) and USA-92 (BCI)). Duty rate for remaining exporters outside the PRC-wide entity estimated by the United States as a simple average based on USDOC records for investigation A-570-910 (Exhibit USA-92 (BCI)).
<i>Steel Products</i>	n/a	199.4%	[[***]]%	PRC-wide duty rate provided by the United States based on USDOC records for investigation A-570-026 (Exhibits USA-77 (BCI) and USA-92 (BCI)). Duty rate for remaining exporters outside the PRC-wide entity estimated by the United States as a simple average based on USDOC records for investigation A-570-026 (Exhibit USA-92 (BCI)).
<i>Steel Standard, Line, and Pressure Pipe</i>	n/a	98.74%	[[***]]%	PRC-wide duty rate provided by the United States based on USDOC records for investigation A-570-956 (Exhibits USA-77 (BCI) and USA-92 (BCI)). Duty rate for remaining exporters outside the PRC-wide entity estimated by the United States as a simple average based on USDOC records for investigation A-570-956 (Exhibit USA-92 (BCI)).
<i>Steel Wire Rod</i>	n/a	97.24%	[[***]]%	PRC-wide duty rate provided by the United States based on USDOC records for investigation A-570-012 (Exhibits USA-77 (BCI) and USA-92 (BCI)). Duty rate for remaining exporters outside the PRC-wide entity estimated by the United States as a simple average based on USDOC records for investigation A-570-012 (Exhibit USA-92 (BCI)).



## ANNEX E-7

### LIST OF ANTI-DUMPING DUTY RATES USED FOR TWO ANTI-DUMPING ORDERS

Anti-dumping order	Exporter	Producer	Duty rate	Data source
<i>Aluminium Extrusions</i>	United States Square Industrial Limited	Zhaoqing United States Square Industry Limited	32.79%	USDOC records for investigation A-570-967
	North United States Aluminum Co., Ltd	North United States Aluminum Co., Ltd	32.79%	
	PanAsia Aluminium (United States) Limited	PanAsia Aluminium (United States) Limited	32.79%	
	Pingguo United States Aluminum Co., Ltd	Pingguo United States Aluminum Co., Ltd	32.79%	
	Skyline Exhibit Systems (Shanghai) Co., Ltd	n/a	32.79%	
	Gold Mountain International Development Limited	n/a	32.79%	
	Shenzhen Jiuyuan Co., Ltd	n/a	32.79%	
	Dynamic Technologies China Ltd	n/a	32.79%	
	Zhejiang Xinlong Industry Co., Ltd	n/a	32.79%	
	Changzhou Tenglong Auto Parts Co., Ltd	n/a	32.79%	
	Xin Wei Aluminum Company Limited	n/a	32.79%	
	Classic & Contemporary Inc	n/a	22.28%	
	Dynabright Int'l Group (HK) Limited	n/a	22.28%	
	Hanyung Metal (Suzhou) Co., Ltd	n/a	22.28%	
	Global Point Technology (Far East) Limited	n/a	22.28%	
	Jiangsu Changfa Refrigeration Co., Ltd	n/a	27.22%	
	Jiaxing Jackson Travel Products Co., Ltd	n/a	27.22%	

Anti-dumping order	Exporter	Producer	Duty rate	Data source
	Midea International Trading Co., Ltd	n/a	27.22%	
	Shanghai Tongtai Precise Aluminum Alloy	n/a	27.22%	
	Sincere Profit Limited	n/a	27.22%	
	Guang Ya Aluminium Industries Co., Ltd.; Foshan Guangcheng Aluminium Co., Ltd.; Kong Ah International Company Limited; Guang Ya Aluminium Industries (Hong Kong) Limited; Zhaoqing New Zhongya Aluminium Co., Ltd.; Zhongya Shaped Aluminium (HK) Holding Limited; Karlton Aluminium Company Ltd	Guang Ya Aluminium Industries Co., Ltd.; Foshan Guangcheng Aluminium Co., Ltd.; Kong Ah International Company Limited; Guang Ya Aluminium Industries (Hong Kong) Limited; Zhaoqing New Zhongya Aluminium Co., Ltd.; Zhongya Shaped Aluminium (HK) Holding Limited; Karlton Aluminium Company Ltd.; Xinya Aluminum & Stainless Steel Product Co., Ltd. (A.K.A. New Asia Aluminum & Stainless Steel Product Co., Ltd.)	33.02%	
	Alnan Aluminium Co., Ltd	Alnan Aluminium Co., Ltd	0.00%	
	Changshu Changsheng Aluminium Products Co., Ltd	Changshu Changsheng Aluminium Products Co., Ltd	0.00%	
	China Square Industrial Limited	China Square Industrial Limited	0.00%	
	Cosco (J.M.) Aluminium Co., Ltd	Cosco (J.M.) Aluminium Co., Ltd	0.00%	
	First Union Property Limited	First Union Property Limited	0.00%	
	Foshan Jinlan Non-ferrous Metal Product Co. Ltd	Foshan Jinlan Non-ferrous Metal Product Co. Ltd	0.00%	
	Foshan Sanshui Fenglu Aluminium Co., Ltd	Foshan Sanshui Fenglu Aluminium Co., Ltd	0.00%	
	Guangdong Hao Mei Aluminium Co., Ltd	Guangdong Hao Mei Aluminium Co., Ltd	0.00%	
	Guangdong Weiye Aluminium Factory Co., Ltd	Guangdong Weiye Aluminium Factory Co., Ltd	0.00%	
	Guangdong Xingfa Aluminium Co., Ltd	Guangdong Xingfa Aluminium Co., Ltd	0.00%	
	Hanwood Enterprises Limited	Hanwood Enterprises Limited	0.00%	
	Honsense Development Company	Honsense Development Company	0.00%	

Anti-dumping order	Exporter	Producer	Duty rate	Data source
	Innovative Aluminium (Hong Kong) Limited	Innovative Aluminium (Hong Kong) Limited	0.00%	
	Jiangyin Trust International Inc	Jiangyin Trust International Inc	0.00%	
	Longkou Donghai Trade Co., Ltd	Longkou Donghai Trade Co., Ltd	0.00%	
	Ningbo Yili Import and Export Co., Ltd	Ningbo Yili Import and Export Co., Ltd	0.00%	
	North China Aluminum Co., Ltd	North China Aluminum Co., Ltd	0.00%	
	PanAsia Aluminium (China) Limited	PanAsia Aluminium (China) Limited	0.00%	
	Pingguo Asia Aluminum Co., Ltd	Pingguo Asia Aluminum Co., Ltd	0.00%	
	Popular Plastics Co., Ltd	Popular Plastics Co., Ltd	0.00%	
	Press Metal International Ltd	Press Metal International Ltd	0.00%	
	Shenyang Yuanda Aluminium Industry Engineering Co. Ltd	Shenyang Yuanda Aluminium Industry Engineering Co. Ltd	0.00%	
	Tai-Ao Aluminium (Taishan) Co., Ltd	Tai-Ao Aluminium (Taishan) Co., Ltd	0.00%	
	Tianjin Ruixin Electric Heat Transmission Technology Co., Ltd	Tianjin Ruixin Electric Heat Transmission Technology Co., Ltd	0.00%	
	USA Worldwide Door Components (Pinghu) Co., Ltd.; Worldwide Door Components (Pinghu) Co	USA Worldwide Door Components (Pinghu) Co., Ltd.; Worldwide Door Components (Pinghu) Co	0.00%	
	Zhejiang Yongkang Listar Aluminium Industry Co., Ltd	Zhejiang Yongkang Listar Aluminium Industry Co., Ltd	0.00%	
	Zhongshan Gold Mountain Aluminium Factory Ltd	Zhongshan Gold Mountain Aluminium Factory Ltd	0.00%	
	Justhere Co., Ltd	n/a	85.73%	
	Kromet International Inc	n/a	85.66%	
	Permasteelisa Hong Kong Ltd <sup>30</sup>	n/a	85.73%	
	Union Industry (Asia) Co., Ltd	n/a	85.73%	

Anti-dumping order	Exporter	Producer	Duty rate	Data source
	Allied Maker Limited	n/a	85.94%	
	Birchwoods (Lin'an) Leisure Products Co., Ltd	n/a	85.94%	
	Changzhou Changzheng Evaporator Co., Ltd	n/a	85.94%	
	Dongguan Aoda Aluminum Co., Ltd	n/a	85.94%	
	JMA (HK) Company Limited	n/a	85.94%	
	Kam Kiu Aluminium Products Sdn Bhd	n/a	85.94%	
	Metaltek Group Co., Ltd	n/a	85.94%	
	Tianjin Jinmao Import & Export Corp., Ltd	n/a	85.94%	
	tenKsolar (Shanghai) Co., Ltd	n/a	85.96%	
	PRC-wide entity	n/a	85.96%	
<i>Sheet and Strip</i>	Taiyuan Ridetaixing Precision Stainless Steel Incorporated Co., Ltd	Taiyuan Ridetaixing Precision Stainless Steel Incorporated Co., Ltd	45.26%	
	Zhangjiagang Pohang Stainless Steel Co., Ltd	Zhangjiagang Pohang Stainless Steel Co., Ltd	45.26%	
	PRC-Wide Entity	PRC-Wide Entity	58.04%	

## ANNEX E-8

### DATA INPUTS FOR US MARKET VALUES IN 2017

Anti-dumping order	Total US market (1,000 USD)	US shipments (1,000 USD)	US imports from China (1,000 USD)	US imports from the rest of the world (1,000 USD) <sup>1</sup>	Data sources
<i>Aluminum Extrusions</i>	[[***]]	5,537,962	[[***]]	1,077,900	Value of US shipments estimated by applying annual growth rates to the 2015 value of US shipments reported in USITC publication 4677. <sup>2</sup> Data on the value of US imports from China from US Customs (Exhibit USA-21 (BCI)). Data on the value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (United States' response to Arbitrator question No. 62, para. 73).
<i>Bags</i>	[[***]]	1,120,838	[[***]]	280,300	Value of US shipments provided by the United States based on data from USITC publication 4605 (Exhibit USA-58). Data on the value of US imports from China from US Customs (Exhibit USA-30 (BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).
<i>Coated Paper</i>	[[***]]	1,125,000	[[***]]	1,554,800	Value of US shipments provided by the United States based on data from USITC publication 4656 (Exhibit USA-58). Data on the value of US imports from China from US Customs (Exhibit USA-30 (BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).

<sup>1</sup> The value of 2017 US imports from the rest of the world is derived by subtracting the value of US imports from China from the total value of US imports from the world, both reported in Exhibit USA-57.

<sup>2</sup> For *Aluminum Extrusions*, the United States contends that the 2017 value of US shipments is USD 5.8 billion. (United States' response to Arbitrator question No. 62, para. 65). However, we note that the USITC reports the 2015 value of US shipments to be USD 5.28 billion and that the United States proposes to use a 2015-2016 growth rate of 1.8% and a 2016-2017 growth rate of 3.1%. Using these figures, we estimate the 2017 value of US shipments to be USD 5,537,962,000.

Anti-dumping order	Total US market (1,000 USD)	US shipments (1,000 USD)	US imports from China (1,000 USD)	US imports from the rest of the world (1,000 USD) <sup>1</sup>	Data sources
<i>Diamond Sawblades</i>	[[***]]	79,745	[[***]]	213,500	Value of US shipments estimated by the United States by applying a growth rate to the 2014 value of US shipments reported in USITC publication 4559 (Exhibit USA-58). Data on the value of US imports from China from US Customs (Exhibit USA-30 (BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).
<i>Furniture</i>	[[***]]	700,000	[[***]]	1,991,300	Value of US shipments estimated by the United States by applying estimated growth rates to the 2015 value of US shipments reported in USITC publication 4665 (Exhibit USA-58). Data on the value of US imports from China from US Customs (Exhibit USA-30 (BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).
<i>OCTG</i>	[[***]]	4,000,000	[[***]]	2,913,200	Value of US shipments estimated by the United States by multiplying the average US price by the corresponding estimated US production quantity based on data from Preston Pipe and Tube (Exhibit USA-58). Data on the value of US imports from China from US Customs (Exhibit USA-30 (BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).
<i>OTR Tires</i>	[[***]]	915,650	[[***]]	9,100	Value of US shipments provided by the United States based on data from USITC publication 4448 (Exhibit USA-58). Data on the value of US imports from China from US Customs (Exhibit USA-30 (BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).
<i>PET Film</i>	[[***]]	766,472	[[***]]	588,200	Value of US shipments provided by the United States based on data from USITC publication 4605 (Exhibit USA-58). Data on the value of US imports from China from US Customs (Exhibit USA-30 (BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).

Anti-dumping order	Total US market (1,000 USD)	US shipments (1,000 USD)	US imports from China (1,000 USD)	US imports from the rest of the world (1,000 USD) <sup>1</sup>	Data sources
<i>Ribbons</i>	[[***]]	510,208	[[***]]	31,500	Value of US shipments estimated by the United States by applying a growth rate to the data published in the US Census Bureau's 2016 Annual Survey of Manufactures (Exhibit USA-58). Data on the value of US imports from China from US Customs (Exhibit USA-30 (BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).
<i>Shrimp</i>	[[***]]	494,000	[[***]]	5,959,500	Value of US shipments provided by the United States based on data from the 2016 Fisheries of the United States Report of the National Oceanic and Atmospheric Administration (Exhibit USA-58). Data on the value of US imports from China from US Customs (Exhibit USA-30 (BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).
<i>Solar Panels</i>	[[***]]	325,920	[[***]]	5,652,300	Value of US shipments estimated by the United States by multiplying the average price reported by the US Department of Energy by the production quantity reported by the International Energy Agency (Exhibit USA-58). Data on the value of US imports from China from US Customs (Exhibit USA-30 (BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).
<i>Steel Cylinders</i>	[[***]]	64,000	[[***]]	5,200	Value of US shipments estimated by the United States based on TriMas Corporation's 2017 annual report (Exhibit USA-58). Data on the value of US imports from China from US Customs (Exhibit USA-30 (BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).
<i>Wood Flooring</i>	[[***]]	490,000	[[***]]	614,600	Value of US shipments estimated by the United States by applying a growth rate to the 2016 value of US shipments reported in USITC publication 4665 (Exhibit USA-58). Data on the value of US imports from China from US Customs (Exhibit USA-30 (BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).

Anti-dumping order	Total US market (1,000 USD)	US shipments (1,000 USD)	US imports from China (1,000 USD)	US imports from the rest of the world (1,000 USD) <sup>1</sup>	Data sources
<i>Copper Pipe and Tube</i>	[[***]]	1,940,000	[[***]]	448,400	Value of US shipments estimated by the United States by applying a growth rate to the 2015 US shipment value reported in USITC Publication 4650 (Exhibit USA-58). Data on the value of US imports from China from US Customs (Exhibit USA-30 (BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).
<i>Iron Pipe Fittings</i>	[[***]]	481,967	[[***]]	31,800	Value of US shipments estimated by the United States by applying a growth rate to the estimated 2016 value of US shipments of all fabricated pipe and pipe fittings based on the US Census Bureau's 2016 Annual Survey of Manufacturers (Exhibit USA-58). Data on the value of US imports from China from US Customs (Exhibit USA-30 (BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).
<i>Passenger Vehicle and Light Truck Tires</i>	[[***]]	11,740,449	[[***]]	8,616,200	Value of US shipments provided by the United States based on data reported in USITC publication 4545 (Exhibit USA-58). Data on the value of US imports from China from US Customs (Exhibit USA-30 (BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).
<i>Residential Washers</i>	[[***]]	3,121,197	[[***]]	1,552,500	Value of US shipments estimated by subtracting the total value of US imports from total value of the US market based on AHAM data (Exhibit CHN-56 (BCI)). Data on the value of US imports from China from US Customs (Exhibit USA-30 (BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).
<i>Sheet and Strip</i>	[[***]]	3,623,089	[[***]]	892,800	Value of US shipments estimated by the United States by multiplying the average US price of subject imports, based on data from USITC DataWeb, by the subject HTS8's share of the broader HTS categories related to flat steel products, based on data from USITC DataWeb, and by the American Iron and Steel Institute's production estimate for stainless steel sheet and strip (Exhibit USA-58). Data on the value of US imports from China from US Customs (Exhibit USA-30 (BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).



Anti-dumping order	Total US market (1,000 USD)	US shipments (1,000 USD)	US imports from China (1,000 USD)	US imports from the rest of the world (1,000 USD) <sup>1</sup>	Data sources
<i>Steel Flat Products</i>	[[***]]	8,216,479	[[***]]	2,002,700	Value of US shipments provided by the United States based on data reported in USITC Publication 4619 (Exhibit USA-58). Data on the value of US imports from China from US Customs (Exhibit USA-30 (BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).
<i>Steel Line Pipe</i>	[[***]]	542,483	[[***]]	605,600	Value of US shipments estimated by the United States by multiplying the average US price by the 2017 total production quantity of welded line pipe multiplied by the share of all line pipe less than 16 inches, based on data from Preston Pipe and Tube (Exhibit USA-58). Data on the value of US imports from China from US Customs (Exhibit USA-30 (BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).
<i>Steel Nails</i>	[[***]]	139,285	[[***]]	477,600	Value of US shipments estimated by the United States by applying a growth rate and a share reflecting the correct product scope to the 2016 value of US shipments based on the US Census Bureau's 2016 Annual Survey of Manufacturers (Exhibit USA-58). Data on the value of US imports from China from US Customs (Exhibit USA-30 (BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).
<i>Steel Pipe</i>	[[***]]	923,716	[[***]]	1,461,600	Value of US shipments estimated by the United States by adjusting the data in 2016 reported in USITC publication 4651 (Exhibit USA-58). Data on the value of US imports from China from US Customs (Exhibit USA-30 (BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).
<i>Steel Products</i>	[[***]]	12,364,944	[[***]]	3,403,900	Value of US shipments estimated by the United States by multiplying the average price of subject imports, based on data from USITC DataWeb, by the subject HTS8's share of the broader HTS categories related to flat steel products, based on data from USITC DataWeb, and by the American Iron and Steel Institute's production estimate for flat steel products (Exhibit USA-58). Data on the value of US imports from China from US Customs (Exhibit USA-30 (BCI)). Value of US imports from the

Anti-dumping order	Total US market (1,000 USD)	US shipments (1,000 USD)	US imports from China (1,000 USD)	US imports from the rest of the world (1,000 USD) <sup>1</sup>	Data sources
					rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).
<i>Steel Standard, Line, and Pressure Pipe</i>	[[***]]	137,584	[[***]]	680,300	Annualized value of US shipments provided by the United States based on data from USITC publication 4656 (Exhibit USA-58). Data on the value of US imports from China from US Customs (Exhibit USA-30 (BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57).
<i>Steel Wire Rod</i>	[[***]]	427,645	[[***]]	1,024,280	Value of US shipments estimated by the United States by multiplying the average price of subject imports, based on data from USITC DataWeb, by the subject HTS8's share of the broader HTS categories related to wire rod, based on data from USITC DataWeb, and by the American Iron and Steel Institute's production estimate for wire rod (Exhibit USA-58). Data on the value of US imports from China from US Customs (Exhibit USA-30 (BCI)). Value of US imports from the rest of the world based on HTS aggregated data from the US Census Bureau (Exhibit USA-57)

Note: The values in this table have been rounded for display purposes only. The actual values were used when implementing the Armington model under the two steps to estimate the level of nullification or impairment.

## ANNEX E-9

CODE AND TEXT VERSION OF THE ARMINGTON MODEL<sup>1</sup>

```

clear all
capture program drop all

***** SOLUTION OF THE ARMINGTON MODEL *****

program nlArmington
    syntax varlist(min=2 max=2) [if], at(name)
    // Specify name
    local RHS: word 1 of `varlist'
    local exogenous: word 2 of `varlist'

    // Specify the temporary variable names
    tempname p_us p_wat p_prc p_roc p_row epsilon_us epsilon_wat epsilon_prc ///
             epsilon_roc epsilon_row m_us m_wat m_prc m_roc m_row Y theta ///
             sigma t0_wat t_wat t0_prc t_prc t0_roc t_roc LHS P Q a_us a_wat ///
             a_prc a_roc a_row b_us b_wat b_prc b_roc b_row QS_us QS_wat ///
             QS_prc QS_roc QS_row QD_us QD_wat QD_prc QD_roc QD_row

    // Specify the endogenous parameters
    scalar `p_us' = `at'[1, 1] // US shipments
    scalar `p_wat' = `at'[1, 2] // US imports from China subject to WA-T rate
    scalar `p_prc' = `at'[1, 3] // US imports from China subject to PRC-wide rate
    scalar `p_roc' = `at'[1, 4] // US imports from the rest of China
    scalar `p_row' = `at'[1, 5] // US imports from the rest of the world

    // Specify the exogenous parameters (i.e. elasticities, initial market
    // shares, initial total expenditure and initial anti-dumping duties)
    local i = 1
    foreach param in epsilon_us epsilon_wat epsilon_prc epsilon_roc ///
                 epsilon_row m_us m_wat m_prc m_roc m_row Y theta sigma ///
                 t0_wat t_wat t0_prc t_prc t0_roc t_roc {
        levelsof `exogenous' in `i'
        generate double ``param'' = `r(levels)'
        local i = `i' + 1
    }

    replace `t0_wat' = 0 if `t0_wat' == .

    // Specify the initial market clearance conditions
    generate double `LHS' = 0

    // Compute the index price
    generate double `P' = (`m_us'/100 * `p_us'^(1 - `sigma') + ///
                          `m_wat'/100 * `p_wat'^(1 - `sigma') + ///
                          `m_prc'/100 * `p_prc'^(1 - `sigma') + ///
                          `m_roc'/100 * `p_roc'^(1 - `sigma') + ///
                          `m_row'/100 * `p_row'^(1 - `sigma')) ///
                      ^ (1/(1 - `sigma'))

    // Compute the aggregate demand
    generate double `Q' = `Y' * `P' ^ `theta'

    local i = 1
    foreach x in us wat prc roc row {
    // Compute the shifting factors
        if "`x'" == "us" | "`x'" == "row" generate double ///
            `a_`x'' = `Y' * `m_`x''/100
    }

```

<sup>1</sup> This Stata code (do-file) has been reviewed using STATA 13 (and above).

```

if "`x'" == "wat" | "`x'" == "prc" | "`x'" == "roc" generate double ///
    `a_`x'' = `Y' * `m_`x''/100 * (1 + `t0_`x''/100) ^(`epsilon_`x'')
generate double `b_`x'' = exp(ln(`m_`x''/100) / `sigma')
    replace `b_`x'' = 0 if `m_`x'' == 0 | `m_`x'' == .

// Compute the supply functions
if "`x'" == "us" | "`x'" == "row" generate double ///
    `QS_`x'' = `a_`x'' * (`p_`x'') ^`epsilon_`x''
if "`x'" == "wat" | "`x'" == "prc" | "`x'" == "roc" generate double ///
    `QS_`x'' = `a_`x'' * ((`p_`x'')/(1 + `t_`x''/100)) ^`epsilon_`x''

// Compute the demand functions
generate double `QD_`x'' = `Q' * (`b_`x''^`sigma') * ///
    (`p_`x''/`P')^(-`sigma')

// Compute the market clearance conditions
    replace `LHS' = `QD_`x'' - `QS_`x'' in `i'
    if `i' == 5 replace `LHS' = `QD_`x'' - `QS_`x'' + 1 in `i'

    local i = `i' + 1
}
// Ensure the market clearance conditions are met
    replace `RHS' = `LHS'
end

***** CORRESPONDING PRICES AND QUANTITIES *****

program define dPQ
    // Specify the input variables:
    * `1': variable with prices
    * `2': variable with exogenous parameters

    // Specify the temporary variable names
    tempname p_us p_wat p_prc p_roc p_row epsilon_us epsilon_wat epsilon_prc ///
        epsilon_roc epsilon_row m_us m_wat m_prc m_roc m_row Y theta ///
        sigma t0_wat t_wat t0_prc t_prc t0_roc t_roc LHS P Q a_us a_wat ///
        a_prc a_roc a_row

    // Specify the parameters
    local i = 1
    foreach param in p_us p_wat p_prc p_roc p_row epsilon_us epsilon_wat ///
        epsilon_prc epsilon_roc epsilon_row m_us m_wat m_prc ///
        m_roc m_row Y theta sigma t0_wat t_wat t0_prc t_prc ///
        t0_roc t_roc {
        if `i' <= 5 scalar ``param'' = `1' in `i'
        if `i' > 5 local j = `i' - 5
        if `i' > 5 scalar ``param'' = `2' in `j'
        local i = `i' + 1
    }

    // Compute the index price
    generate double `P' = (`m_us'/100 * `p_us' ^ (1 - `sigma') + ///
        `m_wat'/100 * `p_wat' ^ (1 - `sigma') + ///
        `m_prc'/100 * `p_prc' ^ (1 - `sigma') + ///
        `m_roc'/100 * `p_roc' ^ (1 - `sigma') + ///
        `m_row'/100 * `p_row' ^ (1 - `sigma')) ///
        ^ (1/(1 - `sigma'))

    // Compute the aggregate demand
    generate double `Q' = `Y' * `P' ^`theta'

    local i = 1
    foreach x in us wat prc roc row {
    // Compute the shifting factors
        if "`x'" == "us" | "`x'" == "row" generate double ///
            `a_`x'' = `Y' * `m_`x''/100
        if "`x'" == "wat" | "`x'" == "prc" | "`x'" == "roc" generate double ///

```

```

`a_`x' = `Y' * `m_`x'/100 * (1 + `t0_`x'/100) ^(`epsilon_`x')

// Compute the percent changes in prices
generate double dp_`x' = (p_`x' - 1) * 100 in 1

// Compute the initial equilibrium quantities
if "`x'" == "us" | "`x'" == "row" generate double ///
    iniq_`x' = `a_`x' * 1 ^`epsilon_`x' in 1
if "`x'" == "wat" | "`x'" == "prc" | "`x'" == "roc" generate double ///
    iniq_`x' = `a_`x' * (1 / (1 + `t0_`x'/100)) ^`epsilon_`x' in 1

// Compute the new equilibrium quantities
if "`x'" == "us" | "`x'" == "row" generate double ///
    newq_`x' = `a_`x' * (p_`x') ^`epsilon_`x' in 1
if "`x'" == "wat" | "`x'" == "prc" | "`x'" == "roc" generate double ///
    newq_`x' = `a_`x' * (p_`x' / (1 + `t_`x'/100)) ^`epsilon_`x' in 1

// Compute the percent changes in quantities
generate double dq_`x' = (newq_`x' - iniq_`x')/iniq_`x' * 100 in 1
if dq_`x' == . replace dq_`x' = 0 in 1

// Compute the new expenditures
generate double newX_`x' = p_`x' * newq_`x' in 1

// Compute the change in expenditures
generate double dX_`x' = (newX_`x' - iniq_`x') in 1
}
end

***** IMPLEMENTATION OF STEP 1 *****

* Import data inputs for each anti-dumping order reported in Appendix Table [XX]
* Appendix Table [XX] saved in an Excel file named "Data.xlsx"

import excel "Data.xlsx", firstrow clear
rename Antidumpingorder Product
drop if Product == ""

* Remove the double brackets for BCI inputs
foreach var in m_us m_wat m_prc m_roc m_row Y Y2017 t_wat t_roc {
    replace `var' = substr(`var',"[[",1)
    replace `var' = substr(`var',""]",1)
    destring `var', replace force
}

* Create additional inputs
foreach var in wat prc roc {
    generate double epsilon_`var' = epsilon_import
    generate double t0_`var' = 0
    rename t_`var' t1_`var'
}
rename epsilon_import epsilon_row
save "Inputs.dta", replace

* Solve the Armington model for each anti-dumping order at issue in the year
* prior to the imposition of the anti-dumping duty rates
use "Inputs.dta", clear
levelsof Product, local(Product)
foreach product of local Product {
    use "Inputs.dta", clear
    keep if Product == "`product'"
    display " "
    display "***** `product' *****"
    quietly {
        * Create constraints and exogenous variables structure
        set obs 19
        generate double MrktEq = 0
    }
}

```

```

        replace MrktEq = 1 in 5
        local i = 1
        generate paramname = ""
        generate double param = .
        foreach param in epsilon_us epsilon_wat epsilon_prc ///
            epsilon_roc epsilon_row m_us m_wat m_prc ///
            m_roc m_row Y theta sigma t0_wat t1_wat ///
            t0_prc t1_prc t0_roc t1_roc {
            levelsof `param' in 1, local(temp)
            replace paramname = "`param'" in `i'
            capture replace param = `temp' in `i'
            replace param = 0 if param == . in `i'
            local i = `i' + 1
        }
    }

    * Solve the Armington model with imposition of anti-dumping duties
    nl Armington @ MrktEq param, param(p_us p_wat p_prc p_roc p_row) ///
        initial(p_us 1 p_wat 1 p_prc 1 p_roc 1 p_row 1) eps(1e-12)
    quietly {
        matrix B = e(b)
        svmat double B
        local i = 1
        foreach x in us wat prc roc row {
            rename B`i' p_`x' // New price
            local i = `i' + 1
        }
    }

    * Compute new market shares
    matrix B = B'
    svmat double B
    dPQ B param
    egen double Y1 = rowtotal(newX_*)
    foreach x in us wat prc roc row {
        generate double ml_`x' = newX_`x' / Y1 * 100
    }
    drop p_* dp_* iniq_* newq_* dq_* newX_* dX_* MrktEq param* B1
    keep in 1
}

quietly save "`product'.dta", replace
}

quietly keep if Product == "?"
foreach product of local Product {
    append using "`product'.dta"
    erase "`product'.dta"
}

***** IMPLEMENTATION OF STEP 2 *****

* Create additional inputs
generate double t2_wat = 0
    * Brackets should be removed before running the code
    replace t2_wat = [[**]] if Product == "OCTG" // This is BCI
generate double t2_prc = 0
generate double t2_roc = t1_roc
save "Inputs.dta", replace

* Solve the Armington model ifor each anti-dumping order at issue in 2017 by using
* the simulated market shares associated with the imposition of the anti-dumping
* duty rates and calculated in step 1
use "Inputs.dta", clear
levelsof Product, local(Product)
foreach product of local Product {
    use "Inputs.dta", clear
    keep if Product == "`product'"
    display " "
    display "***** `product' *****"
    quietly {
        * Create constraints and exogenous variables structure

```

---

```

set obs 19
generate double MrktEq = 0
    replace MrktEq = 1 in 5
local i = 1
generate paramname = ""
generate double param = .
foreach param in epsilon_us epsilon_wat epsilon_prc ///
    epsilon_roc epsilon_row m1_us m1_wat m1_prc ///
    m1_roc m1_row Y2017 theta sigma t1_wat t2_wat ///
    t1_prc t2_prc t1_roc t2_roc {
    levelsof `param' in 1, local(temp)
    replace paramname = "`param'" in `i'
    capture replace param = `temp' in `i'
    replace param = 0 if param == . in `i'
    local i = `i' + 1
}
}
* Solve the Armington model for counterfactual anti-dumping duty rates
nl Armington @ MrktEq param, param(p_us p_wat p_prc p_roc p_row) ///
    initial(p_us 1 p_wat 1 p_prc 1 p_roc 1 p_row 1) eps(1e-12)
quietly {
    matrix B = e(b)
    svmat double B
    local i = 1
    foreach x in us wat prc roc row {
        rename B`i' p_`x' // New price
        local i = `i' + 1
    }
    * Compute the level nullification or impairment
    matrix B = B'
    svmat double B
    dPQ B param
    generate double NI = dX_wat + dX_prc + dX_roc
    keep Product NI
    keep in 1
}
quietly save "`product'.dta", replace
}
quietly keep if Product == "?"
foreach product of local Product {
    append using "`product'.dta"
    erase "`product'.dta"
}

```

## ANNEX E-10

### DATA INPUTS USED TO IMPLEMENT THE ARMINGTON MODEL UNDER THE TWO STEPS<sup>1</sup>

Anti-dumping order	theta	epsilon_us	epsilon_import	sigma	m_us	m_wat	m_prc	m_roc	m_row	Y	Y 2017	t_wat	t_prc	t_roc
<i>Aluminum Extrusions</i>	-0.375	4.00	10.00	5.00	77.239	n/a	[[***]]	[[***]]	11.093	4606386.000	[[***]]	n/a	85.96	[[***]]
<i>Bags</i>	-0.450	3.00	10.00	5.00	77.579	n/a	[[***]]	[[***]]	[[***]]	995491.000	[[***]]	n/a	77.57	[[***]]
<i>Coated Paper</i>	-1.000	4.00	10.00	3.00	58.758	[[***]]	[[***]]	[[***]]	24.165	1742204.000	[[***]]	[[***]]	135.84	[[***]]
<i>Diamond Sawblades</i>	-0.750	5.00	10.00	3.00	[[***]]	n/a	[[***]]	[[***]]	36.115	[[***]]	[[***]]	n/a	82.05	[[***]]
<i>Furniture</i>	-0.750	4.50	10.00	4.50	40.259	n/a	[[***]]	[[***]]	[[***]]	4666667.000	[[***]]	n/a	216.01	[[***]]
<i>OCTG</i>	-0.875	3.00	10.00	4.00	[[***]]	[[***]]	[[***]]	[[***]]	31.560	[[***]]	[[***]]	[[***]]	99.14	[[***]]
<i>OTR Tires</i>	-0.250	7.50	10.00	4.00	56.066	n/a	[[***]]	[[***]]	28.197	1794409.000	[[***]]	n/a	105.31	[[***]]
<i>PET Film</i>	-0.750	3.50	10.00	4.50	[[***]]	n/a	[[***]]	[[***]]	17.791	[[***]]	[[***]]	n/a	76.72	[[***]]
<i>Ribbons</i>	-1.250	5.00	10.00	4.00	89.197	n/a	[[***]]	[[***]]	[[***]]	650438.000	[[***]]	n/a	247.26	[[***]]
<i>Shrimp</i>	-2.000	3.50	10.00	4.00	[[***]]	n/a	[[***]]	[[***]]	82.273	[[***]]	[[***]]	n/a	112.81	[[***]]

<sup>1</sup> The code (do-file) of the software STATA in Annex E-9 refers to this input table.



Anti-dumping order	theta	epsilon_us	epsilon_import	sigma	m_us	m_wat	m_prc	m_roc	m_row	Y	Y 2017	t_wat	t_prc	t_roc
<i>Solar Panels</i>	-0.875	6.00	10.00	4.00	[[***]]	n/a	[[***]]	[[***]]	41.144	[[***]]	[[***]]	n/a	238.95	[[***]]
<i>Steel Cylinders</i>	-0.500	7.50	10.00	4.00	[[***]]	[[***]]	[[***]]	[[***]]	2.705	[[***]]	[[***]]	[[***]]	31.21	[[***]]
<i>Wood Flooring</i>	-1.000	5.50	10.00	4.00	43.517	n/a	[[***]]	[[***]]	14.770	783896.000	[[***]]	n/a	25.62	[[***]]
<i>Copper Pipe and Tube</i>	-0.875	2.00	10.00	4.00	75.958	n/a	[[***]]	[[***]]	12.474	2110170.000	[[***]]	n/a	60.85	[[***]]
<i>Iron Pipe Fittings</i>	-1.250	4.50	10.00	4.50	[[***]]	n/a	[[***]]	[[***]]	12.310	[[***]]	[[***]]	n/a	75.5	[[***]]
<i>Passenger Vehicle and Light Truck Tires</i>	-0.375	3.00	10.00	4.00	52.995	n/a	[[***]]	[[***]]	35.442	22154265.000	[[***]]	n/a	76.46	[[***]]
<i>Residential Washers</i>	-0.550	7.00	10.00	4.00	[[***]]	n/a	[[***]]	[[***]]	[[***]]	[[***]]	[[***]]	n/a	49.72	[[***]]
<i>Sheet and Strip</i>	-0.750	5.00	10.00	4.00	[[***]]	n/a	[[***]]	[[***]]	19.791	[[***]]	[[***]]	n/a	76.64	[[***]]
<i>Steel Flat Products</i>	-0.500	6.00	10.00	4.00	80.830	n/a	[[***]]	[[***]]	15.652	8405722.000	[[***]]	n/a	199.76	[[***]]
<i>Steel Line Pipe</i>	-0.375	4.00	10.00	3.00	[[***]]	n/a	[[***]]	[[***]]	33.561	[[***]]	[[***]]	n/a	101.1	[[***]]
<i>Steel Nails</i>	-0.375	4.00	10.00	4.00	22.393	n/a	[[***]]	[[***]]	[[***]]	984270.000	[[***]]	n/a	118.04	[[***]]
<i>Steel Pipe</i>	-0.625	4.00	10.00	5.00	61.810	n/a	[[***]]	[[***]]	16.647	2185379.000	[[***]]	n/a	85.55	[[***]]

Anti-dumping order	theta	epsilon_us	epsilon_import	sigma	m_us	m_wat	m_prc	m_roc	m_row	Y	Y 2017	t_wat	t_prc	t_roc
<i>Steel Products</i>	-0.750	6.00	10.00	4.00	78.869	n/a	[[***]]	[[***]]	[[***]]	17055633.000	[[***]]	n/a	199.43	[[***]]
<i>Steel Standard, Line, and Pressure Pipe</i>	-0.750	7.50	10.00	3.00	29.180	n/a	[[***]]	[[***]]	51.025	683206.000	[[***]]	n/a	98.74	[[***]]
<i>Steel Wire Rod</i>	-0.625	2.00	10.00	4.00	[[***]]	n/a	[[***]]	[[***]]	25.287	[[***]]	[[***]]	n/a	97.24	[[***]]

Note: The names used in the table refer to the following: theta: total demand elasticity; epsilon\_us: domestic supply elasticity; epsilon\_import: import supply elasticity; sigma: elasticity of substitution; m\_us: market share of US domestic producers in year prior; m\_wat: market share of Chinese exporters subject to WTO-inconsistent WA-T duty rate in year prior; m\_prc: market share of Chinese exporters subject to WTO-inconsistent PRC-wide duty rate in year prior; m\_roc: market share of remaining Chinese exporters in year prior; m\_row: market share of exporters from rest of the world in year prior; Y: total US market value in 1,000 USD in year prior; Y 2017: total US market value in 1,000 USD in 2017; t\_wat: WA-T duty rate; t\_prc: PRC-wide duty rate; and t\_roc: duty rate for remaining Chinese exporters in 2017.

## ANNEX E-11

### RESULTS OF IMPLEMENTING THE ARMINGTON MODEL UNDER THE FIRST STEP

Anti-dumping order	Simulated market share of US domestic producers	Simulated market share of Chinese exporters subject to the WA-T duty rate	Simulated market share of Chinese exporters subject to the PRC-wide duty rate	Simulated market share of remaining Chinese exporters	Simulated market share of exporters from the rest of the world
<i>Aluminum Extrusions</i>	84.3%	n/a	[[***]]%	[[***]]%	12.6%
<i>Bags</i>	[[***]]%	n/a	[[***]]%	[[***]]%	[[***]]%
<i>Coated Paper</i>	60.0%	[[***]]%	[[***]]%	n/a	24.8%
<i>Diamond Sawblades</i>	[[***]]%	n/a	[[***]]%	[[***]]%	40.0%
<i>Furniture</i>	[[***]]%	n/a	[[***]]%	[[***]]%	[[***]]%
<i>OCTG</i>	[[***]]%	[[***]]%	[[***]]%	[[***]]%	37.9%
<i>OTR Tires</i>	61.3%	n/a	[[***]]%	[[***]]%	31.1%
<i>PET Film</i>	[[***]]%	n/a	[[***]]%	[[***]]%	18.2%
<i>Ribbons</i>	[[***]]%	n/a	[[***]]%	[[***]]%	[[***]]%
<i>Shrimp</i>	[[***]]%	n/a	[[***]]%	[[***]]%	84.9%
<i>Solar Panels</i>	[[***]]%	n/a	[[***]]%	[[***]]%	53.0%
<i>Steel Cylinders</i>	[[***]]%	[[***]]%	[[***]]%	[[***]]%	3.1%
<i>Wood Flooring</i>	48.9%	n/a	[[***]]%	[[***]]%	16.9%
<i>Copper Pipe and Tube</i>	78.7%	n/a	[[***]]%	[[***]]%	13.2%
<i>Iron Pipe Fittings</i>	[[***]]%	n/a	[[***]]%	[[***]]%	13.2%

Anti-dumping order	Simulated market share of US domestic producers	Simulated market share of Chinese exporters subject to the WA-T duty rate	Simulated market share of Chinese exporters subject to the PRC-wide duty rate	Simulated market share of remaining Chinese exporters	Simulated market share of exporters from the rest of the world
<i>Passenger Vehicle and Light Truck Tires</i>	53.9%	n/a	[[***]]%	[[***]]%	36.4%
<i>Residential Washers</i>	[[***]]%	n/a	[[***]]%	[[***]]%	15.9%
<i>Sheet and Strip</i>	[[***]]%	n/a	[[***]]%	[[***]]%	20.1%
<i>Steel Flat Products</i>	83.4%	n/a	[[***]]%	n/a	16.2%
<i>Steel Line Pipe</i>	[[***]]%	n/a	[[***]]%	[[***]]%	34.8%
<i>Steel Nails</i>	[[***]]%	n/a	[[***]]%	[[***]]%	36.4%
<i>Steel Pipe</i>	72.8%	n/a	[[***]]%	[[***]]%	20.9%
<i>Steel Products</i>	[[***]]%	n/a	[[***]]%	[[***]]%	18.7%
<i>Steel Standard, Line, and Pressure Pipe</i>	33.2%	n/a	[[***]]%	[[***]]%	58.4%
<i>Steel Wire Rod</i>	[[***]]%	n/a	[[***]]%	[[***]]%	26.7%

Note: The percentage values in this table have been rounded for display purposes only. The actual percentage values were used when implementing the Armington model under the second step to estimate the level of nullification or impairment.