UNITED STATES – ANTI-DUMPING MEASURES APPLYING DIFFERENTIAL PRICING METHODOLOGY TO SOFTWOOD LUMBER FROM CANADA

REPORT OF THE PANEL
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1 INTRODUCTION

1.1 Complaint by Canada

1.1. On 28 November 2017, Canada requested consultations with the United States pursuant to Articles 4 and 10.4 of the Understanding on Rules and Procedures Governing the Settlement of Disputes (DSU), Article XXII:1 of the General Agreement on Tariffs and Trade 1994 (GATT 1994) and Article 17 of the Agreement on Implementation of Article VI of the General Agreement on Tariffs and Trade 1994 (Anti-Dumping Agreement), with respect to the US anti-dumping measures applying the differential pricing methodology (DPM) to softwood lumber products from Canada.¹

1.2. Consultations were held on 17 January 2018. These consultations failed to settle the dispute.

1.2. Panel establishment and composition

1.3. On 15 March 2018, Canada requested the establishment of a panel.² At its meeting on 9 April 2018, the Dispute Settlement Body (DSB) established a panel pursuant to the request of Canada in document WT/DS534/2, in accordance with Article 6 of the DSU.³

1.4. The Panel’s terms of reference are the following:

To examine, in the light of the relevant provisions of the covered agreements cited by the parties to the dispute, the matter referred to the DSB by Canada in document WT/DS534/2 and to make such findings as will assist the DSB in making the recommendations or in giving the rulings provided for in those agreements.⁴

1.5. On 9 May 2018, Canada requested the Director-General to determine the composition of the Panel, pursuant to Article 8.7 of the DSU. On 22 May 2018, the Director-General accordingly composed the Panel as follows:

Chairperson: Mr Thinus Jacobsz
Members: Ms Maria Valeria Raiteri
Mr Guillermo Valles Galmés

1.6. Brazil, China, the European Union, Japan, Kazakhstan, the Republic of Korea, the Russian Federation, and Viet Nam reserved their rights to participate in the Panel proceedings as third parties.⁵

1.3 Panel proceedings

1.3.1 General


1.8. The Panel held its first substantive meeting with the parties on 12 and 13 September 2018. The session with the third parties took place on 13 September 2018. The Panel held its second substantive meeting with the parties on 4 December 2018. On 29 January 2019, the Panel issued

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¹ Request for consultations by Canada, WT/DS534/1-G/L/1206-G/ADP/D120/1 (Canada's consultations request).
² Request for the establishment of a panel by Canada, WT/DS534/2 (Canada's panel request).
³ DSB, Minutes of Meeting held on 9 April 2018, WT/DSB/M/411.
⁴ Constitution note of the Panel, WT/DS534/3.
⁵ Constitution note of the Panel, WT/DS534/3.
⁸ See the Panel's Additional Working Procedures on Open Meetings in Annex A-3.

2 FACTUAL ASPECTS

2.1. This dispute concerns anti-dumping measures imposed by the United States Department of Commerce (USDOC) following an investigation on certain softwood lumber products from Canada (underlying investigation). In particular, Canada challenges certain aspects of the dumping determinations made by the USDOC using the DPM.

3 PARTIES' REQUESTS FOR FINDINGS AND RECOMMENDATIONS

3.1. Canada requests the Panel to find as follows:

a. The USDOC acted inconsistently with the second sentence of Article 2.4.2 of the Anti-Dumping Agreement because by applying the DPM in the underlying investigation it9:
   i. failed to find "a pattern of export prices which differ significantly among different purchasers, regions or time periods"; and
   ii. used zeroing under the weighted-average-to-transaction (W-T) methodology provided in the second sentence of Article 2.4.2 of the Anti-Dumping Agreement.

b. The USDOC acted inconsistently with Article 2.4 of the Anti-Dumping Agreement in the underlying investigation because as part of the DPM the USDOC used zeroing under the W-T methodology provided in the second sentence of Article 2.4.2 of the Anti-Dumping Agreement.10

c. The USDOC acted inconsistently with Articles 1 and 2.1 of the Anti-Dumping Agreement as well as Articles VI:1 and VI:2 of the GATT 1994 in the underlying investigation as a consequence of its violations under Articles 2.4.2 and 2.4 in this investigation.11

3.2. The United States requests that the Panel reject Canada's claims in their entirety.

4 ARGUMENTS OF THE PARTIES

4.1. The arguments of the parties are reflected in their executive summaries that were provided to the Panel in accordance with paragraph 22 of the Working Procedures (see Annex B).

5 ARGUMENTS OF THE THIRD PARTIES

5.1. The arguments of Brazil, China, the European Union, and Japan are reflected in their executive summaries that were provided to the Panel in accordance with paragraph 25 of the Working Procedures (see Annex C).12

6 INTERIM REVIEW

6.1. On 28 February 2019, we issued our Interim Report to the parties. On 7 March 2019, the United States submitted a written request for the Panel to review precise aspects of the Interim Report. Canada did not make a written request to review precise aspects of the Interim Report but submitted on 13 March 2019 its comments on the United States' request for interim review.

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9 Canada's first written submission, para. 68; response to Panel question after the first meeting of the Panel No. 6, para. 17.
10 Canada's first written submission, para. 68; response to Panel question after the first meeting of the Panel No. 6, para. 17.
11 Canada's first written submission, para. 68.
12 Kazakhstan, the Republic of Korea, the Russian Federation, and Viet Nam did not file a submission, nor did they make any statement.
6.2. The requests made at the interim review stage as well as the Panel's discussion and disposition of those requests are set out in Annex A-5.

7 FINDINGS

7.1 General principles regarding treaty interpretation, the standard of review, and burden of proof

7.1.1 Treaty interpretation

7.1. Article 3.2 of the DSU provides that the WTO dispute settlement system serves to clarify the existing provisions of the covered agreements "in accordance with customary rules of interpretation of public international law". Article 17.6(ii) of the Anti-Dumping Agreement similarly requires panels to interpret that agreement's provisions in accordance with the customary rules of interpretation of public international law. The principles codified in Articles 31 and 32 of the Vienna Convention on the Law of Treaties are generally accepted as such customary rules.

7.1.2 Standard of review

7.2. Article 11 of the DSU provides, in relevant part, that:

[A] panel should make an objective assessment of the matter before it, including an objective assessment of the facts of the case and the applicability of and conformity with the relevant covered agreements.

In addition, Article 17.6 of the Anti-Dumping Agreement sets forth the special standard of review applicable to disputes under the Anti-Dumping Agreement:

(i) in its assessment of the facts of the matter, the panel shall determine whether the authorities' establishment of the facts was proper and whether their evaluation of those facts was unbiased and objective. If the establishment of the facts was proper and the evaluation was unbiased and objective, even though the panel might have reached a different conclusion, the evaluation shall not be overturned;

(ii) the panel shall interpret the relevant provisions of the Agreement in accordance with customary rules of interpretation of public international law. Where the panel finds that a relevant provision of the Agreement admits of more than one permissible interpretation, the panel shall find the authorities' measure to be in conformity with the Agreement if it rests upon one of those permissible interpretations.

7.3. Thus, Article 11 of the DSU and Article 17.6 of the Anti-Dumping Agreement together establish the standard of review we will apply with respect to both the factual and the legal aspects of the present dispute. The Appellate Body has explained that when a panel is reviewing an investigating authority's determination, the "objective assessment" standard in Article 11 of the DSU requires a panel to review whether the authority has provided a reasoned and adequate explanation as to (a) how the evidence on the record supported its factual findings; and (b) how those factual findings support the overall determination. In reviewing an investigating authority's determination, a panel should not conduct a de novo review of the evidence, nor substitute its judgment for that of the investigating authority. A panel must limit its examination to the evidence that was before the investigating authority during the investigation and must take into account all such evidence submitted by the parties to the dispute. At the same time, a panel must not simply defer to the

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13 Article 17.6(ii) of the Anti-Dumping Agreement also provides that if a panel finds that a provision of the Anti-Dumping Agreement admits of more than one permissible interpretation, it shall uphold a measure that rests upon one of those interpretations.
15 Article 17.5(ii) requires a panel to examine the matter based on the facts made available to the authorities.
conclusions of the investigating authority; a panel’s examination of those conclusions must be “in-depth” and “critical and searching”.  

7.4. In the context of Article 17.6(i) of the Anti-Dumping Agreement, the Appellate Body has clarified that while the text of this provision is couched in terms of an obligation on a panel, in effect it defines when an investigating authority can be considered to have acted inconsistently with the Anti-Dumping Agreement in the course of its “establishment” and “evaluation” of the relevant facts. Therefore, a panel must assess if the establishment of the facts by the investigating authority was proper and if the evaluation of those facts by that authority was unbiased and objective. If these broad standards have not been met, a panel must hold the investigating authority’s establishment or evaluation of the facts to be inconsistent with the Anti-Dumping Agreement.

7.1.3 Burden of proof

7.5. The general principles applicable to the allocation of the burden of proof in WTO dispute settlement require that a party claiming a violation of a provision of a WTO Agreement must assert and prove its claim. Therefore, as the complaining party in this proceeding, Canada bears the burden of demonstrating that the challenged aspects of the measures at issue are inconsistent with the Anti-Dumping Agreement and the GATT 1994. The Appellate Body has stated that a complaining party will satisfy its burden when it establishes a prima facie case, namely a case which, in the absence of effective refutation by the defending party, requires a panel, as a matter of law, to rule in favour of the complaining party. Finally, it is generally for each party asserting a fact to provide proof thereof.

7.2 The USDOC’s dumping determinations in the underlying investigation

7.6. In the underlying investigation, the USDOC used the DPM to examine whether the export prices of the Canadian producers showed “a pattern of export prices which differ[ed] significantly among different purchasers, regions or time periods”. Finding that the export prices of Canadian producers Resolute FP Canada Inc. (Resolute), Tolko Marketing and Sales Ltd. (Tolko), and West Fraser Mills Ltd. (West Fraser) (three Canadian producers) showed such a pattern, the USDOC examined whether the weighted-average-to-weighted-average (W-W) methodology could take into account those price differences, and explained that it could not. Thus, the USDOC decided not to apply the W-W methodology, and instead determined the margins of dumping of the three Canadian producers by comparing a normal value established on a weighted average basis with the prices of individual export transactions (i.e. the W-T methodology), which is the methodology provided in the second sentence of Article 2.4.2 of the Anti-Dumping Agreement. The USDOC applied the W-T methodology to all export transactions of the three Canadian producers, and used zeroing when doing so.

7.7. Canada challenges certain aspects of these determinations under the second sentence of Article 2.4.2 and Article 2.4 of the Anti-Dumping Agreement, claiming, as noted in paragraph 3.1 above, that in applying the DPM in the underlying investigation the USDOC:

a. failed to identify a "pattern" consistent with the second sentence of Article 2.4.2 of the Anti-Dumping Agreement thereby acting inconsistently with this second sentence; and

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22 Appellate Body Report, EC – Hormones, paras. 98 and 104.
24 Canada’s first written submission, para. 22; United States’ first written submission, para. 15.
25 Canada’s first written submission, paras. 23-24; United States’ first written submission, para. 15. The USDOC did not explain why the T-T comparison could not take into account those price differences.
26 Canada’s first written submission, paras. 26-27; United States’ first written submission, paras. 15 and 17.
b. used zeroing while applying the W-T methodology provided in the second sentence of Article 2.4.2, thereby acting inconsistently with this second sentence as well as Article 2.4 of the Anti-Dumping Agreement.

7.8. In addition, Canada claims that as a consequence of violations under the second sentence of Article 2.4.2 and Article 2.4 in the underlying investigation, the USDOC also acted inconsistently with Articles 1 and 2.1 of the Anti-Dumping Agreement as well as Articles VI:1 and VI:2 of the GATT 1994.27

7.9. We recall that the panel and the Appellate Body in US – Washing Machines examined similar sets of claims under the second sentence of Articles 2.4.2 and 2.4 brought by Korea against the United States. The panel and the Appellate Body upheld Korea's claims in that dispute and found that:

a. the DPM is, as such, inconsistent with Article 2.4.2 of the Anti-Dumping Agreement because it fails to find "a pattern" consistent with the pattern clause28; and

b. Articles 2.4.2 and 2.4 of the Anti-Dumping Agreement do not permit zeroing under the W-T methodology.29

7.10. Canada relies on the findings of the Appellate Body in presenting its arguments, and asks us to reach the same conclusions that the Appellate Body did with respect to these two sets of claims.30 The United States argues that the Appellate Body's findings in US – Washing Machines were incorrect, and asks us to not follow them.31 We will first examine Canada's claims under the second sentence of Article 2.4.2 of the Anti-Dumping Agreement, followed by its claim under Article 2.4 of the Anti-Dumping Agreement and the consequential claims under Articles 1 and 2.1 of the Anti-Dumping Agreement as well as Articles VI:1 and VI:2 of the GATT 1994.

7.2.1 Second sentence of Article 2.4.2 of the Anti-Dumping Agreement

7.2.1.1 Provision at issue

7.11. Article 2 of the Anti-Dumping Agreement is titled "Determination of Dumping". Article 2.4.2 of the Anti-Dumping Agreement sets out the methodologies to determine the "margins of dumping" while Article 2.1 of the Anti-Dumping Agreement as well as Article VI:1 of the GATT 1994 define dumping.

7.12. Article 2.4.2 of the Anti-Dumping Agreement states:

Subject to the provisions governing fair comparison in paragraph 4, the existence of margins of dumping during the investigation phase shall normally be established on the basis of a comparison of a weighted average normal value with a weighted average of prices of all comparable export transactions or by a comparison of normal value and export prices on a transaction-to-transaction basis. A normal value established on a weighted average basis may be compared to prices of individual export transactions if the authorities find a pattern of export prices which differ significantly among different purchasers, regions or time periods, and if an explanation is provided as to why

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27 See para. 3.1(c) above.
28 Panel Report, US – Washing Machines, para. 8.1(a)(ix); Appellate Body Report, US – Washing Machines, para. 6.3. One distinction between Canada's and Korea's claims is that in this dispute Canada makes "as applied", and not "as such", claims challenging the use of the DPM in the underlying investigation. (Canada's response to Panel question after the first meeting of the Panel No. 6, para. 17).
30 Canada's first written submission, para. 3.
31 See, e.g. United States' first written submission, paras. 10, 36-37, 69-73, 82-83, and 86-87.
such differences cannot be taken into account appropriately by the use of a weighted average-to-weighted average or transaction-to-transaction comparison.

7.13. Article 2.4.2 sets out three different methodologies to determine the margins of dumping (dumping margin\(^{32}\)) of a foreign producer or exporter. The first sentence of Article 2.4.2 sets out the two methodologies that are normally used to determine such a margin. The first methodology, which we refer to as the W-W methodology, requires "a comparison of a weighted average normal value with a weighted average of prices of all comparable export transactions". The second methodology requires "a comparison of normal value and export prices on a transaction-to-transaction basis". We refer to it as the T-T methodology.

7.14. The second sentence of Article 2.4.2 sets out the third methodology to determine the dumping margin. It states that "[a] normal value established on a weighted average basis may be compared to prices of individual export transactions" if the following two conditions are met by the investigating authority:

a. it finds "a pattern of export prices which differ significantly among different purchasers, regions or time periods" (we refer to this part of the second sentence of Article 2.4.2 as the pattern clause); and

b. it explains why "such differences cannot be taken into account appropriately by the use of a [W-W or T-T] comparison" (we refer to this part of the second sentence of Article 2.4.2 as the explanation clause).

7.15. The W-T methodology is considered an exception because its use is permitted only when these two conditions are met.\(^{33}\) The function of the second sentence is to identify and unmask dumping targeted to certain purchasers, to certain regions, or in certain time periods.\(^{34}\)

7.16. Irrespective of whether the dumping margin is determined under the first sentence or pursuant to the second sentence of Article 2.4.2, it must be determined consistent with the definition of "dumping" set out in Article 2.1 of the Anti-Dumping Agreement\(^{35}\), which states:\(^{36}\):

For the purpose of this Agreement, a product is to be considered as being dumped, i.e. introduced into the commerce of another country at less than its normal value, if the export price of the product exported from one country to another is less than the comparable price, in the ordinary course of trade, for the like product when destined for consumption in the exporting country.

7.17. Article VI:1 of the GATT 1994 defines dumping in a similar manner, recognizing that dumping occurs when a product is introduced into the commerce of another country at less than its normal value. The Appellate Body has consistently held, relying in part on Article 2.1 of the Anti-Dumping Agreement and Article VI:1 of the GATT 1994 as context, that dumping and margins of dumping must be determined for the product as a whole.\(^{37}\)

7.18. What this means is that if in applying the W-W methodology, an investigating authority divides the product into multiple models, and calculates a model-specific weighted average normal value and a model-specific weighted average export price for each model, the "margins of dumping" are not the results of those multiple model-specific comparisons in which the model-specific normal

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\(^{32}\) An investigating authority is required to find a single overall dumping margin for a foreign producer or exporter. (Appellate Body Report, US – Continued Zeroing, para. 283).


\(^{34}\) Appellate Body Reports, EC – Bed Linen, para. 62; US – Washing Machines, para. 5.17.


\(^{36}\) By virtue of the opening phrase of Article 2.1 ("[f]or the purpose of this Agreement"), the definition of dumping applies throughout the Anti-Dumping Agreement.

\(^{37}\) See e.g. Appellate Body Reports; US – Softwood Lumber V, paras. 93-96; EC – Bed Linen, para. 53; and US – Zeroing (EC), para. 126. The Appellate Body in US – Washing Machines recognized that a dumping margin determined pursuant to the second sentence of Article 2.4.2 must be a margin for the product as a whole. But it took the view that a dumping margin for the product as a whole is determined differently under this second sentence. (Appellate Body Report, US – Washing Machines, para. 5.104).
value exceed the model-specific export price. Dumping and "margins of dumping" only exist for the product as a whole, and not for types, models, or categories of the product. Therefore, an investigating authority can establish the dumping margin for the product as a whole only by aggregating all intermediate values generated on the basis of such model-specific comparison results. The Appellate Body has stated in this regard that there is no textual basis under Article 2.4.2 to justify taking into account only some multiple comparison results (i.e. those results that are positive because the model-specific weighted average export price is lower than the model-specific weighted average normal value) to determine the dumping margin for the product as a whole. If an investigating authority disregards, by treating as zero, those model-specific comparison results that are negative because the model-specific weighted average export price is higher than the model-specific weighted average normal value, it would fail to take into account the prices of "all" comparable export transactions, as is required under the W-W methodology described in the first sentence of Article 2.4.2. It would also fail to determine the dumping margin for the product as a whole.

7.19. If an investigating authority applies the T-T methodology, the transaction-specific comparisons where the transaction-specific contemporaneous normal value exceed the transaction-specific export price are not the "margins of dumping" referred to in Article 2.4.2. Instead, an investigating authority can establish the dumping margin for the product as a whole only by aggregating all comparison results irrespective of whether the transaction-specific export price is higher or lower than the transaction-specific contemporaneous normal value. In particular, when aggregating such results, an investigating authority is not permitted to disregard, by treating as zero, those comparison results that are negative because the transaction-specific export price is higher than the transaction-specific contemporaneous normal value. In reaching this conclusion, the Appellate Body found the reference to "export prices" in the plural in the first sentence of Article 2.4.2, without further qualification, to suggest that all of the results of the transaction-specific comparisons generated under the T-T methodology need to be aggregated to determine the dumping margin. It took the view that zeroing alters the real values of certain export transactions. Further, it relied on contextual considerations, noting that the two "normal" methodologies provided in the first sentence, i.e. the W-W and T-T methodologies, fulfill the same function. Thus, according to the Appellate Body it would be illogical to interpret the T-T methodology in a manner that would lead to results that are systemically different from those obtained under the W-W methodology, which would be the case if zeroing is permitted under the T-T methodology (while it is precluded under the W-W methodology). Thus, as reflected in the

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44 Appellate Body Report, US – Softwood Lumber V (Article 21.5 – Canada), paras. 87 and 94. The Appellate Body found the reference to "export prices" in the plural in the first sentence to suggest that the comparison under the T-T methodology will generally involve multiple export transactions, and the reference to "a comparison" in the singular to suggest that this methodology requires an overall calculation exercise involving aggregation of those multiple transactions.
49 Appellate Body Report, US – Softwood Lumber V (Article 21.5 – Canada), para. 93. The Appellate Body noted that while the W-W methodology, as described in the first sentence of Article 2.4.2, requires a comparison based on a weighted average of prices of "all" comparable export transactions, the first sentence does not use similar terms while describing the T-T methodology. However, the Appellate Body took the view that the phrase "all comparable export transactions" is used while describing the W-W methodology because under this methodology if an investigating authority makes comparisons based on groups or models, it must include in each group only those export transactions that are comparable, but must include all comparable export transactions corresponding to the group. Such a scenario does not arise under the T-T methodology, and thus the phrase "all comparable export transactions" is not pertinent in the context of the T-T methodology. Thus, it concluded that no inference could be drawn from the absence of this phrase in the description of the T-T methodology in the first sentence of Article 2.4.2. (Appellate Body Report, US – Softwood Lumber V (Article 21.5 – Canada), para. 91).
findings in numerous panel and Appellate Body reports, zeroing is prohibited under the W-W and T-T methodologies.

7.20. Like under the T-T methodology, the application of the W-T methodology may yield multiple comparison results. How exactly these comparison results must be aggregated under the W-T methodology is a subject of dispute in this case, and thus separately discussed as part of our legal analysis below.

7.2.1.2 Factual overview

7.2.1.2.1 The USDOC’s evaluation of the conditions for the use of the W-T methodology in the underlying investigation

7.21. Following the requirements under US law in the underlying investigation, the USDOC determined the dumping margin of the Canadian producers using the W-T methodology when it found "a pattern of export prices that differ[ed] significantly" and explained why the W-W methodology could not account for such differences. The USDOC used the DPM to meet these requirements.

7.2.1.2.1.1 DPM

7.22. In the first stage of the DPM, the USDOC examined whether the export sales of an investigated producer or exporter showed a pattern of export prices that differed significantly among different purchasers, regions and time periods. In the second stage of the DPM, the USDOC examined whether it could appropriately account for such differences using only the W-W methodology. When it explained that it could not account for such differences using only the W-W methodology, it considered it appropriate to use the W-T methodology.

7.23. To meet the pattern requirements in the first stage of the DPM, the USDOC used what it referred as the Cohen’s d test and the ratio test. It used the Cohen’s d test to examine whether the investigated producer’s or exporter’s prices of merchandise to a distinct purchaser, region or time period differed significantly from the prices of its comparable merchandise to all other purchasers, regions or time periods respectively. The purpose of the Cohen’s d test was not to evaluate whether a pattern existed. Instead, the USDOC discerned the pattern under the ratio test based on the extent of the prices that differed significantly.

56 USDOC, Issues and decision memorandum dated 1 November 2017 for the final affirmative determination of sales at less than fair value and affirmative final determination of critical circumstances of certain softwood lumber products from Canada (Final issues and decision memorandum), (Exhibit CAN-1), p. 55.

51 USDOC, Decision memorandum dated 23 June 2017 for the preliminary determination in the antidumping duty investigation of certain softwood lumber products from Canada (Preliminary issues and decision memorandum), (Exhibit CAN-3), p. 14; United States’ response to Panel question after the first meeting of the Panel No. 8(b), para. 30.


53 Preliminary issues and decision memorandum, (Exhibit CAN-3), p. 15. To examine whether the W-W methodology could appropriately take into account such differences, the USDOC examined the difference between a dumping margin calculated under the W-W methodology (without zeroing) and a dumping margin calculated under the appropriate alternative methodology (described in paragraph 7.28 below), based on the results of the Cohen’s d test and the ratio test. (Ibid. p. 14). The USDOC used zeroing under the W-T methodology when calculating the margin under the appropriate alternative methodology. When it found a meaningful difference between these two dumping margins it explained that the differences in prices could not be taken into account appropriately under the W-W methodology. Such a meaningful difference arose when (a) there was a 25% relative change in the dumping margin obtained under the W-W methodology and the dumping margin obtained under the appropriate alternative methodology, provided the dumping margins obtained under both methodologies were above de minimis; or (b) when the dumping margin under the W-W methodology was de minimis but under the appropriate alternative methodology was above de minimis. (Ibid. p. 15).

54 Final issues and decision memorandum, (Exhibit CAN-1), p. 58.

55 Final issues and decision memorandum, (Exhibit CAN-1), p. 58; United States’ response to Panel question after the second meeting of the Panel No. 8(b), para. 30.

56 Final issues and decision memorandum, (Exhibit CAN-1), p. 58.
7.24. Under the Cohen's \( d \) test, the USDOC compared the weighted average price to a specific purchaser (or specific region, or specific time period) with the weighted average price to all other purchasers (or all other regions, or all other time periods). This test was done on a model-by-model basis.\(^{57}\) To illustrate, let us assume that Foreign Producer Z exports the product under investigation to four US purchasers, which are Purchasers A, B, C, and D. The USDOC would apply the Cohen's \( d \) test with respect to each of these four purchasers on a model basis. Thus, the USDOC would calculate the weighted average price (mean price) of all export transactions with respect to a particular model (CONNUM\(^{58}\)) to Purchaser A.\(^{59}\) This was the test group. The USDOC would also calculate a weighted average price of all export transactions other than those made to Purchaser A with respect to that particular model.\(^{60}\) This was the comparison group.

7.25. The USDOC used the Cohen's \( d \) coefficient to consider whether the difference in the weighted average prices to the test group and the comparison group was significant.\(^{61}\) In particular, to assess the magnitude of this difference, the USDOC calculated a Cohen's \( d \) coefficient using the following formula:\(^{62}\)

\[
d = \frac{(\text{weighted average export price})_{\text{test}} - (\text{weighted average export price})_{\text{comparison}}}{\sqrt{\text{(variance)}_{\text{test}} - (\text{variance})_{\text{comparison}}}}
\]

7.26. When the Cohen's \( d \) coefficient based on this formula was 0.8 or above, the USDOC found a significant difference in the weighted average export price to the test group and that to the comparison group.\(^{63}\) The USDOC found such a significant difference irrespective of whether the weighted average price to the test group was significantly higher or significantly lower than that to the comparison group.\(^{64}\) Thus, in our illustration above, irrespective of whether the weighted average price to Purchaser A in the test group met the 0.8 threshold because it was significantly higher or significantly lower than the weighted average price in the comparison group, the export prices to Purchaser A in the test group would pass the Cohen's \( d \) test. This exercise would be repeated for Purchasers B, C, and D. This exercise would also be repeated for different regions, and for different time periods.\(^{65}\)

7.27. The export transactions of purchasers, regions and time periods that passed the Cohen's \( d \) test were set aside for separate consideration under the ratio test.\(^{66}\) Under the ratio test, the USDOC aggregated the export transactions to purchasers, regions and time periods that passed the Cohen's \( d \) test to identify a single pattern.\(^{67}\)

7.28. When the aggregate value of the export transactions to purchasers, regions and time periods that passed the Cohen's \( d \) test accounted for 66% or more of the value of all export transactions, the USDOC considered applying the W-T methodology to all export transactions.\(^{68}\) When the aggregate value of the export transactions to purchasers, regions and time periods that passed the

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\(^{57}\) Canada's first written submission, para. 14; United States' first written submission, paras. 56-57.

\(^{58}\) The USDOC uses the nomenclature CONNUM or control numbers to refer to different models of the product under investigation.

\(^{59}\) United States' first written submission, paras. 57-58; Canada's first written submission, para. 16.

\(^{60}\) Canada's first written submission, para. 16; United States' first written submission, para. 57.

\(^{61}\) Final issues and decision memorandum, (Exhibit CAN-1), p. 55.

\(^{62}\) United States' first written submission, para. 58.


\(^{64}\) Canada's first written submission, paras. 17-18; United States' first written submission, para. 68.

\(^{65}\) See, e.g. United States' first written submission, paras. 56-57. The USDOC would define time periods by quarter, i.e. three-month periods.

\(^{66}\) In applying the Cohen's \( d \) test, the USDOC compared the export sales on a CONNUM basis for each purchaser, region and time period. If, for instance a particular CONNUM-specific export transaction did not pass the Cohen's \( d \) test for a given purchaser, that CONNUM-specific transaction was not included in the ratio test. (United States' response to Panel question after the second meeting of the Panel No. 1, paras. 1-2).

\(^{67}\) In aggregating the results of the Cohen's \( d \) test, the USDOC did not double count export sales that passed the Cohen's \( d \) test for more than one category, i.e. by purchaser, region or time period. For example, if an export sale passed the Cohen's \( d \) test by purchaser and region, then the USDOC only counted the export sale once while aggregating the results of the Cohen's \( d \) test. (United States' response to Panel question after the first meeting of the Panel No. 1(b), para. 3).

Cohen’s d test accounted for more than 33% but less than 66% of the value of all export transactions, the USDOC considered applying the W-T methodology to those export transactions that passed the Cohen's d test and the W-W methodology to those export transactions that did not pass the Cohen's d test. When the aggregate value of the export transactions to purchasers, regions and time periods that passed the Cohen's d test accounted for 33% or less of the value of all export transactions, the USDOC applied the W-W methodology to all export transactions.

7.29. Having met the pattern requirement through the Cohen's d test and the ratio test, the USDOC considered whether the W-W methodology could take into account appropriately the differences identified under the Cohen's d test. When it explained that it could not, the USDOC applied the W-T methodology to determine the dumping margin of the concerned foreign producer or exporter.

7.2.1.2.1 DPM's application in the underlying investigation

7.30. In the underlying investigation, the USDOC found that 73.56%, 72.69%, and 80.83% of Resolute's, Tolko's, and West Fraser's export transactions respectively passed the Cohen's d test. These export transactions included sales to purchasers, regions and time periods that passed the Cohen's d test because they were found to be significantly higher than export prices to other purchasers, regions or time periods, as well as prices that passed the Cohen's d test because they were found to be significantly lower than export prices to other purchasers, regions or time periods. These export transactions of Resolute, Tolko, and West Fraser also included transactions to multiple purchasers, regions and time periods.

7.31. Thus, as the United States confirms, in the underlying investigation the USDOC found "a single pattern" of export prices "which differ[ed] significantly among different purchasers, regions and time periods." The pattern included export prices to purchasers, regions and time periods that differed significantly because they were found to be significantly lower than other prices, as well as those that differed significantly because they were significantly higher than other prices.

7.2.1.2.2 The USDOC's application of the W-T methodology in the underlying investigation

7.32. The export transactions of Resolute, Tolko, and West Fraser that passed the Cohen's d test represented 66% or more of the respective value of all export transactions made by these three Canadian producers. Thus, after explaining why the W-W methodology could not take into account appropriately the identified differences in prices, following the DPM requirements the USDOC applied the W-T methodology to all export transactions of each of these producers.

7.33. In comparing the weighted average normal value with the price of an individual export transaction under the W-T methodology, the USDOC disregarded, by treating as zero, those comparison results that were negative because the price of the individual export transaction in question was higher than the relevant weighted average normal value. The USDOC determined the dumping margin by aggregating the positive comparison results, i.e. those comparison results that were positive because the price of the individual export transaction was lower than the relevant

70 United States' first written submission, para. 64; Canada's first written submission, para. 23.
71 United States' response to Panel question after the first meeting of the Panel No. 1(a), para. 1.
72 United States' response to Panel question after the first meeting of the Panel No. 1(b), para. 2.
73 United States' response to Panel question after the first meeting of the Panel No. 8(b), para. 30 (emphasis added). See also Canada's response to Panel question after the first meeting of the Panel No. 1(b), para. 3.
74 United States' response to Panel question after the first meeting of the Panel No. 1(a), para. 1; Canada's response to Panel question after the first meeting of the Panel No. 1(a), paras. 1-2; and Canada's first written submission, para. 17.
75 United States' response to Panel question after the first meeting of the Panel No. 3(b), paras. 18-20. The USDOC used multiple averaging in the underlying investigation, meaning that the USDOC divided the product under consideration into different models or CONNUMs, and calculated a weighted average normal value for each CONNUM. It compared the weighted average normal value in the comparison market with US prices, and then aggregated the comparison results. (United States' response to Panel question after the first meeting of the Panel No. 3(a), para. 17).
weighted average normal value.77 The dumping margin was expressed as a percentage of the total value of all US prices for each exporter.78 Thus, the USDOC used zeroing under the W-T methodology in the underlying investigation.

7.2.1.3 Evaluation

7.34. We will first review Canada's claims under the second sentence of Article 2.4.2 concerning the USDOC's alleged failure to identify a pattern consistent with the pattern clause, and then turn to its claim on the use of zeroing under the W-T methodology. In making our findings with respect to these claims, we recall that Article 11 of the DSU obliges us to "make an objective assessment of the matter before [us], including an objective assessment of the facts of the case and the applicability of and conformity with the relevant covered agreements". Consistent with this obligation, as well as with Article 3.2 of the DSU and Article 17.6(ii) of the Anti-Dumping Agreement, we have set out in the sections below our interpretation of the second sentence of Article 2.4.2 of the Anti-Dumping Agreement. We have then examined whether Canada has established that the USDOC acted inconsistently with the second sentence of Article 2.4.2, as we have interpreted it. In interpreting this provision, we have taken into account the legal interpretations developed in the reports of WTO panels and the Appellate Body, including those set out in the panel and Appellate Body reports in US – Washing Machines.

7.35. We have found our understanding of the text of the second sentence of Article 2.4.2 in this regard to be consistent with certain aspects of the panel's and Appellate Body's interpretation of this sentence in US – Washing Machines. However, as noted below, we have found our understanding of this text to differ from certain aspects of the panel's and the Appellate Body's interpretation in US – Washing Machines. For the reasons set out in our report, we respectfully disagree with those aspects of the Appellate Body's and the panel's interpretation in US – Washing Machines.79

7.2.1.3.1 Identification of pattern under the second sentence of Article 2.4.2 of the Anti-Dumping Agreement

7.36. The parties agree, as stated in paragraph 7.31 above, that in the underlying investigation:

a. the USDOC found "a single pattern" of export prices "which differed significantly among different purchasers, regions and time periods"; and

b. this pattern included export prices to purchasers, regions or time periods that differed significantly because they were significantly higher than export prices to other purchasers, regions or time periods.

7.37. The parties disagree, however, on whether, as a matter of law, the pattern clause permits an investigating authority to find such a "pattern". Canada asks us to follow the Appellate Body's finding in US – Washing Machines that the pattern clause does not permit an investigating authority to find a "pattern" of the type set out in paragraph 7.36 above. The United States considers the Appellate Body's findings to be incompatible with the text of the second sentence of Article 2.4.2, and thus asks us to not follow these findings. We commence our analysis by examining the text of the pattern clause.

7.38. To comply with the pattern clause, an investigating authority must find:

a. a pattern;

b. of export prices which differ significantly among different purchasers, regions or time periods.

77 United States' response to Panel question after the first meeting of the Panel No. 3(b), paras. 18-20.
78 United States' response to Panel question after the first meeting of the Panel No. 3(a), para. 17.
79 See para. 7.107 below. We also disagree for the same reason with the panel and the Appellate Body in US – Anti-Dumping Methodologies (China) to the extent the findings of the panel and the Appellate Body differ from the legal interpretation set out in this Report.
7.39. "Pattern" is defined as "a regular and intelligible form or sequence discernible in certain actions or situations".\textsuperscript{80} Thus, if the export prices do not form "a regular and intelligible form or sequence discernible in certain actions or situations", they do not form "a pattern" consistent with the pattern clause. The pattern clause also specifies what type of pattern an investigating authority must find because it refers to a pattern "of export prices which differ significantly among different purchasers, regions or time periods". Thus, export prices which do not differ, or do not differ significantly, among different purchasers, regions or time periods, also do not form "a pattern" consistent with the pattern clause.

7.40. Further, the use of the singular form in the pattern clause ("a pattern") does not necessarily suggest that an investigating authority cannot find more than one pattern. If the text had used the plural form "patterns", an investigating authority may have been required to find more than one type of pattern to meet the pattern clause requirements.\textsuperscript{81} But that is not the case. Thus, while the use of "a pattern" suggests that an investigating authority may comply with the pattern clause by identifying only one type of pattern, it on its face does not preclude an investigating authority from finding more than one type of pattern.

7.41. With these considerations in mind, we turn to examine whether the pattern clause permits an investigating authority to find a pattern of the type set out in paragraph 7.36 above.

\textbf{7.2.1.3.1.1 Whether export price variations across purchasers, regions and time periods may be aggregated to find a single pattern of export prices which differ significantly among different purchasers, regions and time periods}

7.42. The issue before us is whether the pattern clause permits an investigating authority to aggregate export price variations across purchasers, regions and time periods to find a single pattern of export prices which differ significantly among different purchasers, regions and time periods. The Appellate Body and the panel in US – Washing Machines concluded that it does not. Canada relies on these findings of the Appellate Body to contend that in the underlying investigation the USDOC failed to find a pattern among different purchasers, regions or time periods because it aggregated differences in prices across three unrelated categories, i.e. purchasers, regions and time periods.\textsuperscript{82} The United States disagrees with Canada’s arguments.

7.43. We note that an investigating authority must identify a pattern of "export prices which differ significantly among different purchasers, regions or time periods". The preposition "among" may be defined, \textit{inter alia}, as "in relation to the rest of the group [it belongs to]"\textsuperscript{83} or "esp. of things distinguished in kind from the rest of the group".\textsuperscript{84} These definitions suggest, as the United States acknowledges, a relationship between one thing, i.e. purchasers, regions or time periods and other things of the same type, i.e. other purchasers, regions or time periods.\textsuperscript{85} Thus, as the United States also acknowledges, the use of "among" in the pattern clause shows that an investigating authority may not compare prices between purchasers and regions because these two categories are not of the same type.\textsuperscript{86} Instead, the comparisons must be made between export prices to different purchasers, or different regions, or different time periods, i.e. with respect to categories of the same type.\textsuperscript{87}

\textsuperscript{80} The parties agree on this definition. (Canada’s first written submission, para. 38; United States’ first written submission, para. 44).
\textsuperscript{81} See e.g. Panel Report, US – Washing Machines, para. 7.143. The panel considered that the use of the singular form may simply indicate that a finding of a pattern with respect to any of the three categories set out in the pattern clause could potentially be a sufficient basis to apply the W-T methodology.
\textsuperscript{82} Canada’s first written submission, paras. 34 and 41-42.
\textsuperscript{84} Oxford Dictionaries online, definition of "among" http://www.oed.com/view/Entry/65247?redirectedFrom=among#eid (accessed 20 March 2019). See also United States’ first written submission, para. 46.
\textsuperscript{85} The United States appears to agree with this understanding based on the word “among”. (United States’ first written submission, para. 46).
\textsuperscript{86} United States’ response to Panel question after the first meeting of the Panel No. 7, para. 24.
\textsuperscript{87} See, e.g. United States’ response to Panel question after the first meeting of the Panel No. 7, para. 24.
7.44. However, the United States contends that such comparisons do not in and of themselves identify "a pattern".\(^{88}\) Instead, in the United States' view, to identify a pattern among different purchasers, regions or time periods for the foreign producer or exporter, and the product as a whole, an investigating authority needs to examine the producer's or exporter's sales holistically, and in the aggregate.\(^{89}\) The United States submits that the USDOC aggregated the differences in export prices identified under the Cohen's \(d\) test to determine the extent of those differences and consider the producer's overall pricing behaviour in the US market for the product as a whole.\(^{90}\) The United States asserts that nothing in the text of the pattern clause suggests that significant differences among each category, i.e. purchasers, regions or time periods, cannot be considered together when assessing whether there exists "a pattern of export prices which differ significantly 'among different purchasers, regions or time periods'".\(^{91}\) According to the United States, the text of the pattern clause on its face contemplates a pattern of export prices that transcends multiple purchasers, regions or time periods, noting that if the pattern clause prohibited the identification of such a single pattern, instead of using the preposition "among" only once, it would have used this preposition three times (as in among purchasers, or among regions, or among time periods).\(^{92}\) We, however, disagree with the United States' arguments.

7.45. Nothing in the pattern clause suggests that having identified significant differences in export prices among different purchasers, or different regions, or different time periods, an investigating authority is permitted to aggregate those differences to find one single pattern. Instead, we agree with the Appellate Body in US – Washing Machines that a single "pattern" which comprises prices found to be significantly different from other prices across different categories would effectively be composed of prices that do not form a regular and intelligible sequence.\(^{93}\) The use of the conjunction "or" in the specific context of the pattern clause, that is along with the use of the words "among" and "pattern" confirms that the identified pattern must be one of export prices which differ significantly among categories of the same type, i.e. different purchasers, different regions, or different time periods. We also disagree with the United States' argument that if the pattern clause prohibited the identification of a single pattern that aggregates differences in export prices across categories, it would have used the preposition "among" thrice. Instead, we, like the Appellate Body in US – Washing Machines, consider that the use of "among" thrice in the pattern clause would have been superfluous because it would have conveyed the same meaning as the existing text.\(^{94}\)

7.46. Further, nothing in the pattern clause precludes an investigating authority from considering the extent of the price differences identified under the pattern clause. One would also expect an investigating authority to look at the overall pricing behaviour of a foreign producer or exporter to identify a pattern. But we do not consider that it is necessary for an investigating authority to, as the United States contends, aggregate the identified price differences across different categories to address those considerations.

7.47. In particular, as noted above, the pattern clause does not preclude an investigating authority from finding more than one pattern. Thus, having examined the totality of an exporter's or producer's export sales by purchaser, by region, and by time period, an investigating authority could find, consistent with the pattern clause, a pattern of export prices which differ significantly among different purchasers, a pattern of export prices which differ significantly among different regions, and a pattern of export prices which differ significantly among different time periods. The investigating authority is free to examine the extent of the price differences represented across the identified patterns.

7.48. Our interpretation is consistent with that of the Appellate Body in US – Washing Machines. The Appellate Body noted that its interpretation of the pattern clause did not exclude the possibility that a foreign producer or exporter could be practising more than one type of targeted dumping (that is dumping targeted to purchasers, regions and time periods), or that an investigating authority could find more than one type of pattern.\(^{95}\) However, like us, the Appellate Body found that the text

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\(^{88}\) United States' response to Panel question after the first meeting of the Panel No. 8(b), para. 28.

\(^{89}\) United States' response to Panel question after the first meeting of the Panel No. 8(b), para. 28.

\(^{90}\) United States' response to Panel question after the first meeting of the Panel No. 8(b), para. 28.

\(^{91}\) United States' first written submission, para. 79. (emphasis omitted)

\(^{92}\) Appellate Body Report, US – Washing Machines, para. 5.34.

\(^{93}\) Appellate Body Report, US – Washing Machines, para. 5.35.

\(^{94}\) Appellate Body Report, US – Washing Machines, para. 5.35.
of the pattern clause did not support the United States' view that an investigating authority could find a single pattern of export prices, which includes variations in export prices across purchasers, regions and time periods. Therefore, we conclude that the pattern clause does not permit an investigating authority to find a single pattern that aggregates differences in export prices across purchasers, regions, and time periods.

Conclusion

7.49. Based on the foregoing, we find that the USDOC acted inconsistently with the second sentence of Article 2.4.2 in the underlying investigation because in applying the DPM, and specifically under the ratio test, it aggregated differences in export prices across unrelated categories, i.e., purchasers, regions, and time periods to identify a single pattern of export prices which differed significantly among different purchasers, regions, and time periods.

7.2.1.3.1.2 Whether a pattern can include export prices to purchasers, regions or time periods that differ significantly because they are significantly higher relative to export prices to other purchasers, regions or time periods

7.50. We recall that a foreign producer or exporter's prices to a US purchaser pass the Cohen's d test when the weighted average price to that purchaser is found to differ significantly from the weighted average export price to all other purchasers (same with regions and time periods). Otherwise, those prices fail the Cohen's d test. But the weighted average export price to a specific purchaser (or a specific region, or a specific time period) that passes the Cohen's d test, may differ significantly because this price is significantly lower, or significantly higher, than the weighted average price to all other purchasers (or all other regions, or all other time periods).

7.51. Noting that in applying the Cohen's d test in the underlying investigation the USDOC identified both higher-priced and lower-priced export sales to purchasers, regions, or time periods as part of the purported pattern\(^96\), Canada asserts that export prices which differ significantly because they are significantly higher, as opposed to significantly lower, cannot form part of the pattern. Canada finds support for its view in the Appellate Body report in *US – Washing Machines*, where the Appellate Body concluded that the pattern must be limited to the export transactions to those purchasers, regions, or time periods whose prices are found to differ significantly because they are significantly lower than export prices to other purchasers, regions, or time periods.\(^97\) Canada submits that this interpretation of the Appellate Body gives meaning to the word "pattern".\(^98\) Further, considering the Anti-Dumping Agreement is focused on sales below normal value, and the second sentence of Article 2.4.2 is meant to address targeted dumping, an investigating authority must find a pattern of lower-priced, not higher-priced export sales.\(^99\)

7.52. The United States disagrees with Canada's arguments as well as the Appellate Body's findings in *US – Washing Machines* on which these arguments are based. Noting that as part of the pattern requirements, the DPM, and specifically the Cohen's d test, looks for export prices to a purchaser, region, or time period that are either significantly higher or significantly lower than export prices to other purchasers, regions, or time periods, the United States asserts that the pattern clause does not require or foreclose a focus either on lower-priced or higher-priced sales.\(^100\) Instead, a pattern of export prices which "differ significantly" would necessarily include in the United States' view both lower-priced and higher-priced export sales that differ significantly from each other.\(^101\)

7.53. However, while observing that the Cohen's d test looks for export prices that are either significantly higher or significantly lower, the United States asserts that the relevant pattern is not limited to export transactions to those purchasers, regions, or time periods that pass the Cohen's d test. Instead, the pattern could comprise the export transactions to purchasers, regions, or time periods that pass the Cohen's d test as well as those that fail the Cohen's d test, which, we

\(^{96}\) Canada's first written submission, para. 40.

\(^{97}\) Canada's first written submission, para. 35 (referring to Appellate Body Report, *US – Washing Machines*, paras. 5.39–5.43); Appellate Body Report, *US – Washing Machines*, para. 5.29.

\(^{98}\) Canada’s response to Panel question after the first meeting of the Panel No. 10, para. 20.

\(^{99}\) Canada's opening statement at the first meeting of the Panel, para. 20.

\(^{100}\) United States' first written submission, para. 68.

\(^{101}\) United States' first written submission, para. 70.
note, effectively means that the pattern could comprise all export transactions of the investigated producer or exporter.\textsuperscript{102} The United States justifies this view by observing that under the Cohen’s d test, the USDOC makes intermediate comparisons by comparing the export prices to each purchaser with that to all other purchasers (same with regions and time periods). For example, if the foreign producer or exporter has three US purchasers, A, B, and C, the USDOC would compare the weighted average export price to Purchaser A with the weighted average export price to Purchasers B and C; the weighted average export price to Purchaser B with the weighted average export price to Purchasers C and A; and the weighted average export price to Purchaser C with the weighted average export price to Purchasers A and B. The United States contends that if the weighted average export price to Purchaser A is significantly lower than the weighted average export price to the other purchasers, "logically" the weighted average export price to the other purchasers, here, Purchasers B and C, would be significantly higher.\textsuperscript{103} Thus, per the United States, the pattern of export prices which differ significantly would comprise export transactions to Purchasers A and C as well as B.\textsuperscript{104}

7.54. Canada challenges the USDOC’s decision to identify as part of the pattern those export prices to a specific purchaser, region or time period that passed the Cohen’s d test because they were significantly higher (as opposed to just significantly lower) relative to export prices to other purchasers, regions or time periods. Thus, the issue that we must resolve is whether "a pattern of export prices which differ significantly" could include export prices to purchasers, regions or time periods which differ significantly because they are significantly higher relative to export prices to other purchasers, regions or time periods. Our interpretation of the pattern clause suggests that it could.

7.55. Interpreting the pattern clause taking into account the function of the second sentence of Article 2.4.2 suggests that the focus of the pattern is on export prices which "differ significantly" and thus not on all export prices.\textsuperscript{105} However, the pattern clause does not further qualify the export prices which "differ significantly" by requiring that they differ only because they are significantly lower, not significantly higher, relative to export prices to other purchasers, regions or time periods. Thus, the pattern clause is silent on this matter:

7.56. We recognize that this silence of the text is not dispositive.\textsuperscript{106} Indeed, even assuming the phrase "export prices which differ significantly" could, in principle, cover export prices to purchasers, regions or time periods that are significantly lower as well as significantly higher, these export prices must collectively form a regular and intelligible sequence that is discernible in certain actions and is capable of being understood (i.e. they form "a pattern"). We recall that the panel in US – Washing Machines concluded, relying on a definition of pattern as a regular and intelligible form or sequence, that prices that are too high and prices that are too low do not belong in the same pattern.\textsuperscript{107} The Appellate Body upheld this finding of the panel, while additionally noting that a pattern cannot comprise export prices that differ significantly because they are significantly higher.\textsuperscript{108} However, our interpretation of the text leads us to a different conclusion than that reached by the panel and the Appellate Body in US – Washing Machines.

7.57. To us, the silence of the text on whether the export prices that differ significantly must do so because they are significantly lower or significantly higher is explained by the function of the second sentence of Article 2.4.2, which is to unmask dumping targeted to certain purchasers, regions or

\textsuperscript{102} See e.g. United States’ response to Panel question after the first meeting of the Panel No. 8(b), para. 30. Export transactions that pass the Cohen’s d test, and those that fail the Cohen’s d test, would make up the entire universe of export transactions of a foreign producer or exporter.

\textsuperscript{103} United States’ response to Panel question after the first meeting of the Panel No. 8(a), para. 27.

\textsuperscript{104} If there are multiple export transactions to a purchaser that makes up the test group, the USDOC would calculate a single weighted average price to that purchaser. If there are multiple export transactions to the purchasers that make up the comparison group, the USDOC would calculate a single weighted average price to all these purchasers. Under the Cohen’s d test, the USDOC would make its comparisons based on these weighted average prices. However, as explained above, when the weighted average price to the purchaser passes the Cohen’s d test, the USDOC would consider the total value of all export transactions to this purchaser under the ratio test.


\textsuperscript{106} We are aware that the silence of a text is not necessarily dispositive, as it is possible that the requirement with respect to which the text is silent was intended to be included by implication. (Appellate Body Report, US – Carbon Steel, para. 65).

\textsuperscript{107} Panel Report, US – Washing Machines, para. 7.144.

\textsuperscript{108} Appellate Body Report, US – Washing Machines, paras. 5.36-5.37.
time periods. The text of the pattern clause supports the view that targeted dumping is masked when significantly lower prices to certain purchasers, or certain regions, or in certain time periods are masked by significantly higher export prices to certain other purchasers, or to certain other regions, or in certain other time periods. In particular, the text permits an investigating authority to find a pattern, which comprises export prices to purchasers, regions or time periods that are (a) significantly lower and thus may be masked; and (b) significantly higher and thus may be masking those lower-priced export sales. Having identified such a pattern, an investigating authority is permitted, as noted in paragraph 7.99 below, to unmask targeted dumping reflected in the pattern by applying the W-T methodology to those export transactions that fall within the pattern (while still being required to apply a normal W-W or T-T methodology to the non-pattern transactions).

7.58. To successfully unmask targeted dumping reflected in the pattern transactions, an investigating authority should be permitted to adopt a methodology that deals with such significantly higher-priced export sales, which may be masking the significantly lower-priced export sales, as well as those lower-priced sales, which may be masked. The second sentence permits an investigating authority to do so by applying the W-T methodology to a pattern that includes both these types of export sales. Thus, the silence of the text on whether export prices must "differ significantly" because they are significantly higher or significantly lower is explained by the function of the second sentence of Article 2.4.2.

7.59. We recall that the Appellate Body in US – Washing Machines relied primarily on contextual considerations in concluding that the pattern could only comprise export prices which differ significantly because they are significantly lower. The Appellate Body, after all, did recognize that the text of the second sentence does not expressly specify whether the export prices which differ significantly must do so because they are significantly higher or significantly lower.109 We, however, disagree with these contextual considerations.

7.60. For instance, the Appellate Body found support for its view in the definition of dumping in Article 2.1 of the Anti-Dumping Agreement and Article VI:1 of the GATT 1994, noting that dumped prices refer to export prices that are lower than the normal value.110 But we do not find this definition to offer specific guidance on the issue before us because low-priced export transactions may be higher or lower than the normal value, just as high-priced export transactions may be higher or lower than the normal value, especially considering that the pattern is not determined by reference to normal value. Further, the Appellate Body's finding was informed by its view that if an investigating authority determines the dumping margin under the second sentence of Article 2.4.2, it must apply the W-T methodology only to pattern transactions and exclude the non-pattern transactions.111 However, as discussed in paragraphs 7.88-7.99 below, such a methodological approach is not consistent with Article 2.4.2 because this provision does not permit an investigating authority to exclude non-pattern transactions. Thus, we respectfully disagree with the contextual considerations relied on by the Appellate Body to the extent they are based on a methodological approach that in our view is not provided under the second sentence of Article 2.4.2.

7.61. We also disagree with the panel in US – Washing Machines insofar as it concluded that prices that are too high and prices that are too low do not belong in the same pattern.112 The definition of pattern does not suggest that prices falling within a pattern need to differ in the same way, i.e. it need not comprise only lower-priced export sales, or only higher-priced export sales, to purchasers (or regions, or time periods). What is important is that the sequence of export prices should form a regular and intelligible sequence that is discernible in certain actions and capable of being understood. Export prices which "differ significantly" because they are significantly higher or significantly lower could form such a sequence. Such a sequence of significantly higher and significantly lower export prices to purchasers, regions or time periods would stand out relative to export prices to other purchasers, regions or time periods because they "differ significantly", and thus would be capable of being understood. Moreover, the word "pattern" should not be viewed in isolation from the other parts of the text that specify what type of pattern an investigating authority must find. In so specifying, the pattern clause only requires that the pattern be of export prices which differ significantly, and does not prescribe whether they should differ because they are

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111 See para. 7.71 below.
significantly higher or significantly lower relative to export prices to other purchasers, regions or time periods. Therefore, the pattern clause does not preclude an investigating authority from finding that the pattern includes export prices to purchasers, regions or time periods that “differ significantly” because they are significantly higher relative to export prices to other purchasers, regions or time periods.

7.62. As we noted above, Canada’s claim under the second sentence of Article 2.4.2 is based on its view that the pattern identified under the pattern clause cannot include export prices to purchasers, regions or time periods which differ significantly because they are significantly higher relative to export prices to other purchasers, regions or time periods. We disagree with this view based on the legal analysis set out above. Thus, we also disagree with Canada that the USDOC acted inconsistently with the pattern clause because export prices to certain purchasers, regions or time periods passed the Cohen’s d test because they were significantly higher relative to export prices to other purchasers, regions or time periods.

7.63. Our findings with respect to the claim brought by Canada should not, however, be misunderstood to mean that a pattern would comprise all export transactions of a foreign producer or exporter.\(^{113}\) The United States asserts, as noted above, that once an investigating authority finds that the weighted average export price to a particular purchaser (Purchaser A in the hypothetical discussed in paragraph 7.53) is significantly lower than the weighted average export price to all other purchasers (Purchasers B and C in the hypothetical), the weighted average export price to those other purchasers (i.e. Purchasers B and C) is significantly higher than the weighted average export price to Purchaser A. Thus, the pattern of export prices which “differ significantly” from each other per the United States includes all export transactions to Purchaser A (because the weighted average price to this purchaser is significantly lower) as well as all export transactions to Purchasers B and C (because the weighted average export price to these two purchasers is significantly higher).

7.64. We disagree with this argument of the United States because it works when one assumes that to meet the pattern clause requirements, an investigating authority must necessarily consider whether the weighted average export price to one purchaser differs significantly from the weighted average of the export prices to all other purchasers combined.\(^{114}\) But this assumption is not grounded in the text of the pattern clause. The pattern clause does not prescribe how an investigating authority must find a pattern. But it does require an investigating authority to find a pattern of export prices which differ significantly among different purchasers. It does not state that an investigating authority must find whether the weighted average export price to one purchaser differs significantly from the weighted average of export prices to all other purchasers (with the same rationale applying to regions and time periods as well). Irrespective of the methodology used to identify a pattern, the pattern ultimately discerned, based on an evaluation of all export sales of the concerned foreign producer or exporter, cannot include export prices which do not differ significantly among different purchasers, regions or time periods.

7.65. Indeed, as noted in paragraph 7.55 above, we agree with the Appellate Body in US – Washing Machines that the focus of the pattern is on export prices which “differ significantly” and thus not on all export prices.\(^{115}\) The text of the pattern clause does not suggest that the pattern comprises any

\(^{113}\) The United States submits that the USDOC did not find in the underlying investigation that the pattern consisted of all export sales. (United States’ response to Panel question after the second meeting of the Panel No. 4, para. 43). However, as noted earlier, it also contends that a pattern could comprise export transactions that pass the Cohen’s d test as well as those that fail the Cohen’s d test, which would effectively mean that the pattern would comprise all export transactions of a foreign producer or exporter, even though only export prices to certain purchasers, regions or time periods pass the Cohen’s d test because they are found to “differ significantly”. (United States’ response to Panel question after the first meeting of the Panel No. 8(b), para. 30).

\(^{114}\) The United States contends that the Appellate Body in US – Washing Machines rewrote the pattern clause by substituting “among” for “from” because the Appellate Body found that the distinguishing factor that would allow the authority to discern which prices form part of the pattern would be that the prices in the pattern differ significantly from prices not in the pattern. (United States’ first written submission, para. 71). It appears to us, however, that it is the United States’ interpretation of the pattern clause that replaces the word “among” with “from”.

\(^{115}\) Appellate Body Report, US – Washing Machines, paras. 5.26. We also consider that a “pattern” that includes export prices to purchasers, regions or time periods which do not "differ significantly" would not form "a regular and intelligible form or sequence discernible in certain actions or situations". There would be no criteria based on which such a sequence could be discerned or be capable of being understood, and such a
lower- or higher-priced export transaction, or any export transaction priced above or below the normal value. The existence of such type of lower-priced and higher-priced export transactions would not be a sufficient basis to find a pattern because the pattern clause requires an investigating authority to find a pattern of export prices which differ significantly among different purchasers, regions or time periods, and not significant differences or variations across the prices of all export transactions. It follows that if an investigating authority were to find that certain export prices do "differ significantly among different purchasers, regions or time periods" and form the relevant pattern, that would not present the investigating authority with a carte blanche to include other export prices that do not "differ significantly among different purchasers, regions or time periods" in the pattern. Thus, we consider that a pattern of export prices which "differ significantly" among different purchasers, regions or time periods necessarily excludes export prices which do not differ significantly among different purchasers, regions or time periods.

### Conclusion

7.66. Based on the foregoing, we find that Canada has not established that in applying the DPM in the underlying investigation the USDOC acted inconsistently with the second sentence of Article 2.4.2 by including, in the pattern, export transactions to those purchasers, regions or time periods whose prices differed significantly because they were significantly higher relative to export prices to other purchasers, regions or time periods.

#### 7.2.1.3.2 Zeroing under the W-T methodology

7.67. We observed in paragraph 7.20 above that the process of comparing a normal value established on a weighted average basis with the prices of individual export transactions may yield multiple intermediate comparison results. An intermediate comparison result is positive when the price of an individual export transaction is lower than the weighted average normal value. An intermediate comparison result is negative when the price of an individual export transaction is higher than the weighted average normal value. An investigating authority uses zeroing under the W-T methodology when, in aggregating the intermediate comparison results, it disregards by treating as zero the negative comparison results and considers only the positive comparison results. Considering that in dumping margin calculations the total dumped amount is presented in the numerator, the numerator reflects only the positive comparison results when zeroing is used (and the positive as well as the negative comparison results when zeroing is not used). The denominator comprises the value of all export transactions, including the value of export transactions that are disregarded while determining the total dumped amount. The formula for calculating a dumping margin under the W-T methodology (in percentage) is\(^\text{16}\):

\[
\frac{\text{Total Dumped Amount (Numerator)}}{\text{Total Value of all export transactions (Denominator)}} \times 100
\]

7.68. The issue in this dispute is whether the second sentence of Article 2.4.2 permits such type of zeroing under the W-T methodology. The panels in US – Washing Machines and US – Anti-Dumping Methodologies (China) and the Appellate Body in US – Washing Machines concluded that the second sentence of Article 2.4.2 does not permit the use of zeroing under the W-T methodology.\(^\text{117}\) One Appellate Body Member in US – Washing Machines, however, dissented from the majority view and found zeroing to be permissible under the W-T methodology. While these panels and the Appellate Body found zeroing to be impermissible under the second sentence, they

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\(^{16}\) Irrespective of whether the dumping margin is determined under the W-T methodology, the W-W methodology, or the T-T methodology, the numerator would reflect the total dumped amount. However, how exactly the total dumped amount is determined would vary based on the methodology used.

\(^{117}\) The Appellate Body’s findings were not based on the unanimous view of all three Appellate Body Members forming the Division. While the majority, i.e. two Members concluded that the second sentence of Article 2.4.2 prohibits zeroing under the W-T methodology, one Member disagreed with that conclusion and wrote a dissenting opinion. We refer to the findings of the majority as the Appellate Body findings in US – Washing Machines.
acknowledged that the W-T methodology is an exceptional methodology which is designed to unmask targeted dumping.\footnote{See, e.g. Appellate Body Report, US – Washing Machines, paras. 5.17-5.18; Panel Reports, US – Washing Machines, para. 7.155; US – Anti-Dumping Methodologies (China), fn 385.} However, they concluded that the second sentence of Article 2.4.2 permits an investigating authority to unmask targeted dumping without using zeroing. This conclusion is based on their view on how an investigating authority is supposed to determine the dumping margin pursuant to the second sentence of Article 2.4.2.

7.69. These panels and the Appellate Body noted that when an investigating authority determines the dumping margin under the second sentence of Article 2.4.2 after meeting the conditions set out in this sentence, it is permitted to apply the W-T methodology only to those export transactions that fall within the relevant pattern.\footnote{Appellate Body Report, US – Washing Machines, para. 5.55; Panel Reports, US – Washing Machines, para. 7.29; US – Anti-Dumping Methodologies (China), para. 7.183.} Thus, they took the view that the second sentence does not permit an investigating authority to apply the W-T methodology to the non-pattern transactions. However, the panels and the Appellate Body reached different conclusions on how an investigating authority is supposed to treat such non-pattern transactions.

7.70. The panels in US – Washing Machines and US – Anti-Dumping Methodologies (China) did not preclude the application of any of the two normal methodologies, i.e. the W-W or the T-T methodology to the non-pattern transactions.\footnote{The panel in US – Washing Machines observed that one might take the view that the combined application of the W-T and W-W (or T-T) methodologies is not provided under the second sentence of Article 2.4.2. But considering the complainant did not make a claim to that effect, it assumed that the combined application of the two methodologies (i.e. W-T methodology to the pattern transactions and W-W or T-T methodology to the non-pattern transactions) is not precluded. (Panel Report, US – Anti-Dumping Methodologies (China), para. 7.161). The panel in US – Anti-Dumping Methodologies (China) noted that to resolve the claim before it, it did not need to express a view on how an investigating authority should treat non-pattern transactions while determining the dumping margin for the product as a whole. But, it observed that an investigating authority may use another methodology with respect to the non-pattern transactions, provided it complies with Article 2.4.2 and other relevant provisions of the Anti-Dumping Agreement. It did not suggest that the non-pattern transactions must be excluded. (Panel Report, US – Anti-Dumping Methodologies (China), para. 7.182.)} Thus, these panels did not preclude that an investigating authority could apply a mixed methodology wherein the W-T methodology is applied to pattern transactions (but without zeroing) and the W-W or T-T methodology is applied to non-pattern transactions (without zeroing).\footnote{In US – Washing Machines, the panel dealt with the use of a mixed methodology by the USDOC wherein the W-T methodology was applied to export transactions that passed the Cohen’s d test and the W-W methodology was applied to export transactions that did not pass the Cohen’s d test.} When such a mixed methodology is used, the intermediate results calculated by applying the W-T methodology to pattern transactions and the W-W (or T-T) methodology to non-pattern transactions must be aggregated to calculate one overall dumping margin for the foreign producer or exporter. The panels observed that in aggregating these intermediate results, an investigating authority may systematically disregard the intermediate result calculated by applying the W-W or the T-T methodology to non-pattern transactions, when this intermediate result is negative.\footnote{Panel Reports, US – Washing Machines, paras. 7.162-7.164; US – Anti-Dumping Methodologies (China), fn 385.} When this intermediate result is positive, the investigating authority would add this result to the intermediate result obtained by applying the W-T methodology to pattern transactions.\footnote{So, to take an example, if the intermediate result calculated by applying the W-T methodology to pattern transactions is 500, and that calculated by applying the T-T methodology to non-pattern transactions is -500, an investigating authority would disregard the intermediate result based on non-pattern transactions resulting in a dumped amount of 500 (500 + 0). If the intermediate result calculated by applying the W-T methodology to pattern transactions is 500, and that calculated by applying the T-T methodology to non-pattern transactions is 150, the two results would be added to get a total dumped amount of 650 (500+150).} This way, according to these panels, the W-T methodology could unmask targeted dumping by not letting negative dumping outside the pattern offset or “re-mask” the dumping within the pattern.\footnote{Panel Reports, US – Washing Machines, para. 7.162; US – Anti-Dumping Methodologies (China), fn 385.}

7.71. However, unlike these two panels, the Appellate Body concluded that the second sentence of Article 2.4.2 does not permit the use of a mixed methodology, thereby disagreeing with the two
panels on this point. Instead, in determining the dumped amount pursuant to the second sentence an investigating authority would apply the W-T methodology only to the pattern transactions and exclude the non-pattern transactions. Thus, the dumped amount represented in the numerator would be based only on results obtained by applying the W-T methodology to pattern transactions. The denominator would reflect the value of all export transactions, i.e. the pattern and the non-pattern transactions. This way, per the Appellate Body, an investigating authority can address targeted dumping that is represented in the pattern by comparing all export transactions identified in the pattern with the weighted average normal value. Because the non-pattern transactions are excluded from the dumping margin calculations, the negative intermediate result based on such non-pattern transactions is not allowed to re-mask the targeted dumping identified in the pattern. According to the Appellate Body, once the non-pattern transactions are excluded, there is nothing more that needs to be unmasked. Thus, per the Appellate Body zeroing is not permitted to unmask targeted dumping.

7.72. Relying primarily on these findings of the Appellate Body in US – Washing Machines, Canada contends that the second sentence of Article 2.4.2 does not permit the use of zeroing under the W-T methodology. The United States disputes Canada's submission and asks us not to follow the Appellate Body's findings in US – Washing Machines. Noting that the second sentence of Article 2.4.2 sets out an exceptional W-T methodology, which is designed to unmask targeted dumping, the United States asserts that if zeroing is prohibited under the W-T methodology, this methodology would no longer be exceptional, or provide the means to unmask targeted dumping. The United States' assertion is based on its view that because the W-T methodology is an exceptional methodology, its use should result in a dumping margin that is systematically different from the dumping margin determined under the "normal" W-W or T-T methodology. However, if zeroing is permitted under the W-T methodology, this methodology per the United States will "as a mathematical certainty, in every case" yield a dumping margin that is identical to the dumping margin determined under the W-W methodology. In particular, the United States submits that if zeroing is prohibited under the W-T methodology, there will be mathematical equivalence between the dumping margin determined under the W-W methodology, the W-T methodology, and a mixed methodology wherein the W-T methodology is applied to a subset of export transactions and the W-W methodology is applied to the remaining export transactions. Such type of mathematical equivalence according to the United States will render the second sentence of Article 2.4.2 inutile. Canada, however, disputes the United States' mathematical equivalence arguments on the grounds set out in paragraph 7.76 below.

7.73. In addition to disagreeing on whether zeroing is permissible under the second sentence of Article 2.4.2, the parties also disagree on whether the dumping margin determined under the W-W methodology provided in the first sentence of Article 2.4.2, and that determined pursuant to the second sentence of Article 2.4.2, will be mathematically equivalent in every case if zeroing is prohibited under the W-T methodology. We must ascertain whether the dumping margin determined under the W-W methodology provided in the first sentence of Article 2.4.2 will be mathematically equivalent "in every case" to the dumping margin determined pursuant to the second sentence of Article 2.4.2. If we find that such type of mathematical equivalence arises in every case, and not just in a specific set of circumstances, we will consider the United States' mathematical equivalence.

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125 Appellate Body Reports, US – Washing Machines, paras. 5.129-5.130; US – Anti-Dumping Methodologies (China), para. 5.108.
131 United States' first written submission, paras. 11 and 115.
132 United States' first written submission, paras. 114-115.
133 United States' first written submission, para. 121. (emphasis added)
134 United States' first written submission, fn 177; response to Panel question after the second meeting of the Panel No. 2(a), paras. 13-31.
135 United States' first written submission, paras. 5 and 159.
136 The United States requests us to make factual findings confirming that dumping margins calculated under the W-W and W-T methodologies will be mathematically equivalent if zeroing is considered impermissible under the W-T methodology. (United States' first written submission, para. 160; second written submission, para. 74).
arguments as part of our assessment of whether zeroing is permissible under the W-T methodology.\(^\text{137}\)

### 7.2.1.3.2.1 The assumptions underlying the United States' mathematical equivalence argument

7.74. The United States, as noted above, asserts that the dumping margin determined under the W-W methodology will be mathematically equivalent in every case to a dumping margin that is determined under\(^\text{138}\):

a. the W-T methodology, wherein this methodology is applied to all export transactions of a foreign producer or exporter; or

b. a mixed methodology, wherein the W-T methodology is applied to a subset of export transactions of that foreign producer or exporter and the W-W methodology is applied to the remaining export transactions.

7.75. Canada does not make a formal claim challenging the application of the W-T methodology to all export transactions, instead of only pattern transactions. However, in rebutting the United States' mathematical equivalence arguments, Canada asserts, relying on the Appellate Body report in *US – Washing Machines*, as follows:

a. The second sentence of Article 2.4.2 does not permit an investigating authority to apply the W-T methodology to all export transactions. Instead, this methodology must be limited to pattern transactions.\(^\text{139}\)

b. The Anti-Dumping Agreement does not permit the use of a mixed methodology wherein the W-T methodology is applied to pattern transactions and the W-W (or T-T) methodology is applied to non-pattern transactions.\(^\text{140}\) Instead, as the Appellate Body stated in *US – Washing Machines*, if an investigating authority applies the W-T methodology after meeting the conditions set out in the second sentence, it must apply this methodology only to pattern transactions.\(^\text{141}\) Non-pattern transactions must be excluded when calculating the dumped amount. Therefore, neither the W-W nor the T-T methodology must be applied to these non-pattern transactions.

7.76. Canada submits that if the W-T methodology is applied correctly, consistent with the Appellate Body's interpretation of the second sentence of Article 2.4.2, i.e. if it is applied to pattern transactions alone, the resultant dumping margin will not be mathematically equivalent to the dumping margin determined under the W-W methodology (which must be applied to all export transactions).\(^\text{142}\) In addition, while maintaining that the second sentence does not permit an investigating authority to use a mixed methodology, Canada nonetheless presents calculations showing that the dumping margin based on a W-W methodology will not be mathematically equivalent in all cases to a dumping margin based on a mixed methodology wherein the W-T methodology is applied to pattern transactions and the W-W methodology is applied to

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\(^\text{137}\) In *US – Softwood Lumber V (Article 21.5 – Canada)* the Appellate Body stated that "[o]ne part of a provision setting forth a methodology is not rendered *inutile* simply because, in a specific set of circumstances, its application would produce results that are equivalent to those obtained from the application of a comparison methodology set out in another part of that provision". (Appellate Body Report, *US – Softwood Lumber V (Article 21.5 – Canada)*, para. 99 (emphasis added)). We agree with the Appellate Body that the second sentence of Article 2.4.2 is not rendered *inutile* if the dumping margin determined under the W-W methodology and that determined pursuant to the second sentence of Article 2.4.2 are mathematically equivalent only "in a specific set of circumstances".

\(^\text{138}\) United States' first written submission, fn 177; response to Panel question after the second meeting of the Panel No. 2(a), para. 5.

\(^\text{139}\) Canada's responses to Panel question after the first meeting of the Panel Nos. 5(a) and (b), paras. 12, 14, and 16.

\(^\text{140}\) Canada's response to Panel question after the second meeting of the Panel No. 2(c), para. 1.

\(^\text{141}\) Canada's response to Panel question after the first meeting of the Panel No. 5(a), para. 14.

\(^\text{142}\) Canada's responses to Panel question after the first meeting of the Panel Nos. 5(a) and (b), paras. 12, 14, and 16.
non-pattern transactions. In the calculations, Canada calculates the normal value under the W-W and W-T methodologies on different temporal bases.

7.77. We note that both parties’ arguments on mathematical equivalence are directly linked to the scope of application of the W-T methodology and to the treatment of non-pattern transactions. Thus, in making our findings on mathematical equivalence we find it necessary to set out our understanding on how an investigating authority is supposed to make dumping margin calculations when the conditions for the use of the W-T methodology provided in the second sentence of Article 2.4.2 are met.

**Dumping determinations pursuant to the second sentence of Article 2.4.2**

7.78. We consider, as past panels and the Appellate Body have, that the second sentence of Article 2.4.2 does not permit an investigating authority to apply the W-T methodology to all export transactions. Instead, this methodology may be applied only to pattern transactions. However, we disagree that non-pattern transactions may (or must) be excluded when an investigating authority makes dumping determinations pursuant to the second sentence. Instead, an investigating authority must apply the W-W or the T-T methodology to those non-pattern transactions. The intermediate result calculated by applying the W-T methodology to pattern transactions must be aggregated with the intermediate result calculated by applying the W-W or the T-T methodology to the non-pattern transactions. The intermediate result based on non-pattern transactions may not be excluded, irrespective of whether that result is positive or negative. We have reached these conclusions based on the legal analysis set out below.

**Scope of application of the W-T methodology**

7.79. The United States argues that if an investigating authority properly establishes the conditions for applying the W-T methodology, nothing in the Anti-Dumping Agreement would preclude it from determining the dumping margin by applying the W-T methodology to all export transactions. Canada contends that the W-T methodology may only be applied to pattern transactions. Our interpretation of the text of the second sentence of Article 2.4.2 shows that this sentence does not permit the application of the W-T methodology to non-pattern transactions.

7.80. The second sentence of Article 2.4.2 does not state that in applying the W-T methodology an investigating authority must compare the normal value established on a weighted average basis with the prices of all export transactions. Reading the text of this sentence as a whole, taking into account in particular, the explanation clause, shows that this sentence does not envisage the application of the W-T methodology to all export transactions. Instead, this methodology must be limited to those export transactions that fall within the pattern that the investigating authority identifies under the pattern clause.

7.81. The explanation clause permits an investigating authority to apply the W-T methodology only when it explains why "such differences" cannot be taken into account appropriately by using a W-W or T-T comparison. "Such differences" refer to the "export prices which differ significantly" and therefore form the relevant pattern. To comply with the explanation clause, an investigating authority must explain why the "export prices which differ significantly" and form the relevant pattern cannot be taken into account appropriately by the use of a W-W or T-T comparison. The explanation clause does not require an explanation as to why export prices outside the pattern cannot be taken into account appropriately using a W-W or T-T comparison, or simply an explanation of the reasons for using the W-T comparison (with respect to all export transactions). Indeed, the text of the explanation clause, which closely reflects the text of the Dunkel Draft from the Uruguay

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143 Canada’s response to Panel question after the second meeting of the Panel No. 2(d), para. 4; Canada’s dumping margin calculations under W-W and mixed W-T/W-W methodologies, (Exhibit CAN-33).
144 Canada uses a mixed methodology wherein it calculates the normal value for the W-T methodology based on a quarterly period, and the normal value for the W-W methodology based on an annual period. (Canada’s dumping margin calculations under W-W and mixed W-T/W-W methodologies, (Exhibit CAN-33)).
145 United States’ response to Panel question after the first meeting of the Panel No. 21, para. 74.
146 Appellate Body Report, *US – Washing Machines*, para. 5.50. We consider that when the pattern clause and explanation clause are read together it becomes clear that "such differences" refer to the "pattern of export prices which differ significantly" among different purchasers, regions or time periods.
Round of negotiations, differs in this respect from earlier draft texts from the Uruguay Round, such as the New Zealand I text, the New Zealand II text, the New Zealand III text, and the Ramsauer text that permitted recourse to the W-T methodology provided, inter alia, "the authorities [gave] an explanation of the reasons for using such a comparison", i.e. the W-T comparison.\textsuperscript{147} We consider that the agreed text of the second sentence of Article 2.4.2, and specifically the explanation clause is worded the way it is, and does not require an explanation with respect to export transactions falling outside the pattern because the second sentence does not contemplate the application of the W-T methodology outside the pattern.

7.82. If the W-T methodology was meant to be applied to non-pattern transactions, the need to explain why the W-W or T-T comparison could not take into account appropriately such transactions would perhaps be even more compelling. We stated above that the pattern identified under the pattern clause includes significantly high-priced export sales to purchasers, regions or time periods that may be masking significantly lower-priced export sales to other purchasers, regions or time periods and those lower-priced export sales, which may be masked. Thus, these export sales form part of the pattern transactions, and not the non-pattern transactions. In that sense, there is nothing abnormal about the non-pattern transactions. Just because such non-pattern transactions coexist with pattern transactions does not mean that the non-pattern transactions become abnormal. Instead, these are the sort of export transactions to which an investigating authority would apply a normal methodology in ordinary circumstances. Therefore, if the second sentence permitted an investigating authority to apply the W-T methodology to non-pattern transactions the text would have required an explanation (perhaps an even more compelling one) why the W-W or the T-T methodology could not appropriately take into account such non-pattern transactions. The reason it does not require such an explanation is because the second sentence does not contemplate the application of the W-T methodology to non-pattern transactions.\textsuperscript{148}

7.83. We recognize, of course, that non-pattern transactions may be above the weighted average normal value and that disregarding comparison results based on them would lead to a higher overall dumping margin for the foreign producer or exporter. But we do not consider that the pattern clause or any other part of the second sentence of Article 2.4.2 permits an investigating authority to "unmask" non-pattern transactions above the weighted average normal value by applying the W-T methodology. Indeed, a foreign producer or exporter may make multiple export transactions within the period of investigation. Many of these export transactions may be higher than a weighted average normal value, while others may be lower than the weighted average normal value. The existence of such a higher-priced transaction is not a problem per se because if one were to apply the W-W methodology such higher-priced and lower-priced export transactions would be averaged out without the possibility to disregard any individual high-priced export transaction.\textsuperscript{149} Similarly, if an investigating authority were to apply the T-T methodology, it would have to consider the real values of such high-priced and low-priced transactions, and not disregard comparison results based on either of them. Only when such higher-priced export transactions form part of a pattern of export prices which not only differ, but "differ significantly" "among different purchasers, regions or time periods", is an investigating authority permitted to unmask such higher-priced export sales to certain purchasers, regions or time periods that may be masking lower-priced export sales to other purchasers, regions or time periods. Permitting an investigating authority to "unmask" non-pattern transactions would undermine the prohibition on zeroing under the W-W or T-T methodology.

7.84. Thus, while we disagree with past panels and the Appellate Body on the nature of the export transactions that fall within the relevant pattern, we agree with them that the second sentence of Article 2.4.2 does not permit an investigating authority to apply the W-T methodology to export transactions falling outside the pattern. Based on the above, we conclude that the second sentence

\textsuperscript{147} Draft working paper on anti-dumping discussed during the Uruguay Round (6 November 1990) (New Zealand I); Draft working paper on anti-dumping prepared during the Uruguay Round (15 November 1990) (New Zealand II); Draft working paper on anti-dumping prepared during the Uruguay Round (23 November 1990) (New Zealand III); and Draft working paper on anti-dumping prepared during the Uruguay Round (26 November 1991) (Ramsauer text).

\textsuperscript{148} Panel Report, US – Washing Machines, paras. 7.23-7.24. The panel in US – Washing Machines expressed similar views, noting that an explanation is required with respect to pattern transactions because only pattern transactions should be subject to the W-T methodology.

\textsuperscript{149} This averaging effect of the W-W methodology would not have been lost on the Uruguay Round negotiators, who would have known that higher-priced and lower-priced domestic and export transactions would be averaged out under the W-W methodology, and yet chose it as one of the methodologies that an investigating authority shall normally use.
of Article 2.4.2 does not permit an investigating authority to apply the W-T methodology to all export transactions. Instead, the W-T methodology may be applied only to pattern transactions.

**Treatment of non-pattern transactions under the second sentence of Article 2.4.2**

7.85. The W-T methodology may be applied only to pattern transactions. Does this mean that the non-pattern transactions must be simply excluded while calculating the total dumped amount pursuant to the second sentence of Article 2.4.2 (per the Appellate Body’s methodological approach in *US – Washing Machines*)? Or does this mean that an investigating authority must apply either the W-W or the T-T methodology to the non-pattern transactions? If an investigating authority must apply either the W-W or the T-T methodology to the non-pattern transactions, the application of these normal methodologies would generate an intermediate result based on such non-pattern transactions that may be negative or positive. Is an investigating authority permitted to exclude this intermediate result when it is negative but add it (to the intermediate result based on pattern transactions) when it is positive? We must resolve these questions because the overall dumping margin determined under the W-W methodology and that determined pursuant to the second sentence of Article 2.4.2 will not be mathematically equivalent in every case if (a) non-pattern transactions are excluded under the W-T methodology, or (b) non-pattern transactions are excluded when the intermediate result based on them is negative.\(^{151}\)

7.86. Canada contends that the explicit authorization under the second sentence of Article 2.4.2 to focus on pattern transactions also provides the basis for disregarding non-pattern transactions.\(^{152}\) Thus, Canada asserts, relying on the Appellate Body Report in *US – Washing Machines*, that non-pattern transactions must be excluded when the dumping margin is determined under the second sentence of Article 2.4.2. But Canada submits that assuming Article 2.4.2 permits the use of a mixed methodology, an investigating authority cannot exclude the intermediate result based on non-pattern transactions when it is negative.\(^{153}\)

7.87. The United States argues that a dumping margin determined pursuant to the second sentence of Article 2.4.2 by excluding non-pattern transactions “cannot credibly be called a margin of dumping for the ‘product as a whole’”.\(^{154}\) The United States submits that “one of the major flaws” of this

\(^{150}\) In rejecting the United States’ mathematical equivalence arguments in *US – Washing Machines*, the Appellate Body noted that "[c]omparing normal value with ‘pattern transactions’ only will not normally yield results that are mathematically or substantially equivalent to the results obtained from the application of the W-W [ ] methodology to all export transactions". (Appellate Body Report, *US – Washing Machines*, para. 5.163 (emphasis original).) In addition, the Appellate Body considered that the mere fact that the application of the W-W methodology to pattern transactions may lead to a result that is equivalent to the result obtained by applying the W-W methodology to pattern transactions is neither relevant nor reads the W-T methodology out of the second sentence of Article 2.4.2. (Appellate Body Report, *US – Washing Machines*, para. 5.165).

\(^{151}\) The panel in *US – Washing Machines* noted that when the non-pattern transactions are dumped (i.e. the intermediate result based on such transactions is positive), aggregating the result of the W-W methodology (without zeroing) for non-pattern transactions with the result of the W-T methodology (without zeroing) for pattern transactions would lead to the same margin of dumping as the application of the W-W methodology (without zeroing) to all export transactions. The margin of dumping changes, however, when the non-pattern transactions are not dumped (i.e. the intermediate result based on such transactions is negative), and when that amount of negative dumping outside the pattern is systematically disregarded while aggregating it with results of the W-T methodology. (Panel Report, *US – Washing Machines*, fn 299). The United States agrees that mathematical equivalence will not arise in this case. (United States’ response to Panel question after the second meeting of the Panel No. 2(b), para. 33). However, the United States submits that this does not solve the problem of mathematical equivalence because the application of the W-W or the W-T methodology to the same set of export transactions without zeroing will yield mathematically equivalent results. (United States’ response to Panel question after the second meeting of the Panel No. 2(b), para. 33).

In our view, the relevant question is whether the overall dumping margin determined under the W-W methodology and that determined pursuant to the second sentence of Article 2.4.2 are mathematically equivalent. If we were to find that Article 2.4.2 permits an investigating authority to (a) apply the W-T methodology only to pattern transactions, or (b) exclude the intermediate result based on non-pattern transactions when it is negative, we would conclude that the overall dumping margin determined under the W-W methodology and that determined pursuant to the second sentence of Article 2.4.2 would not be mathematically equivalent in every case.

\(^{152}\) Canada’s response to Panel question after the first meeting of the Panel No. 15(a), para. 35.

\(^{153}\) Canada’s response to Panel question after the second meeting of the Panel No. 2(c), paras. 2-3.

\(^{154}\) United States’ first written submission, para. 95.
methodological approach is that it requires an investigating authority to disregard evidence of dumping from non-pattern transactions.\(^{155}\) With respect to the use of a mixed methodology pursuant to the second sentence, the United States submits that the Anti-Dumping Agreement does not preclude such a methodology.\(^{156}\) The United States also observes that the panel in US – Washing Machines stated that when the intermediate result based on non-pattern transactions is negative, it may be excluded so that negative dumping in respect of non-pattern transactions does not re-mask dumping in the pattern.\(^{157}\)

7.88. We commence our analysis by noting that both sentences of Article 2.4.2 must be interpreted bearing in mind the context provided by Article 2.1 of the Anti-Dumping Agreement and Article VI:1 of the GATT 1994, which define dumping. Article VI:2 of the GATT defines the margin of dumping as the difference between the normal value and the export price, and establishes the link between dumping and margin of dumping.\(^{158}\) The margin of dumping reflects the magnitude of dumping.\(^{159}\) The Appellate Body has, as noted above, relied on these provisions as context in concluding that dumping and margins of dumping must be determined for the product as a whole. The Appellate Body has stated that the notion that a product is introduced into the commerce of another country at less than its normal value, as provided in Article VI:1 of the GATT 1994, suggests that the exporter's dumping determination must be based on "the totality of an exporter's transactions" of the subject merchandise over the period of investigation.\(^{160}\) Considering Article 2.1 of the Anti-Dumping Agreement and Article VI:1 of the GATT 1994 inform our interpretation of not just the first sentence of Article 2.4.2, but also its second sentence, we consider that dumping determinations must be based on the totality of an exporter's transactions even when the conditions for the use of the W-T methodology under this second sentence are met.

7.89. Article 2.4.2, on its face, does not create any exceptional rule allowing an investigating authority to exclude the totality of an exporter's transactions or the pricing behaviour outside the identified pattern when the conditions set out in the second sentence of Article 2.4.2 are met. Is such a rule included by implication? Reading Article 2.4.2 in context and in light of the object and purpose of the Anti-Dumping Agreement suggests no. Instead, the absence of such a rule makes sense.

7.90. Let us consider the following questions. For the purpose of Article 2.1 of the Anti-Dumping Agreement and Article VI:1 of the GATT 1994, a product is considered dumped when it is introduced into the commerce of another country at less than its normal value. Could non-pattern transactions be priced below normal value? Yes, they could because export transactions outside the pattern may be priced below the normal value, just as they may be priced above it. Is an investigating authority permitted to exclude the pricing behaviour outside the pattern when it calculates the overall dumping margin of a foreign producer or exporter? Nothing in the Anti-Dumping Agreement would suggest so. Indeed, to properly assess the pricing behaviour of a foreign producer or exporter, and to determine whether it is in fact dumping the product under consideration, and if so, by what margin, it is obviously necessary to take into account the prices of all the export transactions of that foreign producer or exporter.\(^{161}\) Otherwise, the magnitude of dumping, which is reflected in the margin of dumping, may be understated or overstated.

7.91. We are cognizant that in finding that an investigating authority must exclude non-pattern transactions while determining the dumped amount pursuant to the second sentence of Article 2.4.2, the Appellate Body stated that this sentence "says nothing about including transactions that are not part of the pattern in the comparison process that is required to establish margins of dumping".\(^{162}\) However, what is relevant is not that the text says nothing about including transactions that are not part of the pattern, but that the text says nothing about excluding transactions that are not part of the pattern, when an investigating authority determines the dumping margin for the product as a whole. The silence of the text on this matter may be contrasted with other provisions of the

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\(^{155}\) United States' response to Panel question after the first meeting of the Panel No. 14(a), para. 50.

\(^{156}\) United States' response to Panel question after the second meeting of the Panel No. 2(c), para. 35.

\(^{157}\) United States' response to Panel question after the second meeting of the Panel No. 2(c), para. 35 (referring to Panel Report, US – Washing Machines, para. 7.162).


\(^{160}\) Appellate Body Report, US – Stainless Steel (Mexico), para. 98.


Anti-Dumping Agreement, including Articles 2.2.1, 2.2.2, and 2.3 of the Anti-Dumping Agreement, which set out specific rules on when an investigating authority may reject certain transactions or data. The existence of such specific rules in other parts of the Anti-Dumping Agreement suggests that if the drafter of the Anti-Dumping Agreement had intended to allow an investigating authority to disregard non-pattern transactions, which could well be the majority of the export transactions of a foreign producer or exporter, they would have provided rules to this effect. Therefore, the silence of the text in this regard appears deliberate.

7.92. Further, while the Appellate Body took the view that the exclusion of non-pattern transactions ensures that targeted dumping identified in the pattern is not re-masked by comparison results based on non-pattern transactions, the purpose of the second sentence of Article 2.4.2 is to unmask targeted dumping through the application of the W-T methodology, and not by simply disregarding non-pattern transactions. Otherwise, the text could have simply stated that an investigating authority is permitted to apply the W-W or T-T methodology to a limited set of export transactions that make up the pattern and disregard the non-pattern transactions. Instead, we are concerned that in requiring an investigating authority to make its dumping determination based on pattern transactions alone, the Appellate Body's approach artificially limits or increases the total dumped amount, reflected in the numerator, while the denominator reflects the real value of all export transactions. Such a determination is not based on a proper evaluation of the evidence on record, and thus cannot be a method provided for in the second sentence of Article 2.4.2.

7.93. Our understanding of the text is also consistent with what the Appellate Body considered the object and purpose of the Anti-Dumping Agreement, which is to allow Members to deal with injurious dumping by allowing them to take anti-dumping measures to counteract injurious dumping and imposing disciplines on the use of such anti-dumping measures. The Appellate Body's methodological approach of excluding non-pattern transactions frustrates this object and purpose of the Anti-Dumping Agreement because it does not allow an investigating authority to calibrate the anti-dumping measures to respond to the actual level of injurious dumping, as reflected in the totality of the pricing behaviour of a foreign producer or exporter.

7.94. We also disagree that the first sentence of Article 2.4.2 precludes the application of the W-W (or T-T) methodology to non-pattern transactions alone because this methodology must be applied to all export transactions, and not just a subset of those transactions, i.e. the non-pattern transactions. Instead, reading the two sentences of Article 2.4.2 together, and in proper context, shows that neither the first sentence nor the second sentence permits an investigating authority to simply exclude non-pattern transactions.

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163 Article 2.3 of the Anti-Dumping Agreement for instance permits an investigating authority to reject the price of an export transaction and construct it instead where “it appears to the authorities concerned that the export price is unreliable because of association or a compensatory arrangement between the exporter and the importer or a third party”. Article 2.2.1 of the Anti-Dumping Agreement permits an investigating authority to disregard in determining normal value, when certain conditions are met, the sales of the like product in the domestic market of the exporting country or the sales to third countries, which are below per unit costs of production plus administrative, selling, and general costs. Articles 2.2.2(i)-(iii) of the Anti-Dumping Agreement provide alternative methods that an investigating authority must use when the amounts for administrative, selling, and general costs and for profits cannot be based on actual data pertaining to production and sales in the ordinary course of trade of the like product by the foreign producer or exporter under investigation.

164 The Appellate Body’s view was based on its finding that the pattern comprises export prices to purchasers, regions or time periods which “differ significantly” because they are significantly lower (and not significantly higher) than export prices to other purchasers, regions or time periods. We, for the reasons set out above, disagree with this finding. Therefore, we also disagree with the Appellate Body’s view, which is informed by this finding.

165 The dumping margin obtained by applying the W-T methodology (without zeroing) to pattern transactions will be mathematically equivalent to a dumping margin obtained by applying the W-W methodology to the same pattern transactions. Thus, we do not see why there would be the need to provide for the W-T methodology if the same result could be obtained simply by limiting the W-W methodology to pattern transactions.

167 Canada’s response to Panel question after the second meeting of the Panel No. 2(c), para. 1; response to Panel question after the first meeting of the Panel No. 17, para. 38; and Appellate Body Report, US – Washing Machines, paras. 5.121-5.122.
7.95. Take the "normal" W-W methodology for instance. In setting out this methodology, the first sentence of Article 2.4.2 states that the margins of dumping under this methodology shall be based on a comparison of a weighted average normal value with a weighted average of "prices of all comparable export transactions". The second sentence requires an investigating authority to explain why "such differences", i.e. the differences in the pattern identified by that authority, cannot be taken into account appropriately by the use of a W-W or T-T comparison. Once an investigating authority provides such an explanation, consistent with the explanation clause, it has proper basis to conclude that the universe of "all comparable export transactions" under the W-W methodology excludes those export transactions that fall within the pattern.

7.96. In such a situation, the universe of comparable export transactions under the W-W methodology is limited to the non-pattern transactions, but it includes all such comparable (non-pattern) transactions. Thus, an investigating authority would apply the W-W methodology to all non-pattern transactions. The intermediate result obtained by applying the W-W methodology must be aggregated with the intermediate result obtained by applying the W-T methodology to pattern transactions, to determine the overall dumping margin for the product as a whole. The same considerations apply when an investigating authority applies the T-T methodology to the non-pattern transactions.

7.97. However, an investigating authority is not permitted to disregard the intermediate result obtained by applying the W-W (or T-T) methodology to non-pattern transactions when the result is negative. The requirement to consider "all" comparable export transactions precludes an investigating authority from selectively excluding any comparable export transaction. It also precludes an investigating authority from collectively excluding all such comparable export transactions, which would be the case if an investigating authority disregards the comparison result based on non-pattern transactions because it is negative.

7.98. While the dumping margin may well be higher if an investigating authority excludes the negative intermediate result based on non-pattern transactions, the second sentence is designed to unmask targeted dumping, not ensure a higher dumping margin. Nothing in Article 2.4.2 suggests that whenever a pattern is found to exist, the overall dumping margin for the foreign producer or exporter shall be systemically higher than the dumped margin determined under the first sentence of Article 2.4.2.

7.99. In sum, we conclude that if the conditions set out in the second sentence of Article 2.4.2 are met, an investigating authority is permitted to apply the W-T methodology to the pattern transactions, but must apply the W-W or T-T methodology to the non-pattern transactions. The first sentence of Article 2.4.2 does not cease to apply just because an investigating authority is permitted by the second sentence to apply the W-T methodology to the pattern transactions that cannot be taken into account appropriately under the W-W or T-T methodology. Instead, the W-W or the T-T methodology must be applied to the non-pattern transactions, which may be taken into account appropriately under these normal methodologies.

7.100. The dumping margin determined pursuant to the second sentence where the W-T methodology is applied to pattern transactions (without zeroing) and the W-W methodology is applied to non-pattern transactions (without zeroing) will in every case be mathematically equivalent to the dumping margin based on the application of the W-W methodology to all export transactions, provided the weighted average normal values used under the W-W and W-T methodologies are the same. We will consider below whether such type of mathematical equivalence affects the effet utile of the second sentence of Article 2.4.2.

7.2.1.3.2.2 Textual and contextual basis for a prohibition on zeroing under the second sentence

7.101. We have concluded that the W-T methodology may be applied only to the pattern transactions while a "normal" methodology must be applied to the non-pattern transactions. We have also concluded that the pattern transactions include export transactions to purchasers, regions

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168 Emphasis added.
169 Other provisions of the Anti-Dumping Agreement, such as Annex II(7), provide that the results may be less favourable in the situations set out therein.
or time periods for which the export prices are found to "differ significantly" because (a) they are significantly higher (and thus may be masking the lower-priced export sales) or (b) they are significantly lower (and thus may be masked by higher-priced export sales). But higher-priced export transactions mask lower-priced export transactions only when they are above the normal value.\textsuperscript{170} Thus, it is only by comparing "[a] normal value established on a weighted average basis" with the "prices of individual export transactions" that an investigating authority can ascertain whether the high-priced export transactions are indeed masking lower-priced export transactions. Once the investigating authority applies the W-T methodology it would be able to identify those export transactions that are being masked, and those export transactions that are masking them.

7.102. Having identified the higher-priced export transactions within the pattern that are masking lower-priced export transactions in that pattern, is an investigating authority permitted to unmask such higher-priced export transactions by treating their value as zero? The text of the second sentence does not explicitly state that an investigating authority is permitted to disregard, by treating as zero, those export transactions that are priced above the weighted average normal value.\textsuperscript{171} However, again, the silence of the text on this matter is not dispositive. Instead, to determine whether an investigating authority is permitted to zero such higher-priced export transactions, we must interpret the text of the second sentence in context and in light of the function of the second sentence of Article 2.4.2.

7.103. The second sentence permits an investigating authority to compare a weighted average normal value with the prices of "individual" export transactions. Qualification of the term "export transactions" by "individual" rather than "all" suggests that the dumping margin under the W-T methodology need not be based on the comparison results of all export transactions.\textsuperscript{172} Instead, interpreting the second sentence in light of its function, and taking into account the word "individual," which can be defined as "[e]xisting as a separate indivisible entity; numerically one; single, as distinct from others of the same kind; particular" or "single; separate"\textsuperscript{173}, suggests that an investigating authority may distinguish those individual export transactions that mask other export transactions from those individual export transactions that are being masked. It follows that the authority may treat these individual transactions differently when making its dumping determinations under the W-T methodology. In particular, having identified through the application of the W-T methodology the individual export transactions that mask other export transactions, and those individual export transactions that are being masked, an investigating authority is not required to re-mask the individual export transactions above the weighted average normal value but may instead treat them as zero.

7.104. Our view is supported by contextual elements. The W-T methodology is distinct from the "normal" methodologies provided in the first sentence of Article 2.4.2. It is an exception, and unlike the two normal methodologies, its function is to unmask targeted dumping. Thus, unlike the W-W and T-T methodologies, which as noted in paragraph 7.19 above, fulfil the same function and are meant to give systemically similar results, the W-T methodology fulfils a different function, and is

\textsuperscript{170} Canada states that in the broadest sense of the term "mask", higher-priced sales to a particular purchaser, region or time period may mask lower-priced sales to others within the same category regardless of their relationship with normal value. (Canada’s response to Panel question after the second meeting of the Panel No. 6, para. 12). Canada provides no explanation in support of this statement. In any case, we disagree with this statement for we do not see how higher-priced export sales would mask lower-priced sales when, for instance, both are above normal value. Thus, whether or not higher-priced sales are actually masking lower-priced sales can only be ascertained through the application of a methodology that takes into account the difference between the export price and normal value.

\textsuperscript{171} In US – Washing Machines, the Appellate Body relied on the reference to "prices of individual export transactions" in the plural, which it noted was not qualified by any reference to normal value, to support its view that zeroing was impermissible under the second sentence of Article 2.4.2. (Appellate Body Report, US – Washing Machines, para. 5.154). However, we do not find the use of the plural form in the second sentence of Article 2.4.2 to suggest that zeroing is impermissible under this sentence. Instead, the phrase "a normal value established on a weighted average basis may be compared to prices of individual export transactions" is a description of the W-T methodology, which permits an investigating authority to compare a weighted average normal value with the prices of multiple export transactions.

\textsuperscript{172} This view accords with that of the dissenting Member in US – Washing Machines who noted that the second sentence of Article 2.4.2 puts emphasis on the selection of individual export transactions. (Appellate Body Report, US – Washing Machines, para. 5.201).

\textsuperscript{173} Appellate Body Report, US – Washing Machines, para. 5.49 (quoting the definitions of "individual" in Oxford Dictionaries online).
not meant to give results that are systemically similar to that obtained under either the W-W methodology or the T-T methodology.

7.105. However, if one of the two normal methodologies, i.e. the W-W methodology, systemically and in every case gives a result that is mathematically equivalent to the dumping margin determined pursuant to the second sentence of Article 2.4.2, this would suggest that the W-T methodology is unable to fulfil its function. We consider such type of mathematical equivalence to be a symptom of an underlying problem, which is the inability of the W-T methodology to unmask targeted dumping. Certain adjustments to the examined data may well break mathematical equivalence in some cases. For example, as Canada notes, if in using a mixed W-W and W-T methodology an investigating authority changes the temporal bases of the normal value used under the W-W and W-T methodologies respectively, the resultant overall dumping margin may be different from that calculated by applying the W-W methodology to all export transactions. But Canada (or any third party) does not assert, and we do not consider, that the Anti-Dumping Agreement requires an investigating authority to change the normal value in this manner. More to the point, we do not see, and Canada does not show, how such a change in the temporal basis for normal value calculations would allow an investigating authority to unmask targeted dumping. Thus, while adjustments of these types may well break mathematical equivalence, such type of adjustments would only make the symptom, rather than the underlying problem, disappear.

7.106. Considering the raison d’être of the W-T methodology is to unmask targeted dumping, the inability of this methodology to do so will render this methodology inutille. We recall that an interpreter is not free to adopt a reading that would result in reducing whole clauses or paragraphs of a treaty to redundancy or inutility. Therefore, contextual considerations also support our view that the second sentence of Article 2.4.2 does not prohibit zeroing under the W-T methodology. Based on the above, we find that an investigating authority is permitted to use zeroing while applying the W-T methodology to the pattern transactions.

7.107. We are aware that our conclusions in this Report differ from those of the panel and the Appellate Body in US – Washing Machines as well as the panel in US – Anti-Dumping Methodologies (China). This is the result of our objective assessment of the facts of this case, and the applicability of, and conformity with, the relevant covered agreements. We have carefully considered these reports of the panels and the Appellate Body, and found convincing or cogent reasons to arrive at conclusions different from those of the Appellate Body in US – Washing Machines as well as the panels in US – Washing Machines and US – Anti-Dumping Methodologies (China).

7.2.1.3.2.3 Conclusion

7.108. Based on the foregoing, we find that Canada has failed to establish that the USDOC acted inconsistently with the second sentence of Article 2.4.2 by using zeroing under the W-T methodology in the underlying investigation.

174 See, e.g. Canada’s response to Panel question after the second meeting of the Panel No. 2(d), para. 4.
175 Panel Report, US – Washing Machines, para. 7.165. The panel stated that there was no textual basis to conclude that the “normal value established on a weighted average basis”, as referred in the second sentence of Article 2.4.2, is different from the “weighted average normal value”, as referred in the first sentence of Article 2.4.2.
177 Considering we have concluded that the second sentence of Article 2.4.2 does not require an investigating authority to re-mask the individual export transactions in the pattern that are above the weighted average normal value, we do not consider that by using zeroing under the second sentence of Article 2.4.2 an investigating authority fails to make its dumping determinations based on the totality of an exporter’s or foreign producer’s export transactions. Instead, having considered the prices of all the export transactions of that foreign producer or exporter, an investigating authority is permitted to exclude, by treating as zero, those individual export transactions in the pattern that are above the weighted average normal value and thus masking the prices of other export transactions.
178 See also paras. 7.62 and 7.88-7.99 above.
7.2.2 Zeroing claims under Article 2.4 of the Anti-Dumping Agreement

7.109. Article 2.4 of the Anti-Dumping Agreement requires "[a] fair comparison ... between the export price and the normal value". Canada contends that the use of zeroing under the second sentence of Article 2.4.2 is inconsistent with the "fair comparison" obligation because (a) zeroing inflates the dumping margin generated under the W-T methodology; and (b) zeroing ignores the actual export price of a transaction made above normal value and instead deems that the export price is equal to the normal value. The United States notes that the text of Article 2.4 of the Anti-Dumping Agreement says nothing about whether zeroing is fair or unfair. The United States also asserts that the Appellate Body has found zeroing to be unfair and inconsistent with Article 2.4 in previous disputes only when it has found zeroing to be inconsistent with other provisions of the Anti-Dumping Agreement.

7.110. We recall that in US – Washing Machines the Appellate Body found zeroing under the W-T methodology to be inconsistent with Article 2.4 of the Anti-Dumping Agreement. The Appellate Body found that setting the value of intermediate negative comparison results to zero under the W-T methodology has the effect of inflating the magnitude of dumping, thus resulting in higher margins of dumping, while also making a positive determination of dumping more likely when the export prices above normal value exceed those that are below normal value. However, the Appellate Body's finding under Article 2.4 was based on its finding that zeroing is prohibited under the second sentence of Article 2.4.2. For instance, in making its findings under Article 2.4 it noted that by setting to zero "individual export transactions" that yield a negative comparison result, an investigating authority fails to compare "all" comparable export transactions that form the applicable "universe of export transactions" as required under the second sentence of Article 2.4.2, thus failing to make a 'fair comparison' within the meaning of Article 2.4. It also recalled while making its findings under Article 2.4 its earlier finding that zeroing under the second sentence of Article 2.4.2 is not required to identify and address targeted dumping. Therefore, we consider the Appellate Body's findings under Article 2.4 to be dependent on its findings that zeroing is impermissible under the second sentence of Article 2.4.2.

7.111. We have already found that the second sentence of Article 2.4.2 permits zeroing under the W-T methodology to the extent this methodology is limited to pattern transactions. Thus, the Appellate Body's findings in US – Washing Machines offer us limited guidance on whether we should find zeroing under the W-T methodology to be inconsistent with Article 2.4. Instead, we must consider whether zeroing under the second sentence of Article 2.4.2 could be impermissible under Article 2.4 even if it is permissible under the second sentence of Article 2.4.2. Canada has not provided any independent basis for us to find that zeroing under the W-T methodology is inconsistent with the "fair comparison" obligation of Article 2.4 even if zeroing under this methodology is consistent with the second sentence of Article 2.4.2.

7.112. Based on the foregoing, we find that Canada has not established that the USDOC acted inconsistently with Article 2.4 of the Anti-Dumping Agreement in the underlying investigation because it used zeroing under the W-T methodology provided in the second sentence of Article 2.4.2 of the Anti-Dumping Agreement.

7.2.3 Consequential claims under Articles 1 and 2.1 of the Anti-Dumping Agreement as well as Articles VI:1 and VI:2 of the GATT 1994

7.113. Canada claims that as a consequence of the violations under the second sentence of Article 2.4.2 and Article 2.4 of the Anti-Dumping Agreement, the USDOC acted inconsistently with

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180 Canada's first written submission, paras. 60-61.
181 United States' first written submission, para. 193.
182 United States' first written submission, para. 206.
186 See, e.g. Canada's first written submission, paras. 58-63. Canada relies on past reports of the Appellate Body that found zeroing to be impermissible under Article 2.4 only after finding that zeroing was inconsistent with other provisions of the Anti-Dumping Agreement. Thus, these reports are not directly relevant in assessing whether Article 2.4 prohibits the use of zeroing under the W-T methodology, even if zeroing is permissible under the second sentence of Article 2.4.2.
Articles 1 and 2.1 of the Anti-Dumping Agreement as well as Articles VI:1 and VI:2 of the GATT 1994 in the underlying investigation. We have concluded that the USDOC acted inconsistently with the second sentence of Article 2.4.2 in the underlying investigation because it identified a single pattern that aggregates differences in export prices across purchasers, regions and time periods, which the second sentence does not permit. We have rejected other aspects of Canada’s claims under the second sentence of Article 2.4.2 as well as its claim under Article 2.4.

7.114. We consider our findings under the second sentence of Article 2.4.2 and under Article 2.4 to be sufficient to resolve this dispute. Therefore, we do not find it necessary to address Canada’s claims under Articles 1 and 2.1 of the Anti-Dumping Agreement as well as Articles VI:1 and VI:2 of the GATT 1994. 187

7.115. Based on the foregoing, we exercise judicial economy on Canada’s claims under Articles 1 and 2.1 of the Anti-Dumping Agreement as well as Articles VI:1 and VI:2 of the GATT 1994.

8 CONCLUSIONS AND RECOMMENDATION

8.1. For the reasons set forth in this Report, we find that in applying the DPM in the underlying investigation the United States acted inconsistently with:

a. Article 2.4.2 of the Anti-Dumping Agreement by aggregating differences in export prices across unrelated categories, i.e. purchasers, regions and time periods to identify a single pattern of export prices which differed significantly among different purchasers, regions and time periods.

8.2. For the reasons set forth in this Report, we find that Canada has failed to demonstrate that in applying the DPM in the underlying investigation the United States acted inconsistently with:

a. Article 2.4.2 of the Anti-Dumping Agreement by including, in the pattern, export transactions to those purchasers, regions or time periods whose prices differed significantly because they were significantly higher relative to export prices to other purchasers, regions or time periods.

b. Article 2.4.2 of the Anti-Dumping Agreement by using zeroing under the W-T methodology provided in the second sentence of Article 2.4.2.

c. Article 2.4 of the Anti-Dumping Agreement by using zeroing under the W-T methodology provided in the second sentence of Article 2.4.2.

8.3. For the reasons set forth in this Report, we do not need to address, and exercise judicial economy on, Canada’s consequential claims under Articles 1 and 2.1 of the Anti-Dumping Agreement as well as Articles VI:1 and VI:2 of the GATT 1994.

8.4. Under Article 3.8 of the DSU, in cases where there is an infringement of the obligations assumed under a covered agreement, the action is considered prima facie to constitute a case of nullification or impairment. We conclude that, to the extent the measure at issue is inconsistent with the Anti-Dumping Agreement, it has nullified or impaired benefits accruing to Canada under this agreement.

8.5. Pursuant to Article 19.1 of the DSU, we recommend that the United States bring its measure into conformity with its obligations under the Anti-Dumping Agreement.

187 Panels are not required to address each and every claim. Instead, a panel is only required to address those claims that are necessary to resolve a dispute. (Appellate Body Report, Argentina – Import Measures, para. 5.190).