UNITED STATES – ANTI-DUMPING AND COUNTERVAILING MEASURES ON LARGE RESIDENTIAL WASHERS FROM KOREA

Recourse to Article 22.6 of the DSU by the United States

(DS464)

RESPONSES OF THE UNITED STATES OF AMERICA TO THE ADVANCE QUESTIONS FROM THE ARBITRATOR

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EC – Bananas III (US) (Panel)	Panel Report, *European Communities – Regime for the Importation, Sale and Distribution of Bananas, Complaint by the United States*, WT/DS27/R/USA, adopted 25 September 1997, as modified by Appellate Body Report WT/DS27/AB/R
EC – Bananas III (US) (Article 22.6 – EC)	Decision by the Arbitrators, *European Communities – Regime for the Importation, Sale and Distribution of Bananas – Recourse to Arbitration by the European Communities under Article 22.6 of the DSU*, WT/DS27/ARB, 9 April 1999
EC – Hormones (AB)	Appellate Body Report, *EC – Measures Concerning Meat and Meat Products (Hormones)*, WT/DS26/AB/R, WT/DS48/AB/R, adopted 13 February 1998
EC – Hormones (Canada) (Article 22.6 – EC)	Decision by the Arbitrators, *European Communities – Measures Concerning Meat and Meat Products (Hormones), Original Complaint by Canada – Recourse to Arbitration by the European Communities under Article 22.6 of the DSU*, WT/DS48/ARB, 12 July 1999
EC – Hormones (US) (Article 22.6 – EC)	Decision by the Arbitrators, *European Communities – Measures Concerning Meat and Meat Products (Hormones), Original Complaint by the United States – Recourse to Arbitration by the European Communities under Article 22.6 of the DSU*, WT/DS26/ARB, 12 July 1999
India – Agricultural Products (Panel)	Panel Report, *India – Measures Concerning the Importation of Certain Agricultural Products from the United States,* WT/DS430/R, adopted 19 June 2015, as modified by Appellate Body Report WT/DS430/AB/R
Korea – Dairy (AB)	Appellate Body Report, *Korea – Definitive Safeguard Measure on Imports of Certain Dairy Products*, WT/DS98/AB/R, adopted12 January 2000, as modified by Appellate Body Report WT/DS98/AB/R
US – 1916 Act (EC) (Article 22.6 – US)	Decision by the Arbitrators, *United States – Anti-Dumping Act of 1916, Original Complaint by the European Communities – Recourse to Arbitration by the United States under Article 22.6 of the DSU*, WT/DS136/ARB, 24 February 2004

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US – Certain EC Products (AB)	Appellate Body Report, *United States – Import Measures on Certain Products from the European Communities*, WT/DS165/AB/R, adopted 10 January 2001
US – COOL (Article 22.6 – US)	Decision by the Arbitrators, *United States – Certain Country of Origin Labelling (COOL) Requirements – Recourse to Article 22.6 of the DSU by the United States*, WT/DS384/ARB, and Add. 1; WT/DS386/ARB, and Add. 1, circulated 7 December 2015
US – FSC (Article 22.6 – US)	Decision by the Arbitrator, *United States – Tax Treatment for "Foreign Sales Corporations" – Recourse to Arbitration by the United States under Article 22.6 of the DSU and Article 4.11 of the SCM Agreement*, WT/DS108/ARB, 30 August 2002
US – Gambling (Article 22.6 – US)	Decision by the Arbitrator, *United States – Measures Affecting the Cross-Border Supply of Gambling and Betting Services – Recourse to Arbitration by the United States under Article 22.6 of the DSU*, WT/DS285/ARB, 21 December 2007
US – Offset Act (Byrd Amendment) (Brazil) (Article 22.6 – US)	Decision by the Arbitrator, *United States – Continued Dumping and Subsidy Offset Act of 2000, Original Complaint by Brazil – Recourse to Arbitration by the United States under Article 22.6 of the DSU*, WT/DS217/ARB/BRA, 31 August 2004
US – Offset Act (Byrd Amendment) (Canada) (Article 22.6 – US)	Decision by the Arbitrator, *United States – Continued Dumping and Subsidy Offset Act of 2000, Original Complaint by Canada – Recourse to Arbitration by the United States under Article 22.6 of the DSU*, WT/DS234/ARB/CAN, 31 August 2004
US – Offset Act (Byrd Amendment) (Chile) (Article 22.6 – US)	Decision by the Arbitrator, *United States – Continued Dumping and Subsidy Offset Act of 2000, Original Complaint by Chile – Recourse to Arbitration by the United States under Article 22.6 of the DSU*, WT/DS217/ARB/CHL, 31 August 2004
US – Offset Act (Byrd Amendment) (EC) (Article 22.6 – US)	Decision by the Arbitrator, *United States – Continued Dumping and Subsidy Offset Act of 2000, Original Complaint by the European Communities – Recourse to Arbitration by the United States under Article 22.6 of the DSU*, WT/DS217/ARB/EEC, 31 August 2004
US – Offset Act (Byrd Amendment)	Decision by the Arbitrator, *United States – Continued Dumping and Subsidy Offset Act of 2000, Original Complaint by India –*

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(India) (Article 22.6 – US)	*Recourse to Arbitration by the United States under Article 22.6 of the DSU*, WT/DS217/ARB/IND, 31 August 2004
US – Offset Act (Byrd Amendment) (Japan) (Article 22.6 – US)	Decision by the Arbitrator, *United States – Continued Dumping and Subsidy Offset Act of 2000, Original Complaint by Japan – Recourse to Arbitration by the United States under Article 22.6 of the DSU*, WT/DS217/ARB/JPN, 31 August 2004
US – Offset Act (Byrd Amendment) (Korea) (Article 22.6 – US)	Decision by the Arbitrator, *United States – Continued Dumping and Subsidy Offset Act of 2000, Original Complaint by Korea – Recourse to Arbitration by the United States under Article 22.6 of the DSU*, WT/DS217/ARB/KOR, 31 August 2004
US – Offset Act (Byrd Amendment) (Mexico) (Article 22.6 – US)	Decision by the Arbitrator, *United States – Continued Dumping and Subsidy Offset Act of 2000, Original Complaint by Mexico – Recourse to Arbitration by the United States under Article 22.6 of the DSU*, WT/DS234/ARB/MEX, 31 August 2004
US – Upland Cotton (Article 21.5 – Brazil) (AB)	Appellate Body Report, *United States – Subsidies on Upland Cotton– Recourse to Article 21.5 of the DSU by Brazil*, WT/DS267/AB/RW, adopted 20 June 2008
US – Upland Cotton (Article 22.6 – US II)	Decision by the Arbitrator, *United States – Subsidies on Upland Cotton – Recourse to Arbitration by the United States under Article 22.6 of the DSU and Article 7.10 of the* SCM Agreement, WT/DS267/ARB/2 and Corr.1, 31 August 2009
US – Washing Machines (Panel)	Panel Report, *United States – Anti-Dumping and Countervailing Measures on Large Residential Washers from Korea*, WT/DS464/R, adopted 26 September 2016, as modified by Appellate Body Report WT/DS464/AB/R
US – Washing Machines (AB)	Appellate Body Report, *United States – Anti-Dumping and Countervailing Measures on Large Residential Washers from Korea*, WT/DS464/AB/R, adopted 26 September 2016

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USA-18	Linda Calvin and Barry Krisoff, "Technical Barriers to Trade: A Case Study of Phytosanitary Barriers and U.S.-Japanese Apple Trade," Journal of Agricultural and Resource Economics, 23(2):351-366 (1998)
USA-19 **(BCI)**	Tables Presenting the Inputs and Results of the Application of an Appropriate Armington-Based Partial Equilibrium Model with Respect to the Antidumping and Countervailing Duty Measures on LRWs from Korea Combined, as Requested by the Arbitrator
USA-20 **(BCI)**	Microsoft Excel Version of an Appropriate Armington-Based Partial Equilibrium Model: Antidumping and Countervailing Duty Measures on LRWs from Korea Combined, as Requested by the Arbitrator
USA-21 **(BCI)**	U.S. Customs and Border Protection Data on the Value of Imports from Korea that Were Subject to the U.S. Antidumping and Countervailing Duty Measures on LRWs from Korea for Each Year from 2011 to 2017, as Requested by the Arbitrator

1 MANDATE OF THE ARBITRATOR

1. <u>To the United States</u>: The original panel in this dispute concluded, with reference to Article 3.8 of the DSU, that "to the extent that the measures at issue are inconsistent with certain provisions of the Anti-Dumping Agreement, the SCM Agreement and the GATT 1994, they have nullified or impaired benefits accruing to Korea under those agreements." How would the United States reconcile this conclusion of the original panel with its argument that "if the Member concerned successfully rebuts that presumption, it is possible that the correct conclusion would be that there is no nullification or impairment, despite the existence of a WTO-inconsistent measure"?

<u>Response:</u>

1. The text of Article 3.8 of the *Understanding on Rules and Procedures Governing the Settlement of Disputes* ("DSU") is clear that it establishes a "presumption" of nullification or impairment, and that this presumption can be rebutted by the Member concerned. The original panel cited to this language in Article 3.8 as the basis for its finding that, "to the extent that the measures at issue are inconsistent with certain provisions of the Anti-Dumping Agreement, the SCM Agreement and the GATT 1994, they have nullified or impaired benefits accruing to Korea under those agreements."[1]

2. The United States understands that the original panel was therefore not stating that the presumption could not subsequently be rebutted in a later proceeding. Indeed, in past arbitrations under Article 22.6 of the DSU, arbitrators have made it clear that the question of the level of any nullification or impairment, including whether it is zero, is one that can be addressed in an Article 22.6 proceeding.

3. For instance, the arbitrator in *US – Offset Act (Byrd Amendment) (Mexico) (Article 22.6 – US)* explained that "Article 3.8 deals with the establishment of the *existence* of nullification or impairment during proceedings before a panel. It does not address the *valuation or quantification* of such nullification or impairment."[2] The arbitrator further explained that it "accept[ed] the view that some nullification or impairment should exist if it has not been rebutted. However, the quantification of the level of nullification or impairment remains to be established. Article 3.8 does not address how nullification or impairment should be valued."[3]

4. And as the arbitrator in *EC – Hormones (Canada) (Article 22.6 – EC)* explained:

> [O]ur task of estimating nullification and impairment is very different from that of a panel examining the WTO conformity of certain measures. Once a panel has found a WTO inconsistency, it can *presume* – pursuant to Article 3.8 of the DSU – that the inconsistency has caused nullification and impairment. On that

[1] *US – Washing Machines (Panel)*, para. 8.4.

[2] *US – Offset Act (Byrd Amendment) (Mexico) (Article 22.6)*, para. 3.24.

[3] *US – Offset Act (Byrd Amendment) (Mexico) (Article 22.6)*, para. 3.26.

> ground the panel can give redress to the winning party under Article XXIII of GATT 1994 or corresponding provisions in other WTO agreements. What normally counts for a panel is competitive opportunities and breaches of WTO rules, not actual trade flows. A panel does not normally need to further assess the nullification and impairment caused; it can presume its existence. We, in contrast, have to go one step further. We can take it for granted here that the hormone ban is WTO inconsistent. What we have to do is to estimate the nullification and impairment caused by it (and presumed to exist pursuant to Article 3.8 of the DSU). To do so in the present case, we have to focus on trade flows. We must estimate trade foregone….[4]

5. Thus, there is no inconsistency in a panel finding, based on Article 3.8 of the DSU, that a breach of a covered agreement "is considered *prima facie* to constitute a case of nullification or impairment" and a finding by an Article 22.6 arbitrator, based on the evidence concerning the level of nullification or impairment, that the Member concerned has rebutted this presumption and the level of nullification or impairment is zero. The panel finding concerns a presumption based on inconsistency with a covered agreement, and the arbitrator's determination concerns the evaluation of the evidence based on trade flows and whether that presumption has been rebutted.

6. The situation presented in the *EC – Bananas III (US)* dispute provides a helpful illustration. There, the panel had addressed the argument of the European Communities that since U.S. banana production is minimal, its banana exports are nil, and for climatic reasons this situation is unlikely to change; therefore, the United States had not suffered any nullification or impairment and lacked a legal interest required to bring a dispute.

7. The *EC – Bananas III (US)* panel nonetheless found a breach by the European Communities of a covered agreement, and thus, relying on Article 3.8 of the DSU, there was a presumption of nullification or impairment. The panel found that there was no requirement in the DSU for a "legal interest" in order for a Member to bring a dispute. Thus, a Member could pursue claims even without having to establish that there was a positive level of nullification or impairment.[5] In the arbitration under Article 22.6 of the DSU in the *EC – Bananas III (US)* dispute, the arbitrator referred back to the panel's findings and explained that, "even if no compensation were due, an infringement finding could be made."[6]

2 COUNTERFACTUAL

2. <u>To both parties</u>: What principles, if any, should an arbitrator apply when choosing among different counterfactuals proposed by the parties?

[4] *EC – Hormones (Canada) (Article 22.6 – EC)*, para. 41.

[5] *EC – Bananas III (US) (Panel)*, para. 7.47 *et seq*.

[6] *EC – Bananas III (US) (Article 22.6 – EC)*, para. 6.9.

a. Is the arbitrator obliged to accept the counterfactual proposed by the Member requesting authorization to suspend concessions or other obligations, provided this counterfactual is "plausible" or "reasonable", even where the other party proposes an equally "plausible" or "reasonable" counterfactual as a means of achieving compliance?

Response:

8. No. The Arbitrator has the discretion to determine which counterfactual is the most appropriate for purposes of fulfilling the requirement in Article 22.4 of the DSU that the "level of the suspension of concessions or other obligations authorized by the [Dispute Settlement Body ("DSB")] shall be equivalent to the level of the nullification or impairment."

9. The fact that the Member concerned has the burden of substantiating its objection to the level of suspension of concessions requested by the complaining Member means that the Member concerned is to show that the complaining Member's requested level is not equivalent to the level of nullification or impairment. That burden of proof relates to the level requested, rather than the complaining Member's methodology or any individual element of that methodology, such as the proposed counterfactual.

10. The Arbitrator retains the discretion to determine which methodology, and which elements, to utilize in evaluating the requested level of suspension. Just as a panel is not constrained to accept the legal interpretations advanced by the parties to a dispute,[7] an arbitrator in an arbitration under Article 22.6 of the DSU is not required to accept or give priority to a complaining Member's methodology, including any data sets, proposed counterfactual, elasticities, or any other aspect of the complaining Member's methodology.

11. It is helpful to note that, in fact, in the first arbitration under Article 22.6 of the DSU, the arbitrator did not select a counterfactual proposed by either the complaining Member or the Member concerned. Instead, the arbitrator utilized a counterfactual that was not proposed by either party.[8]

b. Assuming that two equally "plausible" or "reasonable" counterfactuals for achieving compliance are being proposed by the parties, how should the arbitrator choose between them? Should the extent of the changes required to bring the measure into conformity play a role in this choice? In particular, what reasons would there be for an arbitrator to prefer an implementation scenario based upon changes to the measure that go beyond what is necessary to bring the measure into conformity with the Agreement at issue?

Response:

[7] *See EC – Hormones (AB)*, para. 156; *Korea – Dairy (AB)*, para. 139; *US – Certain EC Products (AB)*, para. 123.

[8] *EC – Bananas III (US) (Article 22.6 – EC)*, para. 7.7.

12. One starting point is the relevant DSB recommendations. Article 19.1 of the DSU provides the mandatory recommendation in the event a panel or the Appellate Body finds a challenged measure to be WTO-inconsistent: the recommendation is to bring the measure into conformity with the relevant covered agreement. Article 22 of the DSU confirms that the relevant DSB recommendations form the basis for the evaluation of the level of nullification and impairment. For instance, Article 22.1 of the DSU provides that the starting point is whether "the recommendations and rulings are not implemented within a reasonable period of time" ("RPT") and, under Article 22.1, the appropriate counterfactual would be one in which there is "full implementation of a recommendation to bring a measure into conformity with the covered agreements."[9]

13. Consequently, there is no reason to select a counterfactual that would go beyond what is necessary for implementation. To do so could appear to assume that the Member concerned has obligations beyond what is reflected in the recommendations adopted by the DSB, which is for the Member to comply with WTO rules. Furthermore, to do so also would risk determining a level of suspension that is not equivalent to the level of nullification or impairment, but is instead punitive.

14. In this proceeding, nothing in the recommendations adopted by the DSB calls for the United States to terminate the antidumping or countervailing duty measures on large residential washers ("LRWs") from Korea. There is no reason in this proceeding for the Arbitrator to prefer a counterfactual that assumes an obligation on the part of the United States beyond the relevant DSB recommendations.

c. Please comment on whether, in your view, previous rulings under Article 22.6 of the DSU, in particular the *US – Gambling* ruling, provide relevant guidance with respect to the choice of the counterfactual in the present case.

Response:

15. Previous decisions by arbitrators under Article 22.6 of the DSU have affirmed the discretion of the Arbitrator to select a counterfactual that is plausible and reasonable. In *US – Gambling (Article 22.6 – US)*, the arbitrator also affirmed that a touchstone for considering an appropriate counterfactual is the relevant DSB recommendations. There, the complaining Member urged a counterfactual based on the removal of regulation for all types of internet gambling. The arbitrator rejected that counterfactual, explaining that:

> We also note that while Article 3.7 of the DSU does provide that the objective of dispute settlement proceedings is *usually* the withdrawal of the inconsistent measures, we do not read this provision to mean that this is in all cases the only possible outcome in disputes where a violation of one of the covered agreements has been found. The recommendations of the DSB to the United States

[9] Similarly, Article 22.8 of the DSU provides that what the DSB is to "keep under surveillance" is "the implementation of adopted recommendations or rulings."

> in this dispute require it to bring its measures into compliance with the GATS. This did not necessarily require it to "withdraw" the measures by removing entirely the restrictions it maintained on remote gambling and betting services.[10]

16. The same reasoning would apply in this proceeding. The DSB recommendations in this dispute do not require the United States to terminate the antidumping and countervailing duty measures on LRWs from Korea. A WTO-inconsistent measure is, in effect, withdrawn if the WTO-inconsistent aspect of the measure is removed. As a result, Korea's proposed counterfactual is not "reasonable" and could, in fact, lead to a level of suspension of concessions that is in excess of, and therefore not equivalent to, the level of nullification or impairment.

3. <u>To Korea</u>: Korea argues that its proposed counterfactual is "consistent with prior Article 22.6 proceedings" where arbitrators found that the removal of a measure as of the expiration date of the RPT was an appropriate counterfactual. In support of this position, Korea cites the arbitrators' decisions in EC – Hormones (Canada) (Article 22.6 – EC), EC – Hormones (US) (Article 22.6 – EC), US – COOL (Article 22.6 – US), and US – Tuna II (Mexico) (Article 22.6 – US). Given that none of these precedents deal with anti-dumping or countervailing duty matters, please explain how the legal and factual underlying circumstances in those cases provide relevant guidance for the Arbitrator's selection of a proper counterfactual in the present Arbitration.

<u>Response:</u>

17. This question is directed to Korea.

4. <u>To both parties</u>: In your view, do the conclusions in paragraph 8.1 of the original panel report provide guidance in selecting the appropriate counterfactual for this Arbitration? If yes/no, please explain.

<u>Response:</u>

18. Since the conclusions in paragraph 8.1 of the original panel report help inform the DSB recommendations, they do provide guidance in selecting the appropriate counterfactual. As discussed above in response to question 2.b, one starting point in determining an appropriate counterfactual is the relevant DSB recommendations.

5. <u>To the United States</u>: Assume that a WTO-inconsistent measure resulted in a production shift into the importing country that had the WTO-inconsistent measure, and that, in light of the investments made, removal of that measure at the end of the reasonable period of time (RPT) would not restore trade to the levels in existence at the time the measure was imposed. In the view of the United States, would the exporting Member have any right to suspend concessions commensurate

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[10] *US – Gambling (Article 22.6 – US)*, para. 3.46.

with the continuing loss in export volumes caused by the imposition of the WTO-inconsistent measure?

<u>Response:</u>

19. As an initial matter, the situation presented in this proceeding differs from the hypothetical described in the question. The evidence before the Arbitrator, in particular statements made by Samsung and LG, some of which were made in sworn testimony and in written statements the veracity of which has been certified by company officials and legal counsel,[11] demonstrates that the decisions by Samsung and LG to discontinue and reduce exports from Korea to the United States, and to shift production from Korea to other countries, including the United States, were not made in response to the imposition of the U.S. antidumping and countervailing duty measures.[12]

20. That being said, and assuming *arguendo* that a WTO-inconsistent measure resulted in a production shift into the importing country that had the WTO-inconsistent measure, the United States recalls that under the WTO dispute settlement system, remedies are prospective in nature.[13] Moreover, the obligation in the DSU is for a Member concerned to bring the measure at issue into conformity with the relevant covered agreement.[14] The obligation in the DSU for a Member concerned does not include an obligation to reverse the trade effects of the inconsistent measure.

21. For instance, where the Member concerned has applied tariffs on a product in excess of its schedule, those tariffs may have resulted in a shift in supplying the market away from the complaining Member (for example, the effect of the tariffs was to increase the market share for imports from another Member). However, there is nothing in the DSU that requires the Member

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[11] *See*, *e.g.*, Company Representative Certification of Jangmuk Park, Vice-President, Samsung, and Counsel Certification of Lynn M. Fischer Fox, in Large Residential Washers from Korea and Mexico Inv. Nos. TA-701-488 & 731-TA-1199-1200 (1st Review), Samsung's Substantive Response to ITC Notice of Institution (February 1, 2018) ("Samsung 2018 USITC LRWs Sunset Initiation Response") (pp. 3-4 of the PDF version of Exhibit USA-2); Company Certification of Namsu Kim, Senior Manager for Trade Team, LG, and Certificate of Accuracy and Completeness of Daniel L. Porter, in LG Electronics' Notice of Intent to Participate and Substantive Response to Notice of Initiation of Sunset Review – Large Residential Washers from Korea (February 5, 2018) ("LG 2018 Commerce LRWs Sunset Initiation Response") (pp. 5-6 of the PDF version of Exhibit USA-4); Counsel Certification of Daniel L. Porter in LG Electronics' Response to Commission's Notice of Institution for Washer Sunset Review Certain Large Residential Washers from Korea and Mexico Investigation No. 701-TA-488 and 731-TA-1199-1200 (Review) (February 2, 2018) ("LG 2018 USITC LRWs Sunset Initiation Response") (p. 3 of the PDF version of Exhibit USA-6).

[12] *See* Written Submission of the United States of America (March 23, 2018) ("U.S. Written Submission"), paras. 40-47.

[13] *See, e.g.*, *US – Upland Cotton (Article 21.5 – Brazil) (AB)*, footnote 494 ("Indeed, remedies in WTO law are generally understood to be prospective in nature.").

[14] *See, e.g.*, Article 19.1 of the DSU ("Where a panel or the Appellate Body concludes that a measure is inconsistent with a covered agreement, it shall recommend that the Member concerned bring the measure into conformity with that agreement.").

concerned to take action to alter the relative market shares to restore the market share of the product from the complaining Member that existed prior to the adoption of the measure at issue.

22. Similarly, if the Member concerned has adopted a WTO-inconsistent sanitary or phytosanitary measure, the Member is to bring its measure into conformity. There is no obligation for the Member concerned to restore the market share previously held by exports from the complaining Member.

23. One objective of the suspension of concessions is to encourage compliance. However, since compliance does not include an obligation to restore trade to the *status quo ante*, then providing for an element of the level of suspension of concessions unrelated to compliance would not accord with this purpose of the suspension of concessions.

24. In this proceeding, Korea is not entitled to have the United States act to undo private companies' investment decisions and affirmatively alter the location of production of the product at issue. Consequently, then, it would not be correct to include in the level of suspension of concessions an element "commensurate with the continuing loss in export volumes caused by the imposition of the WTO-inconsistent measure."

6. To both parties: Korea contends that its calculation of nullification or impairment is "consistent with prior Article 22.6 proceedings, where arbitrators have found that an appropriate counterfactual is one where the WTO-inconsistent measure is removed as of the expiration date of the RPT." The United States opines that "the appropriate analysis requires consistent consideration of … what that relationship would be if the U.S. measures had been brought into compliance with the DSB recommendations following the expiration of the RPT (the counterfactual)." On this basis, the Arbitrator understands that both parties agree that the end of the RPT is the appropriate period of reference for the calculation of the level of nullification or impairment. Please confirm if this understanding is correct.

Response:

25. In the context of this proceeding, the Arbitrator's understanding is correct.

7. To Korea: Korea's proposed counterfactual scenario is one in which the WTO-inconsistent anti-dumping and countervailing duties are terminated at the end of the RPT. Is Korea's view that, in the context of this case, termination of the WTO-inconsistent aspects of the measures is the only way the United States can comply with the DSB recommendations and rulings? Please comment on this in light of paragraphs 4.4 and 4.5 of *US – Tuna II (Mexico) (Article 22.6 – US)*, and taking into account the DSB's recommendation that the United States "bring its measures … into conformity" with the WTO agreements at issue.

Response:

26. This question is directed to Korea.

8. <u>To both parties</u>: According to Korea, "not only is it impossible to contemplate how the USDOC intended to modify the measure, but the actions of the United States make clear that the USDOC does not intend to modify the measure at all." Please comment on whether and to what extent, in your view, the responding party's intention with respect to implementation of the DSB's recommendations and rulings should be taken into account in this proceeding.

<u>Response:</u>

27. Korea's argument is based on a false premise and an incorrect understanding of the WTO dispute settlement system. Under Article 22 of the DSU, the most common scenario for the existence of arbitration under Article 22.6 of the DSU is the situation in which the Member concerned has not taken a measure to comply by the end of the reasonable period of time. Far from being an unusual situation, it is the presumed normal situation.

28. Accordingly, there is no basis for modifying the level of suspension of concessions based on imputing the intention of the Member concerned regarding compliance. Korea appears to argue that there should be an additional, punitive element added to the level of nullification or impairment determined by the Arbitrator as a result of the fact that compliance has not yet been achieved. However, as past arbitrators have observed, the requirement in the DSU is for the level of suspension to be equivalent to the level of nullification or impairment. There is no basis for increasing the level of suspension in order to be punitive. Indeed, Korea has previously agreed that the determination of the level of suspension of concessions must ensure that it is not punitive.[15]

29. The arbitrator in *US – Upland Cotton (Article 22.6 – US II)* agreed with the arbitrator in *EC – Bananas III (US) (Article 22.6 – EC)* that "it is the purpose of countermeasures to induce compliance. But this purpose does not mean that the DSB should grant authorization to suspend concessions beyond what is equivalent to the level of nullification or impairment. In our view, there is nothing in Article 22.1 of the DSU, let alone in paragraphs 4 and 7 of Article 22, that could be read as a justification for counter-measures of a punitive nature."[16]

9. <u>To Korea</u>: The Arbitrator understands that it is Korea's proposition that alternative margins of dumping proposed by the responding Member could be taken into account by the Arbitrator only to the extent that they represent the responding Member's "efforts to implement a modified margin in accordance with the DSB's recommendations and rulings".

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[15] *US – Offset Act (Byrd Amendment) (Korea) (Article 22.6)*, para. 4.19 ("Korea argues that the purpose of Article 22.4 of the DSU is to ensure equivalence between the level of suspension and the level of nullification or impairment so as to ensure that no punitive measures are taken against a Member found in violation of its WTO obligations.").

[16] *US – Upland Cotton (Article 22.6 – US II),* paras. 4.57 and 4.58 (quoting *EC – Bananas III (US) (Article 22.6 – EC)*).

a. Could Korea indicate whether previous Article 22.6 arbitration decisions support this proposition?

b. Is it Korea's view that hypothetical measures by definition cannot be assumed to be WTO-consistent and, therefore, the only counterfactual that can be applied is termination?

<u>Response:</u>

30. This question is directed to Korea.

10. <u>To the United States</u>: Please comment on Korea's argument that "[a]s the alternative margin proposed by the United States does not represent any efforts to implement a modified margin in accordance with the DSB's recommendations and rulings, it cannot be determined whether this hypothetical measure would be WTO-consistent."

<u>Response:</u>

31. In selecting an appropriate counterfactual, as discussed above in response to question 2.c, past arbitrators have emphasized that the arbitrator has discretion to select a counterfactual that is plausible and reasonable. Additionally, the counterfactual should be based on the recommendations adopted by the DSB. Whether a counterfactual is plausible and reasonable is not a question of whether compliance has been achieved or how much progress there has been toward compliance. That is a distinct issue and is not relevant to the selection of a counterfactual. Again, Korea appears to be seeking to add some punitive element to the determination of the level of suspension of concessions, which is contrary to the DSU.

32. However, as noted above in response to question 8, the complaining Member may only resort to arbitration under Article 22.6 of the DSU in a situation where compliance has not yet been achieved. There is nothing about the situation in this proceeding that merits taking an approach to determining the level of suspension of concessions that is different from the approach taken by past arbitrators, all of whom were making their determinations in the context of a scenario where there was no WTO finding that compliance had been achieved.

33. Furthermore, as past arbitrators have observed, an Article 22.6 arbitrator is not required to examine the WTO consistency of any measures that would achieve the selected counterfactual. That said, Korea's challenge of the determination of the U.S. Department of Commerce ("USDOC") in the antidumping investigation of LRWs from Korea was confined to two primary issues, namely the USDOC's application of the alternative, average-to-transaction comparison methodology provided in Article 2.4.2 of the AD Agreement[17] (the so-called targeted dumping methodology) and the USDOC's use of zeroing in connection with that methodology.[18] If the USDOC were to re-determine the margin of dumping for LG and not

[17] *Agreement on Implementation of Article VI of the General Agreement on Tariffs and Trade 1994*.

[18] *See US – Washing Machines (Panel)*, paras. 8.1.a.i, iii, xiv, and xv. *See also US – Washing Machines (AB)*, paras. 6.2-6.11 (The ultimate implication of the Appellate Body's findings is that the original panel's finding that the

apply a targeted dumping methodology and also not use zeroing, that margin of dumping would be consistent with the recommendations adopted by the DSB and would be entitled to the general presumption of WTO consistency.

34. As explained in the U.S. written submission, evidence placed before the original panel in this dispute, and now before the Arbitrator, demonstrates that the margin of dumping determined for LG in the original antidumping investigation would have been [[***]],[19] if it had been determined using the average-to-average comparison methodology (without zeroing). That [[***]] margin of dumping, if applied to LG following a redetermination of the results of the original investigation, would be in compliance with the DSB's recommendations and U.S. WTO obligations. Accordingly, rather than total elimination of the antidumping duty determined for LG in the original investigation, a more appropriate counterfactual in this proceeding is reduction of LG's antidumping duty rate from 13.02 percent[20] to [[***]].

35. In that case, the counterfactual to be applied to measure the level of nullification or impairment resulting from the maintenance of the WTO-inconsistent aspects of the U.S. antidumping measure on LRWs from Korea after the expiration of the RPT would be a reduction of the weighted-average antidumping duty rate[21] from 11.86 percent to [[***]],[22] not a reduction to zero percent.

11. <u>To Korea</u>: The United States argues that, as the margin of the dumping and countervailing duty rate assigned to Daewoo are not the subject of any DSB recommendations, "the U.S. antidumping and countervailing duty measures on LRWs from Korea would not, in any event, simply be terminated to bring them into compliance with the DSB's recommendations in this dispute." In paragraph 27 of its written submission, Korea appears to limit its response to the countervailing duty measures at issue. Would Korea make the same argument with respect to the anti-dumping measures at issue?

<u>Response:</u>

36. This question is directed to Korea.

USDOC acted inconsistently in the antidumping investigation of LRWs from Korea by using a targeted dumping methodology with zeroing was sustained.).

[19] *See* First Written Submission of the United States of America (Confidential) in *US – Washing Machines (Panel)* (November 24, 2014), para. 126 (citing Final Determination Margin Calculation for LG Electronics Inc. and LG Electronics USA, Inc.) (Exhibit USA-3 **(BCI)**).

[20] *See* Methodology Paper of the Republic of Korea (February 23, 2018) ("Korea's Methodology Paper"), para. 42.

[21] Daewoo was assigned a margin of dumping and a countervailing duty rate based on the application of facts available in the original antidumping and countervailing duty investigations of LRWs from Korea. The margin of dumping and countervailing duty rate assigned to Daewoo are not the subject of any DSB recommendations.

[22] The United States determined this weighted-average dumping margin using the calculation presented in Korea's methodology paper. *See* Korea's Methodology Paper, footnote 33. Thus, if Samsung's dumping margin changes to zero percent and LG's dumping margin changes to [[***]], then 0 x 0.31 + [[***]] x (1-0.31) = [[***]].

12. To the United States: Korea observes that a redetermination of dumping margins could have affected the United States International Trade Commission's (USITC) injury determination. Please respond.

Response:

37. Korea did not challenge any aspect of the injury determination made by the U.S. International Trade Commission ("USITC") in this dispute, and the USITC's injury determination is not subject to any recommendations adopted by the DSB. The DSB recommendations do not require the United States to revisit or revise the USITC's injury determination in the process of bringing the challenged antidumping and countervailing duty measures into compliance with U.S. WTO obligations. Korea's assertion is groundless.

13. To both parties: Both the United States and Korea use 2012 dumping margins for the calculation of nullification or impairment. Why do you use the 2012 margins and not those at the end of the RPT?

Response:

38. The antidumping and countervailing duty cash deposit rates in effect at the end of the RPT were determined in administrative review proceedings that occurred following the original antidumping and countervailing duty investigations.[23] The results of those administrative review proceedings are not subject to any findings by the original panel or the Appellate Body, nor are they subject to any recommendations adopted by the DSB. In its methodology paper, Korea appropriately used in its economic analysis the antidumping and countervailing duty rates determined in the original investigations, which are subject to recommendations adopted by the DSB.

14. To Korea: Korea contends that in order to implement a revised margin, the United States would be required to change other aspects of the measure, and it refers in this respect to the calculation of the "all others" rate and to administrative reviews. However, neither the Korean nor the United States' methodology for calculation of the level of nullification or impairment depends on these elements. Please explain the relevance of these elements for Korea's argument.

Response:

39. This question is directed to Korea.

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[23] *See Large Residential Washers From the Republic of Korea: Amended Final Results of the Antidumping Duty Administrative Review; 2012-2014*, 80 Fed. Reg. 68,508 (Nov. 5, 2015) (Exhibit KOR-20); *Large Residential Washers From the Republic of Korea: Final Results of the Antidumping Duty Administrative Review; 2014-2015*, 81 Fed. Reg. 62,715 (Sept. 12, 2016) (Exhibit KOR-21); *Large Residential Washers From the Republic of Korea: Final Results of Antidumping Duty Administrative Review; 2015-2016*, 82 Fed. Reg. 42788 (Sept. 12, 2017) (Exhibit KOR-22); *Large Residential Washers From the Republic of Korea: Final Results of Countervailing Duty Administrative Review; 2012-2013*, 80 Fed. Reg. 55336 (Sept. 15, 2015) (Exhibit KOR-23).

15. To Korea: Does Korea agree with the United States that the [] margin of dumping calculated for LG in the original investigation, "if applied to LG following a redetermination of the results of the original investigation, would be in compliance with the DSB's recommendations and U.S. WTO obligations"? If not, please identify in what respects that margin would be WTO-inconsistent.

Response:

40. This question is directed to Korea.

16. To the United States: According to Korea, "it is clear from the safeguard proceedings that the United States considered LG's and Samsung's decision to move production facilities out of Korea, and ultimately into the United States, a direct result of anti-dumping and countervailing duties imposed by the United States". Please comment on this statement by Korea.

Response:

41. The United States has put before the Arbitrator statements made by Samsung and LG explaining that their decisions to shift production of LRWs out of Korea were unrelated to the U.S. antidumping and countervailing measures.[24] For example:

- "Samsung stated that operating cost savings and its ability to consolidate LRW production from Korea and Mexico into one facility in China were the factors in its decision to move production of LRWs from Korea to China".[25]

- Samsung represented that it "has virtually eliminated production capacity in Korea and Mexico."[26]

- "For nearly forty years, Samsung has steadily expanded our operations in the United States – creating thousands of jobs and investing billions of dollars in cutting edge manufacturing facilities, research and development," said Samsung Electronics America President & CEO Tim Baxter. "With this investment [in the South Carolina LRWs production facility], Samsung is reaffirming its commitment to expanding its U.S. operations and deepening our connection to the

[24] *See* U.S. Written Submission, paras. 40-47.

[25] U.S. International Trade Commission, *Large Residential Washers from China*, Investigation No. 731-TA-1306 (Preliminary), Publication 4591 (February 2016), p. VII-4, footnote 12 (Exhibit USA-1). The United States has provided to the Arbitrator an excerpt of this USITC preliminary report. The full report is available on the Internet at https://www.usitc.gov/publications/701_731/pub4591_1.pdf.

[26] Samsung 2018 USITC LRWs Sunset Initiation Response, p. 10 (p. 15 of the PDF version of Exhibit USA-2).

American consumers, engineers and innovators who are driving global trends in consumer electronics."[27]

- "At LG, we've been discussing US production for quite some time, and I've been personally involved since I joined the Company in 2010. In fact, we started looking at US production before any of the anti-dumping cases came along. A US production site affords us tremendous operational benefits, shortening our supply chain by several weeks and allowing us to be more responsive to the market."[28]

- "In short, LG is similar to many other global producers of complex consumer durables that initially established a presence in the U.S. market with imports, and switched to supplying the U.S. market using domestic U.S. production once a critical mass of market acceptance has been reached. LG's new Tennessee production plant is all about continuing the natural progression of LGEUS' commitment of its highly sought after residential washers to the United States...."[29]

- "The announcement of the new home appliance factory in Tennessee comes on the heels of the start of construction of the LG North American Headquarters in Englewood Cliffs, N.J., where LG broke ground earlier this month. That $300-million project is expected to increase LG's local employment there from 500 today to more than 1,000 by 2019."[30]

It is surprising that Korea suggests that the United States' reliance on statements made by Samsung and LG, some of which were made in sworn testimony and in written statements the veracity of which has been certified by company officials and legal counsel,[31] is

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[27] "Samsung to Expand U.S. Operations, Open $380 Million Home Appliance Manufacturing Plant in South Carolina," Samsung Newsroom (June 28, 2017), in Samsung 2018 USITC LRWs Sunset Initiation Response, Exhibit 2 (p. 42 of the PDF version of Exhibit USA-2).

[28] LG 2018 Commerce LRWs Sunset Initiation Response, p. 7 (sworn testimony given by Mr. John Toohey, Director of Strategy for LGEUS, during the ITC remedy hearing in the 2017 LRWs global safeguard investigation) (p. 15 of the PDF Version of Exhibit USA-4) (emphasis added).

[29] LG 2018 Commerce LRWs Sunset Initiation Response, p. 8 (p. 16 of the PDF Version of Exhibit USA-4) (emphasis added).

[30] "LG Electronics To Build U.S. Factory For Home Appliances In Tennessee" (February 28, 2017), http://www.lg.com/us/press-release/lg-electronics-to-build-us-factory-for-home-appliances-in-tennessee (p. 4 of the PDF version of Exhibit USA-5).

[31] *See*, *e.g.*, Company Representative Certification of Jangmuk Park, Vice-President, Samsung, and Counsel Certification of Lynn M. Fischer Fox, in Samsung 2018 USITC LRWs Sunset Initiation Response (pp. 3-4 of the PDF version of Exhibit USA-2); Company Certification of Namsu Kim, Senior Manager for Trade Team, LG, and Certificate of Accuracy and Completeness of Daniel L. Porter, in LG 2018 Commerce LRWs Sunset Initiation Response (pp. 5-6 of the PDF version of Exhibit USA-4); Counsel Certification of Daniel L. Porter in LG 2018 USITC LRWs Sunset Initiation Response (p. 3 of the PDF version of Exhibit USA-6).

"disingenuous."[32]

42. While the USITC may have made certain observations regarding "the temporal correlation between the imposition of antidumping and countervailing duties and the movement of LG's and Samsung's production facilities," Korea has not pointed to any statement by the USITC concluding that a causal relationship existed.[33] That makes sense, as that was not a question that was before the USITC in the safeguard investigation. Nor is it a question before the Arbitrator here.

43. The USITC did come to certain conclusions, however, about the anticipated effect of the imposition of a global safeguard remedy on LRWs. For example, the USITC explained that:

> [O]ur recommended action would do little to hinder LG's and Samsung's plans to construct new LRW production facilities in the United States in the short term. As already discussed, our recommended TRQ on imports of LRWs will permit LG and Samsung to maintain a presence in the U.S. market sufficient to support the ramping up of their planned U.S. plants. Our recommended TRQ on imports of covered parts will enable LG and Samsung to import the covered parts necessary for the service and repair of existing LRWs and for addressing unanticipated disruptions in the domestic production of covered parts at their new U.S. plants. By following through on their commitments to commence production of LRWs at new U.S. plants, LG and Samsung will further increase the U.S. domestic industry's capacity, production, sales, market share, and employment over the course of the remedy period.[34]

Additionally, the USITC found that:

> Although our economic model also predicts a substantial increase in the domestic industry's market share, <u>an increasing portion of this market share will go to LG and Samsung, as they ramp up their new U.S. plants</u>. Indeed, any adverse effects of our recommended action on retailers and consumers will lessen during the remedy period <u>as LG and Samsung replace most of their imports of LRWs with domestically produced LRWs</u>.[35]

[32] Written Submission of the Republic of Korea (April 13, 2018) ("Korea's Written Submission"), para. 39.

[33] Korea's Written Submission, para. 39.

[34] U.S. International Trade Commission, *Large Residential Washers*, Investigation No. TA-201-076, Publication 4745 (December 2017) ("USITC LRWs 201 Report"), p. 78 (p. 87 of the PDF version of Exhibit KOR-25).

[35] USITC LRWs 201 Report, p. 78 (p. 87 of the PDF version of Exhibit KOR-25).

44. The USITC's conclusions about the anticipated effect of the global safeguard remedy are consistent with the statements made by Samsung and LG about their expectations for the future. For example, Samsung and LG have stated the following:

- "[B]eginning later this year [2018], LGEUS-TN will be a major U.S. producer of the subject merchandise, and will have a significant stake in ongoing U.S. production."[36]
- Both Samsung and LG are on record "claim[ing] that their planned U.S. production facilities will ultimately satisfy the vast majority of U.S. demand for their LRWs."[37]
- As Samsung explained to the USITC in February 2018, in the context of the ongoing sunset reviews of LRWs from Korea and Mexico:

> U.S. demand for the subject merchandise has increased steadily throughout the period of review, and is likely to continue to increase in the reasonably foreseeable future. … Samsung and LG's domestic production [*i.e.*, production at their new U.S. facilities] is poised to meet this growing demand, further obviating the need for continuation of the orders.[38]

- LG likewise represented to Commerce in the ongoing sunset review of the antidumping order on LRWs from Korea that:

> Revocation of the order on LRWs from Korea will not lead to continuation or recurrence of dumping by Korean respondents because Korean respondents will have new U.S. LRW production facilities from which they will supply the U.S. market. The existence of the brand new U.S. washer production factories will virtually eliminate the need for LRW imports from Korea.[39]
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> We detail below (a) the substantial evidence that demonstrates that the new U.S. production facilities will be completed by the end of 2018 and (b) the substantial evidence that the new U.S. production

[36] LG 2018 Commerce LRWs Sunset Initiation Response, pp. 2-3 (pp. 10-11 of the PDF Version of Exhibit USA-USA-4).

[37] USITC LRWs 201 Report, p. 70 (p. 79 of the PDF version of Exhibit KOR-25).

[38] Samsung 2018 USITC LRWs Sunset Initiation Response, p. 10 (p. 15 of the PDF version of Exhibit USA-2) (emphasis added).

[39] LG 2018 Commerce LRWs Sunset Initiation Response, p. 6 (p. 14 of the PDF Version of Exhibit USA-4) (emphasis added).

> facilities will have the capability to supply virtually all of the LRW needs of LG and Samsung.[40]
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> * * *
>
> What this means is that, by the time this sunset review concludes (4Q 2018), LG and Samsung will be supplying virtually all of their U.S. demand from their new U.S. production factories in Clarksville, TN and Newbury, SC.[41]
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> * * *
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> [S]tarting from the 4Q 2018 … more than 95 percent of LG and Samsung LRWs will be supplied from the LG and Samsung U.S. LRW production factories.[42]

45. Samsung and LG have publicly stated, repeatedly, that they have no intention of resuming production of LRWs in Korea for export to the U.S. market because the companies intend instead to supply the U.S. market with LRWs manufactured at their new U.S. production facilities. Furthermore, beyond the stated intentions of Samsung and LG, there is, at present, insufficient LRWs production capacity in Korea to support any increase in exports of LRWs from Korea to the United States, according to statements made by Samsung and LG. As LG has explained:

> There is no significant excess capacity in Korea that could be shipped to the United States.[43]
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> * * *
>
> Much of the existing Korean capacity is being absorbed in the Korean market, with another large portion exported to markets other than the U.S.[44]
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> * * *

[40] LG 2018 Commerce LRWs Sunset Initiation Response, p. 7 (p. 15 of the PDF Version of Exhibit USA-4) (emphasis added).

[41] LG 2018 Commerce LRWs Sunset Initiation Response, p. 13 (p. 21 of the PDF Version of Exhibit USA-4) (emphasis added).

[42] LG 2018 Commerce LRWs Sunset Initiation Response, p. 15 (p. 23 of the PDF Version of Exhibit USA-4) (emphasis added).

[43] LG 2018 USITC LRWs Sunset Initiation Response, p. 4 (p. 9 of the PDF version of Exhibit USA-6) (emphasis added).

[44] LG 2018 USITC LRWs Sunset Initiation Response, p. 4 (p. 9 of the PDF version of Exhibit USA-6).

> There is also no incentive to add new capacity in Korea or to ship from Korea in the future as LGE recently added capacity in other Asian countries to meet demand in Asian markets. Moreover, LGE will soon supply the U.S. market with U.S.-origin LRWs manufactured in Tennessee, further reducing the incentive to add any new capacity in Korea.[45]
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> * * *
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> [LG explains that its] Korean manufacturing facility is already operating at full capacity. In December 2016, one of the front load manufacturing lines was demolished, thereby decreasing the capacity of the facility. Instead of adding additional washer capacity, LGE is expanding production of dryers for the Korean market. These situations sequentially lead to the conclusion that there will be no increase of inventories in the Korean facility or the U.S. warehouse.[46]

And, as noted earlier, Samsung represented in February 2018 that it "has virtually eliminated production capacity in Korea and Mexico."[47] Thus, to the extent that Samsung and LG continue to import LRWs into the United States in 2018 as they work toward reaching full production capacity at their brand new U.S. LRWs production facilities, those imports of LRWs necessarily will come from countries other than Korea, according to statements made by Samsung and LG.

46. It is evident from the USITC's report on the global safeguard investigation of LRWs, to which Korea draws the Arbitrator's attention, that the USITC believed the statements made by Samsung and LG concerning their intention to produce LRWs for the U.S. market in the United States and not in Korea.

17. To Korea: Korea argues that the decisions of LG and Samsung to shift their production facilities out of Korea are "a direct result of anti-dumping and countervailing duties imposed by the United States". At the same time, Korea provides an average growth rate for the calculation of the nullification or impairment in the years subsequent to the RPT with the assumption that the market share of the products affected by the inconsistent measures will be regained and will further grow. Please explain what role, if any, a shift in production may play in assessing the growth in the level of suspension of concessions requested by Korea.

[45] LG 2018 USITC LRWs Sunset Initiation Response, p. 4 (p. 9 of the PDF version of Exhibit USA-6) (emphasis added).

[46] LG 2018 USITC LRWs Sunset Initiation Response, p. 4 (p. 9 of the PDF version of Exhibit USA-6) (emphasis added).

[47] Samsung 2018 USITC LRWs Sunset Initiation Response, p. 10 (p. 15 of the PDF version of Exhibit USA-2) (emphasis added).

Response:

47. This question is directed to Korea.

18. To Korea: Please explain why it is preferable, in Korea's view, to adopt a weighted average, rather than an individual approach to calculation, when there are just two exporters in the analysis?

Response:

48. This question is directed to Korea.

19. According to the United States, the level of nullification or impairment is zero, because the two firms subject to anti-dumping duties, LG and Samsung, are investing in production facilities in the United States and will not re-establish production in Korea. Korea contests this reasoning arguing that "to the extent that there was a decline in Korean exports of LRWs into the United States, this decline is attributable to the United States' imposition of anti-dumping and countervailing duty orders, and it is reasonable to assume that this downward trend would reverse with the removal of the WTO-inconsistent measures."

a. To the United States: Can the United States support its claim with trade statistics, split up by firm, showing how many LRWs LG and Samsung are exporting from Korea into the United States from 2011 to 2017, and by providing evidence to show that this value will fall to zero once the production facilities in the United States become operational?

b. To both parties: Please discuss to what extent the economic literature on hysteresis/path dependence is relevant to the debate between the parties (see, for example, Dixit (1987, 1989) and Baldwin (1988))? Please also discuss, more specifically, to what extent such economic literature provides a conceptual framework for determining whether specific trade policy measures can have asymmetric effects leading to path-dependence of outcomes, i.e. imposing anti-dumping duties and then lifting them will not necessarily lead to a return to the initial situation?

Response:

49. It is not necessary to use historical trends in trade data or economic modeling to predict that Samsung and LG are investing in production facilities in the United States and will not re-establish production in Korea. This is demonstrated through ample evidence in the form of statements made by Samsung and LG themselves.

50. Korea's Methodology Paper reports that, after the imposition of the antidumping and countervailing duty measures, Samsung discontinued exports to the U.S. market and LG has

substantially lowered its volume of exports to the U.S. market.[48] Indeed, Samsung has represented that it "has virtually eliminated production capacity in Korea and Mexico."[49]

51. As the USITC noted in the December 2017 report on its global safeguard investigation of LRWs:

> [B]oth LG and Samsung are in the initial stages of constructing LRW production facilities in the United States that will likely reduce the need for both companies to import LRWs. Specifically, in February 2017, LG announced plans to open a $250 million LRW production facility in Clarksville, Tennessee, in 2019. In June 2017, Samsung announced plans to open a $380 million LRW production facility in Newberry, South Carolina, in early 2018.
>
> Both LG and Samsung claim that their U.S. production facilities, once fully operational, will be capable of satisfying most U.S. demand for their LRWs. Accordingly, assuming LG's and Samsung's plans come to fruition, <u>neither company will have an incentive to increase imports from Korea significantly in the imminent future</u>.[50]

52. In a June 2017 press release, Samsung described its plans to commence manufacturing LRWs in the United States in the following terms:

> For nearly forty years, Samsung has steadily expanded our operations in the United States – creating thousands of jobs and investing billions of dollars in cutting edge manufacturing facilities, research and development," said Samsung Electronics America President & CEO Tim Baxter. "With this investment, Samsung is reaffirming its commitment to expanding its U.S. operations and deepening our connection to the American

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[48] *See* Korea's Methodology Paper, para. 44. Korea notes that Daewoo also discontinued exports to the U.S. market. As explained above, Daewoo was assigned a margin of dumping and a countervailing duty rate based on the application of facts available in the original antidumping and countervailing duty investigations of LRWs from Korea. The margin of dumping and countervailing duty rate assigned to Daewoo are not the subject of any DSB recommendations.

[49] Samsung 2018 USITC LRWs Sunset Initiation Response, p. 10 (p. 15 of the PDF version of Exhibit USA-2).

[50] USITC LRWs 201 Report, pp. 59-60 (pp. 68-69 of the PDF version of Exhibit KOR-25) (emphasis added). *See also id.*, p. 70 (p. 79 of the PDF version of Exhibit KOR-25) ("LG and Samsung also claim that their planned U.S. production facilities will ultimately satisfy the vast majority of U.S. demand for their LRWs."). *See also* USITC LRWs 201 Report, p. 26 (p. 35 of the PDF version of Exhibit KOR-25).

> consumers, engineers and innovators who are driving global trends in consumer electronics.[51]

53. In a January 2018 press release, Samsung "announced the start of commercial production at its first U.S. based home appliance manufacturing facility … in Newberry, South Carolina."[52] As explained in that press release, "Samsung plans to produce one million washing machines at the Newberry County facility in 2018."[53]

54. LG offered a similar explanation for its planned U.S. production facility in a submission to Commerce in February 2018, quoting sworn testimony given by Mr. John Toohey, Director of Strategy for LGEUS, during the ITC remedy hearing in the 2017 LRWs global safeguard investigation:

> At LG, we've been discussing US production for quite some time, and I've been personally involved since I joined the Company in 2010. In fact, <u>we started looking at US production before any of the anti-dumping cases came along</u>. A US production site affords us tremendous operational benefits, shortening our supply chain by several weeks and allowing us to be more responsive to the market.[54]

55. LG's submission continued:

> In short, LG is similar to many other global producers of complex consumer durables that initially established a presence in the U.S. market with imports, and switched to supplying the U.S. market using domestic U.S. production once a critical mass of market acceptance has been reached. LG's new Tennessee production plant is all about continuing the natural progression of LGEUS' commitment of its highly sought after residential washers to the United States....[55]

56. LG's construction of a U.S. LRWs production facility is part of LG's broader plans to expand its presence in the United States:

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[51] "Samsung to Expand U.S. Operations, Open $380 Million Home Appliance Manufacturing Plant in South Carolina," Samsung Newsroom (June 28, 2017), in Samsung 2018 USITC LRWs Sunset Initiation Response, Exhibit 2 (p. 42 of the PDF version of Exhibit USA-2).

[52] "Samsung Kicks Off U.S. Production of Premium Home Appliances," Samsung Newsroom (January 12, 2018), in Samsung 2018 USITC LRWs Sunset Initiation Response, Exhibit 2 (p. 33 of the PDF version of Exhibit USA-2).

[53] "Samsung Kicks Off U.S. Production of Premium Home Appliances," Samsung Newsroom (January 12, 2018), in Samsung 2018 USITC LRWs Sunset Initiation Response, Exhibit 2 (p. 35 of the PDF version of Exhibit USA-2).

[54] LG 2018 Commerce LRWs Sunset Initiation Response, p. 7 (p. 15 of the PDF Version of Exhibit USA-4) (emphasis added).

[55] LG 2018 Commerce LRWs Sunset Initiation Response, p. 8 (p. 16 of the PDF Version of Exhibit USA-4).

> The announcement of the new home appliance factory in Tennessee comes on the heels of the start of construction of the LG North American Headquarters in Englewood Cliffs, N.J., where LG broke ground earlier this month. That $300-million project is expected to increase LG's local employment there from 500 today to more than 1,000 by 2019.[56]

"[B]eginning later this year [2018], LGEUS-TN will be a major U.S. producer of the subject merchandise, and will have a significant stake in ongoing U.S. production."[57]

57. Indeed, both Samsung and LG are on record "claim[ing] that their planned U.S. production facilities will ultimately satisfy the vast majority of U.S. demand for their LRWs."[58] As Samsung explained to the USITC in February 2018, in the context of the ongoing sunset reviews of LRWs from Korea and Mexico:

> U.S. demand for the subject merchandise has increased steadily throughout the period of review, and is likely to continue to increase in the reasonably foreseeable future. … Samsung and LG's domestic production [*i.e.*, production at their new U.S. facilities] is poised to meet this growing demand, further obviating the need for continuation of the orders.[59]

58. LG likewise represented to Commerce in the ongoing sunset reviews that:

> Revocation of the order on LRWs from Korea will not lead to continuation or recurrence of dumping by Korean respondents because Korean respondents will have new U.S. LRW production facilities from which they will supply the U.S. market. The existence of the brand new U.S. washer production factories will virtually eliminate the need for LRW imports from Korea.[60]
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> We detail below (a) the substantial evidence that demonstrates that the new U.S. production facilities will be completed by the end of

[56] "LG Electronics To Build U.S. Factory For Home Appliances In Tennessee" (February 28, 2017), http://www.lg.com/us/press-release/lg-electronics-to-build-us-factory-for-home-appliances-in-tennessee (p. 3 of the PDF Version of Exhibit USA-5).

[57] LG 2018 Commerce LRWs Sunset Initiation Response, pp. 2-3 (pp. 10-11 of the PDF Version of Exhibit USA-USA-4).

[58] USITC LRWs 201 Report, p. 70 (p. 79 of the PDF version of Exhibit KOR-25) (emphasis added).

[59] Samsung 2018 USITC LRWs Sunset Initiation Response, p. 10 (p. 15 of the PDF version of Exhibit USA-2) (emphasis added).

[60] LG 2018 Commerce LRWs Sunset Initiation Response, p. 6 (p. 14 of the PDF Version of Exhibit USA-4) (emphasis added).

> 2018 and (b) the substantial evidence that the new U.S. production facilities will have the capability to supply virtually all of the LRW needs of LG and Samsung.[61]
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> * * *
>
> What this means is that, by the time this sunset review concludes (4Q 2018), LG and Samsung will be supplying virtually all of their U.S. demand from their new U.S. production factories in Clarksville, TN and Newbury, SC.[62]
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> [S]tarting from the 4Q 2018 … more than 95 percent of LG and Samsung LRWs will be supplied from the LG and Samsung U.S. LRW production factories.[63]

59. Samsung and LG have publicly stated, repeatedly, that they have no intention of resuming production of LRWs in Korea for the U.S. market because the companies intend instead to supply the U.S. market with LRWs manufactured at their new U.S. production facilities. Furthermore, beyond the stated intentions of Samsung and LG, there is, at present, insufficient LRWs production capacity in Korea to support any increase in exports of LRWs from Korea to the United States, according to statements made by Samsung and LG. As LG has explained:

> There is no significant excess capacity in Korea that could be shipped to the United States.[64]
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> * * *
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> Much of the existing Korean capacity is being absorbed in the Korean market, with another large portion exported to markets other than the U.S.[65]
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> * * *

[61] LG 2018 Commerce LRWs Sunset Initiation Response, p. 7 (p. 15 of the PDF Version of Exhibit USA-4) (emphasis added).

[62] LG 2018 Commerce LRWs Sunset Initiation Response, p. 13 (p. 21 of the PDF Version of Exhibit USA-4) (emphasis added).

[63] LG 2018 Commerce LRWs Sunset Initiation Response, p. 15 (p. 23 of the PDF Version of Exhibit USA-4) (emphasis added).

[64] LG 2018 USITC LRWs Sunset Initiation Response, p. 4 (p. 9 of the PDF version of Exhibit USA-6) (emphasis added).

[65] LG 2018 USITC LRWs Sunset Initiation Response, p. 4 (p. 9 of the PDF version of Exhibit USA-6).

> There is also no incentive to add new capacity in Korea or to ship from Korea in the future as LGE recently added capacity in other Asian countries to meet demand in Asian markets. Moreover, LGE will soon supply the U.S. market with U.S.-origin LRWs manufactured in Tennessee, further reducing the incentive to add any new capacity in Korea.[66]
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> [LG explains that its] Korean manufacturing facility is already operating at full capacity. In December 2016, one of the front load manufacturing lines was demolished, thereby decreasing the capacity of the facility. Instead of adding additional washer capacity, LGE is expanding production of dryers for the Korean market. These situations sequentially lead to the conclusion that there will be no increase of inventories in the Korean facility or the U.S. warehouse.[67]

And, as noted earlier, Samsung represented in February 2018 that it "has virtually eliminated production capacity in Korea and Mexico."[68] Thus, to the extent that Samsung and LG continue to import LRWs into the United States in 2018 as they work toward reaching full production capacity at their brand new U.S. production facilities, those imports of LRWs necessarily will come from countries other than Korea.

60. The statements made by Samsung and LG concerning their investment decisions and future intentions to produce LRWs for the U.S. market in the United States – and not resume production of LRWs for export to the U.S. market in Korea – can be understood as being consistent with the economic literature on hysteresis/path dependence, to which the question refers. The hysteresis/path dependence literature makes the point that some changes in trade flows from temporary shocks may not be reversed even when market conditions revert back to earlier conditions. As Dixit observed, "[m]any investment decisions are made in an uncertain environment and are costly to reverse later."[69] Such decisions "entail sunk costs."[70] Dixit further observed that "[t]he most important feature of entry and exit decisions in an environment of ongoing uncertainty is 'hysteresis.' This is defined as the failure of an effect to reverse itself as its underlying cause is reversed. For example, the foreign firms that entered the U.S. market

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[66] LG 2018 USITC LRWs Sunset Initiation Response, p. 4 (p. 9 of the PDF version of Exhibit USA-6) (emphasis added).

[67] LG 2018 USITC LRWs Sunset Initiation Response, p. 4 (p. 9 of the PDF version of Exhibit USA-6) (emphasis added).

[68] Samsung 2018 USITC LRWs Sunset Initiation Response, p. 10 (p. 15 of the PDF version of Exhibit USA-2) (emphasis added).

[69] Avinash Dixit, "Entry and Exit Decisions under Uncertainty," Journal of Political Economy, Vol. 97, No. 3 (Jun., 1989), pp. 620-638 ("Dixit (1989)"), at 620.

[70] Dixit (1989), p. 620.

when the dollar appreciated did not exit when the dollar fell back to its original levels."[71] Similarly, Baldwin observed that "if market-entry costs are sunk, exchange rate shocks can alter domestic market structure and thereby have persistent real effects. In other words large, temporary exchange rate shocks may result in hysteresis in import prices and quantities."[72]

61. It is very likely that the same would be true of a temporary shock resulting from the imposition of antidumping and countervailing duty measures. While Samsung and LG have denied that they shifted production of LRWs out of Korea in response to the U.S. antidumping and countervailing duty measures, to the extent that the companies actually did determine to construct production facilities in the United States in response to the antidumping and countervailing duty measures, those decisions entailed sunk costs and it is unlikely that Samsung and LG would reverse those decisions if the antidumping and countervailing duty measures were removed.

62. At the hearing in the USITC's global safeguard investigation of LRWs, LG and Samsung officials stated that:

> LRW production can be moved from one country to another more rapidly when production is transferred to an existing LRW production facility in the destination country, and both companies reported LRW production facilities in Korea. Hearing Tr. At 247-48 (Baxter), 305-6 (Riddle); CR at IV-20; PR at IV-11. Given their track record of "country hopping" and existing LRW production facilities in Korea, LG and Samsung are capable of rapidly shifting production of LRWs from third countries to Korea to increase exports of LRWs from Korea to the U.S. market.[73]

The USITC considered the ability of Samsung and LG to engage in "country hopping" among existing LRW production facilities a concern that favored the imposition of a safeguard remedy. However, the USITC also considered that the imposition of a safeguard remedy "would do little to hinder LG's and Samsung's plans to construct new LRW production facilities in the United States in the short term."[74] Further, the USITC considered that:

> As already discussed, our recommended TRQ on imports of LRWs will permit LG and Samsung to maintain a presence in the U.S. market sufficient to support the ramping up of their planned U.S. plants. Our recommended TRQ on imports of covered parts will enable LG and Samsung to import the covered parts necessary for the service and repair of existing LRWs and for addressing

[71] Dixit (1989), p. 622.

[72] Richard Baldwin, "Hysteresis in Import Prices: The Beachhead Effect," The American Economic Review, Vol. 78, No. 4 (Sep., 1988), pp. 773-785, at 773.

[73] USITC LRWs 201 Report, p. 59, footnote 349 (p. 68 of the PDF version of Exhibit KOR-25).

[74] USITC LRWs 201 Report, p. 78 (p. 87 of the PDF version of Exhibit KOR-25).

> unanticipated disruptions in the domestic production of covered parts at their new U.S. plants. By following through on their commitments to commence production of LRWs at new U.S. plants, LG and Samsung will further increase the U.S. domestic industry's capacity, production, sales, market share, and employment over the course of the remedy period.[75]

Additionally, the USITC found that:

> Although our economic model also predicts a substantial increase in the domestic industry's market share, an increasing portion of this market share will go to LG and Samsung, as they ramp up their new U.S. plants. Indeed, any adverse effects of our recommended action on retailers and consumers will lessen during the remedy period as LG and Samsung replace most of their imports of LRWs with domestically produced LRWs.[76]

The USITC's conclusions about the anticipated effect of the global safeguard remedy are consistent with the statements made by Samsung and LG about their expectations for the future. That is, once Samsung's and LG's U.S. production facilities are operational, "neither company will have an incentive to increase imports from Korea significantly in the imminent future."[77]

63. The Arbitrator's counterfactual analysis must account for these permanent changes in the U.S. LRWs market, *i.e.*, the new U.S. production facilities constructed by Samsung and LG, and Samsung's and LG's stated plans to produce LRWs for the U.S. market in the United States going forward. Properly taken into account, the correct conclusion is that, if the WTO-inconsistent aspects of the U.S. antidumping and countervailing duty measures were brought into compliance following the expiration of the RPT, there would not be any increase at all in the level of exports of LRWs from Korea to the United States, because Samsung's and LG's investment decisions to move production to the United States reflect a lack of both the interest and the ability to resume production of LRWs in Korea for export to the U.S. market.

64. Accordingly, the evidence before the Arbitrator demonstrates that the level of nullification or impairment resulting from the maintenance of the WTO-inconsistent aspects of the U.S. antidumping and countervailing duty measures on LRWs from Korea beyond the expiration of the RPT is zero.

20. To the United States: Can the United States provide empirical (or econometric) evidence for its statements that removal of the measure "would not result in any increase in the value of exports of LRWs from Korea to the United States" , i.e. the

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[75] USITC LRWs 201 Report, p. 78 (p. 87 of the PDF version of Exhibit KOR-25).

[76] USITC LRWs 201 Report, p. 78 (p. 87 of the PDF version of Exhibit KOR-25).

[77] USITC LRWs 201 Report, pp. 59-60 (pp. 68-69 of the PDF version of Exhibit KOR-25) (emphasis added). *See also id.*, pp. 26, 70 ("LG and Samsung also claim that their planned U.S. production facilities will ultimately satisfy the vast majority of U.S. demand for their LRWs.") (pp. 35, 79 of the PDF version of Exhibit KOR-25).

impact of the anti-dumping duties has been path-dependent (also see Question 19(b))?

Response:

65. As explained above in response to question 19, it is not necessary to use historical trends in trade data or economic or econometric modeling to conclude that, if the WTO-inconsistent aspects of the U.S. antidumping and countervailing duty measures were brought into compliance following the expiration of the RPT, there would not be any increase at all in the level of exports of LRWs from Korea to the United States. This is demonstrated through ample evidence in the form of statements made by Samsung and LG themselves, in which the companies have indicated clearly their investor-based decisions and future intentions to move production to the United States, which reflect that the companies lack both the interest and the ability to resume production of LRWs in Korea for export to the U.S. market.

66. In economic terms, to the extent that the statements by Samsung and LG about their investment decisions and future intentions to produce LRWs for the U.S. market in the United States are true, and we recall that the statements by the companies have been made, *inter alia*, in sworn testimony and in written statements the veracity of which has been certified by company officials and legal counsel,[78] then the import supply elasticity of LRWs from Korea would be at or near zero. That would result in a determination that the level of nullification or impairment is at or near zero using a correct economic model.

21. To Korea: Korea states that the decline in Korean LRW exports to the United States is attributable to the United States anti-dumping and countervailing duty orders, and "it is reasonable to assume that this downward trend would reverse with the removal of the WTO-inconsistent measures."

a. Please clarify the exact situation that existed at the end of the RPT with respect to LG and Samsung moving LRW production out of Korea and establishing LRW production facilities in the United States.

b. Is it Korea's position that Korean producers, having built plants in the United States, would, if the orders were removed, close those facilities and resume exporting LRWs from Korea at the levels that existed before the orders were imposed?

Response:

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[78] *See*, *e.g.*, Company Representative Certification of Jangmuk Park, Vice-President, Samsung, and Counsel Certification of Lynn M. Fischer Fox, in Samsung 2018 USITC LRWs Sunset Initiation Response (pp. 3-4 of the PDF version of Exhibit USA-2); Company Certification of Namsu Kim, Senior Manager for Trade Team, LG, and Certificate of Accuracy and Completeness of Daniel L. Porter, in LG 2018 Commerce LRWs Sunset Initiation Response (pp. 5-6 of the PDF version of Exhibit USA-4); Counsel Certification of Daniel L. Porter in LG 2018 USITC LRWs Sunset Initiation Response (p. 3 of the PDF version of Exhibit USA-6).

67. This question is directed to Korea.

3 APPROPRIATE MODEL

22. <u>To the United States</u>: The Arbitrator recalls that the United States had proposed the Armington model to estimate the trade effects in *US – FSC (Article 22.6 – US)* and *US – Offset Act (Byrd Amendment) (EC) (Article 22.6 – US)*. In both cases, the arbitrators rejected this proposal. Please comment on whether the reasons for rejecting the Armington model in these two previous cases are relevant for the current case.

<u>Response:</u>

68. There is an important distinction between the situation in the current proceeding and the situations in *US – FSC (Article 22.6 – US)* and *US – Offset Act (Byrd Amendment) (EC) (Article 22.6)* (and the DSU Article 22.6 arbitrations in the seven other *US – Offset Act (Byrd Amendment)* disputes). In deciding not to employ Armington-based models in those arbitrations, the arbitrators did not consider the models economically unsound. Rather, the arbitrators determined that, in those arbitrations, there was insufficient data to employ an Armington-based model. That is not the situation here.

69. The arbitrator in *US – FSC (Article 22.6 – US)* "acknowledge[d] the general contribution that the Armington approach to modelling differentiated products models of trade can make."[79] That arbitrator found, however, that "the United States did not, in the case before us, satisfactorily explain why we would be obliged to find the particular approach suggested by it to be more reasonable than that generated by the proposed EC approach."[80]

70. In this arbitration, however, the United States has explained why an Armington-based economic model is reasonable and why the partial static equilibrium model proposed by Korea is not reasonable.[81] Korea's economic model is premised on two flawed assumptions: (1) that the United States and Korea are the only two countries that produce and sell LRWs in the U.S. market and (2) that there is perfect substitution between LRWs imported from Korea and U.S. LRWs and, implicitly, no substitution at all between imports from Korea and non-subject imports. The Armington-based economic model proposed by the United States accounts for the fact that the United States and Korea are not the only two countries that produce and sell LRWs in the U.S. market and the fact that LRWs from Korea, the United States, and third countries are imperfect substitutes.

71. The arbitrator in *US – FSC (Article 22.6 – US)* considered that "the United States' approach had demonstrable flaws as it sought to apply it" in that dispute. The arbitrator there noted that:

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[79] *US – FSC (Article 22.6 – US)*, footnote 94.

[80] *US – FSC (Article 22.6 – US)*, footnote 94.

[81] *See* U.S. Written Submission, paras. 58-67.

> [I]n this case, the estimation of the trade impact of the subsidy generated by the United States using the Armington model does not *in fact* employ EC-specific cross price elasticities nor does it use specific elasticities of US export demand (US Second submission, footnote 97). Furthermore, in response to a question from the Arbitrator relating to the use of the alternative methodology, the United States underlined the lack of reliable basis to use this approach. Its response was that "Although the United States *could not find the information necessary* to distinguish between the EC and the rest of the world, the Armington model runs, nevertheless, at least furnish the Arbitrator with an independent assessment of the trade impact of the US subsidy on the EC based on a different set of parameter estimates" (emphasis added) (Para. 30, US Response to Additional Questions by the Arbitrator). The United States also stated that it lacks information, which if available would have allowed them to calculate the trade effects with more precision. "With this additional information, the Armington model *may have possibly* provided better guidance than the Treasury model, because it *would have* incorporated more information (i.e. the degree of substitutability between US exports and EC goods) and *would have* avoided the need to determine how to calculate the EC share" (US Answers to Additional Questions from the Arbitrator, paragraph 30) (emphasis added). Thus, at most, the United States hypothesizes that there *could* be a more reliable and robust approach. It however has been itself unable to give us a reliable alternative basis to make a judgement that would definitively prevail over any based on the Treasury model.[82]

72. The concerns raised by the arbitrator in *US – FSC (Article 22.6 – US)* are not present here. The United States and Korea agree on the appropriate source of information concerning the elasticities to be used, *i.e.*, recent reports published by the USITC. While there was an issue in *US – FSC (Article 22.6 – US)* with the attempt by the United States to use "elasticity estimates … for substitution between imports into the United States and domestically produced US products" instead of "substitution elasticities between US exports and domestically produced products in foreign countries" in a dispute concerning an export subsidy, that is not a problem here.[83] The proper substitution elasticity required to employ the Armington-based partial equilibrium model proposed by the United States is before the Arbitrator.[84]

[82] *US – FSC (Article 22.6 – US)*, footnote 94.

[83] *US – FSC (Article 22.6 – US)*, footnote 96.

[84] *See* U.S. Written Submission, para. 110; USITC LRWs 201 Report, p. V-19 (Exhibit KOR-25) (The USITC found that, "[b]ased on available information, the elasticity of substitution between U.S.-produced LRWs and imported LRWs is likely to be in the range of 3 to 5.").

73. In *US – Offset Act (Byrd Amendment) (EC) (Article 22.6 – US)*, the arbitrator viewed the Armington model proposed by the United States quite favorably. The arbitrator there observed that the U.S. model was "slightly more sophisticated" than the model proposed by the requesting parties,[85] and "the model specification proposed by the United States is disaggregated and well specified."[86] The arbitrator indicated that "[o]ur preference would have been to employ a model endorsed by all parties, and we gave ample opportunity to the parties to try and find common ground on this question. Failing this, our preference would have been for the disaggregated model proposed by the United States."[87] The arbitrator viewed the U.S. model as having "a similar characteristic" to the arbitrator's own model, which was "based on the concept of a trade coefficient."[88]

74. Ultimately, as in *US – FSC (Article 22.6 – US)*, there was insufficient information to apply the U.S. model because the United States "only furnished the Arbitrator with a fully specified model for seven product categories."[89] Accordingly, the arbitrator "concluded that there is insufficient data to run that model with any degree of accuracy."[90]

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[85] *US – Offset Act (Byrd Amendment) (EC) (Article 22.6)*, para. 3.108; *US – Offset Act (Byrd Amendment) (Brazil) (Article 22.6)*, para. 3.108; *US – Offset Act (Byrd Amendment) (Canada) (Article 22.6)*, para. 3.106; *US – Offset Act (Byrd Amendment) (Chile) (Article 22.6)*, para. 3.104; *US – Offset Act (Byrd Amendment) (India) (Article 22.6)*, para. 3.108; *US – Offset Act (Byrd Amendment) (Japan) (Article 22.6)*, para. 3.108; *US – Offset Act (Byrd Amendment) (Korea) (Article 22.6)*, para. 3.108; *US – Offset Act (Byrd Amendment) (Mexico) (Article 22.6)*, para. 3.108.

[86] *US – Offset Act (Byrd Amendment) (EC) (Article 22.6)*, para. 3.114; *US – Offset Act (Byrd Amendment) (Brazil) (Article 22.6)*, para. 3.114; *US – Offset Act (Byrd Amendment) (Canada) (Article 22.6)*, para. 3.112; *US – Offset Act (Byrd Amendment) (Chile) (Article 22.6)*, para. 3.110; *US – Offset Act (Byrd Amendment) (India) (Article 22.6)*, para. 3.114; *US – Offset Act (Byrd Amendment) (Japan) (Article 22.6)*, para. 3.114; *US – Offset Act (Byrd Amendment) (Korea) (Article 22.6)*, para. 3.114; *US – Offset Act (Byrd Amendment) (Mexico) (Article 22.6)*, para. 3.114.

[87] *US – Offset Act (Byrd Amendment) (EC) (Article 22.6)*, para. 3.115; *US – Offset Act (Byrd Amendment) (Brazil) (Article 22.6)*, para. 3.115; *US – Offset Act (Byrd Amendment) (Canada) (Article 22.6)*, para. 3.13; *US – Offset Act (Byrd Amendment) (Chile) (Article 22.6)*, para. 3.111; *US – Offset Act (Byrd Amendment) (India) (Article 22.6)*, para. 3.115; *US – Offset Act (Byrd Amendment) (Japan) (Article 22.6)*, para. 3.115; *US – Offset Act (Byrd Amendment) (Korea) (Article 22.6)*, para. 3.115; *US – Offset Act (Byrd Amendment) (Mexico) (Article 22.6)*, para. 3.115 (emphasis added).

[88] *US – Offset Act (Byrd Amendment) (EC) (Article 22.6)*, paras. 3.131-3.132; *US – Offset Act (Byrd Amendment) (Brazil) (Article 22.6)*, paras. 3.131-3.132; *US – Offset Act (Byrd Amendment) (Canada) (Article 22.6)*, para. 3.129; *US – Offset Act (Byrd Amendment) (Chile) (Article 22.6)*, para. 3.127-3.128; *US – Offset Act (Byrd Amendment) (India) (Article 22.6)*, para. 3.131-3.132; *US – Offset Act (Byrd Amendment) (Japan) (Article 22.6)*, para. 3.131-3.132; *US – Offset Act (Byrd Amendment) (Korea) (Article 22.6)*, para. 3.131-3.132; *US – Offset Act (Byrd Amendment) (Mexico) (Article 22.6)*, para. 3.131-3.132.

[89] *US – Offset Act (Byrd Amendment) (EC) (Article 22.6)*, para. 3.132; *US – Offset Act (Byrd Amendment) (Brazil) (Article 22.6)*, para. 3.132; *US – Offset Act (Byrd Amendment) (Canada) (Article 22.6)*, para. 3.130; *US – Offset Act (Byrd Amendment) (Chile) (Article 22.6)*, para. 3.128; *US – Offset Act (Byrd Amendment) (India) (Article 22.6)*, para. 7.132; *US – Offset Act (Byrd Amendment) (Japan) (Article 22.6)*, para. 3.132; *US – Offset Act (Byrd Amendment) (Korea) (Article 22.6)*, para. 3.132; *US – Offset Act (Byrd Amendment) (Mexico) (Article 22.6)*, para. 3.132.

[90] *US – Offset Act (Byrd Amendment) (EC) (Article 22.6)*, para. 3.114; *US – Offset Act (Byrd Amendment) (Brazil) (Article 22.6)*, para. 3.114; *US – Offset Act (Byrd Amendment) (Canada) (Article 22.6)*, para. 3.112; *US – Offset Act*

75. In sum, the reasons why the arbitrators in *US – FSC (Article 22.6 – US)* and *US – Offset Act (Byrd Amendment) (EC) (Article 22.6 – US)* declined to use an Armington-based model proposed by the United States are not present in this arbitration. The Armington-based partial equilibrium model proposed by the United States in this arbitration addresses demonstrated failings in Korea's proposed economic model, and the Arbitrator has before it all of the information needed to apply the U.S. model to determine the level of nullification or impairment.

23. Korea criticizes the use of the Armington model in its written submission, listing several problems in paragraphs 50-58, citing the work by Brown (1987) and Lloyd and Zhang (2006).

a. To the United States: Please respond to these criticisms, drawing on arguments or results from the relevant trade literature.

Response:

76. Korea's criticism of the "Armington Model"[91] is unfounded and disconnected from the issues before the Arbitrator.

77. As an initial matter, the United States recalls that *A Practical Guide to Trade Policy Analysis*, provided to the Arbitrator by Korea, explains that "most simulation models use the 'Armington assumption' whereby varieties of goods are differentiated by country of origin (Armington, 1969)."[92] Lloyd and Zhang, in their paper, also provided to the Arbitrator by Korea, explain that "[m]ulti-country computable general equilibrium (CGE) models used to analyse tariff and trade policy changes typically incorporate the Armington structure which differentiates commodities by their country of origin (national product differentiation), and assumes them to be imperfect substitutes for each other."[93] Indeed, "the great majority of CGE models with international trade are Armington models. For example, the MONASH Model and the models used by the Centre for International Economics (CIE) in Australia, and the Global Trade Analysis Project (GTAP) model used widely around the world, are all Armington models. In fact, Armington models dominate CGE analyses of trade policy issues made for many governments and international organisations such as the World Bank, the International Monetary Fund and the World Trade Organisation."[94] It is clear from these sources, which Korea has provided to the Arbitrator, that Armington-based economic models are generally accepted and widely used in economic analysis.

(Byrd Amendment) (Chile) (Article 22.6), para. 3.110; *US – Offset Act (Byrd Amendment) (India) (Article 22.6)*, para. 3.114; *US – Offset Act (Byrd Amendment) (Japan) (Article 22.6)*, para. 3.114; *US – Offset Act (Byrd Amendment) (Korea) (Article 22.6)*, para. 3.114; *US – Offset Act (Byrd Amendment) (Mexico) (Article 22.6)*, para. 3.114.

[91] Korea's Written Submission, para. 50.

[92] WTO & UN (2012), *A Practical Guide to Trade Policy Analysis*, p. 144 (Exhibit KOR-14) (emphasis added).

[93] P.J. Lloyd and X.G. Zhang, "The Armington Model," Staff Working Paper, Australian Government Productivity Commission (January 2006) ("Lloyd and Zhang (2006)"), p. viii (Exhibit KOR-34) (emphasis added).

[94] Lloyd and Zhang (2006), p. ix (Exhibit KOR-34) (emphasis added).

78. Korea criticizes the "Armington Model," asserting that it "relies on several extreme assumptions."[95] Korea's criticism is inapposite. The Armington-based partial equilibrium model that the United States proposes the Arbitrator utilize, as described by Hallren and Riker in their paper, which also was provided to the Arbitrator by Korea,[96] is a simple imperfect substitute model. That is, the United States proposes to use a partial equilibrium model that incorporates the elasticity of substitution, which is also known as the "Armington elasticity." Hallren and Riker explain that, in their model, "[a]ll three varieties [of products] are imperfect substitutes and consumers substitute between … each variety at a constant rate (σ). This term is called the 'Armington elasticity.'"[97] *A Practical Guide to Trade Policy Analysis* explains that "[t]he choice between domestic and imported intermediate inputs depends on the prices of the goods and the Armington elasticity, which is a measure of the substitutability between domestic and imported products."[98] Lloyd and Zhang likewise explain that "Armington elasticities specify the degrees of substitution in demand between similar products produced in different countries. They are critical parameters which, along with model structure, data and other parameters, determine the results of policy experiments."[99]

79. In the Hallren and Riker model, "the economic outcomes that [Hallren and Riker] analyze [using the Armington-based partial equilibrium model described in their paper] are import volumes, domestic shipments, and prices in a specific industry and the policies are tariffs and quotas on industry imports."[100] Korea could not have provided to the Arbitrator a more appropriate tool to use in this arbitration for economic analysis.

80. The Hallren and Riker model does not rely on any "extreme assumptions."[101] Rather, it is the standard approach in economics today for both partial equilibrium and CGE analysis, when dealing with imperfect substitutes. As Lloyd and Zhang explain, "[t]he introduction of Armington substitution in the demand for commodities is a departure from the assumption of perfect substitution that underlies traditional trade models. This departure changes fundamentally the properties of a trade model and the well known theoretical results that are based on variants of the Hekscher-Ohlin model."[102] This "departure" is a necessary attribute of the Armington-based partial equilibrium model in this situation, not a drawback. As demonstrated in the U.S. written submission, LRWs are imperfect substitutes,[103] so an economic model that assumes perfect substitution, like the static partial equilibrium model Korea has

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[95] Korea's Written Submission, para. 51.

[96] *See* R. Hallren and D. Riker, "An Introduction to Partial Equilibrium Modeling of Trade Policy," Economic Working Paper Series (Working Paper 2017-07-B), U.S. International Trade Commission (July 2017) ("Hallren and Riker (2017)") (Exhibit KOR-15).

[97] Hallren and Riker (2017), p. 4 (Exhibit KOR-15) (emphasis added).

[98] WTO & UN (2012), *A Practical Guide to Trade Policy Analysis*, p. 189 (Exhibit KOR-14) (emphasis added).

[99] Lloyd and Zhang (2006), p. v (Exhibit KOR-34) (emphasis added).

[100] Hallren and Riker (2017), p. 3.

[101] Korea's Written Submission, para. 51.

[102] Lloyd and Zhang (2006), p. x (Exhibit KOR-34).

[103] *See* U.S. Written Submission, paras. 60-61.

proposed, cannot be used to determine accurately the level of nullification or impairment in this arbitration.

81. Korea notes that Lloyd and Zhang "emphasize three reasons" that "the Armington structure … fundamentally changes the properties of a trade model…."[104] First, "there is no comparative advantage in an Armington model".[105] However, Korea has not demonstrated that Korea has a comparative advantage over the United States in the production of LRWs, so this is not a relevant issue.

82. Second, in the Armington Model, "the number of varieties of a product is fixed".[106] That is not an issue in the Hallren and Riker Armington-based partial equilibrium model, which takes into account different varieties of the product by incorporating the elasticity of substitution.

83. Third, "and possibly most significantly, the small country assumption cannot be made in an Armington model."[107] Korea is not a "small country" producer of LRWs. Korea can affect price. Indeed, in discussing the issue of holiday pricing in its final injury determination in the original investigation, the USITC noted that, "[a]lthough all responding producers and importers engaged in discounting, responding purchasers reported that LG and Samsung offered larger discounts than GE or Whirlpool."[108] The USITC also found that "pervasive subject import underselling depressed domestic like product prices to a significant degree."[109] Thus, in the context of the washers antidumping investigation, evidence suggests that LG and Samsung took the lead in setting export prices that differed significantly among different time periods, such as the holiday promotion periods to which Korea drew the original panel's attention.

84. The concerns raised about the Armington model in the Brown paper, to which Korea refers,[110] similarly are inapposite. Brown discusses the impact of the Armington assumption in computable general equilibrium models and the implications for commercial policy analysis.[111] The issues Brown raises are not a concern with the Hallren and Riker Armington-based partial equilibrium model. For example, Brown observes that the models examined "sometimes yield

[104] Korea's Written Submission, para. 53.

[105] Korea's Written Submission, para. 53.

[106] Korea's Written Submission, para. 53.

[107] Korea's Written Submission, para. 53.

[108] *See Certain Large Residential Washers from Korea and Mexico*, Inv. Nos. 701-TA-488 and 731-TA-1199-1200 (Final), USITC Pub. 4378 (Feb. 2013), p. 22 (available on the Internet at https://www.usitc.gov/publications/701_731/pub4378.pdf).

[109] *See Certain Large Residential Washers from Korea and Mexico*, Inv. Nos. 701-TA-488 and 731-TA-1199-1200 (Final), USITC Pub. 4378 (Feb. 2013), pp. 36, 44-46 (available on the Internet at https://www.usitc.gov/publications/701_731/pub4378.pdf).

[110] Korea's Written Submission, para. 55.

[111] *See* Drusilla K. Brown, "Tariffs, the Terms of Trade, and National Product Differentiation," Journal of Policy Modeling 9(3):503-526 (1987) ("Brown (1987)"), p. 503 (Exhibit KOR-35).

very surprising results."[112] Here, though, it is Korea's proposed model that yields surprising results. The notion that the value of exports of LRWs from Korea to the United States would (that it even could) increase by $711 million per year if the WTO-inconsistent aspects of the U.S. antidumping and countervailing duty measures were removed after the expiration of the RPT, when, according to Korea, LG is the only producer shipping LRWs from Korea to the United States[113] and LG currently faces zero antidumping or countervailing duty rates,[114] simply is not credible. Indeed, Korea points to the USITC's observation that "[t]he responding Korean producers' increased exports to the United States after 2015 coincided with a decline in the antidumping and countervailing duty rates applicable to LG through successive administrative reviews to 0.00 and 0.01 percent, respectively."[115] Yet, in 2016, the year after LG was subject to a substantially lower antidumping duty cash deposit requirement – down from 13.02 percent to just over 1 percent[116] – the value of exports of LRWs from Korea to the United States increased by only $45 million.[117] That is not anywhere close to $711 million, but it is much closer to the estimate of nullification or impairment yielded by the Armington-based partial equilibrium model proposed by the United States.[118]

85. Korea nevertheless concludes by asserting that "[t]he standard static partial equilibrium model offers more reliable estimation for bilateral trade relationship that should be the basis for suspension of concession with more commonsensical assumptions."[119] The Hallren and Riker model is, of course, also a static partial equilibrium model, and it was designed specifically to analyze the economic outcomes on import volumes, domestic shipments, and prices in a specific industry resulting from a change in the tariff rate on a product.[120] Again, Korea has provided to the Arbitrator the best tool to use for economic analysis in this arbitration – the Hallren and Riker Armington model – but now Korea argues that the Arbitrator should not use it.

b. To Korea: The overview of market shares provided in Appendix C of the Methodology Paper of Korea shows that a small number of firms supply the entire LRW market. Please explain why a partial equilibrium model based on perfect competition would be a better way to model the LRW market in

[112] Brown (1987), p. 524 (Exhibit KOR-35).

[113] *See* Korea's Methodology Paper, para. 44. Korea's Methodology Paper reports that, after the imposition of the antidumping and countervailing duty measures, Samsung discontinued exports of LRWs from Korea to the U.S. market.

[114] *See* Korea's Methodology Paper, paras. 42-43.

[115] Korea's Written Submission, para. 38.

[116] *See* Korea's Methodology Paper, para. 43. LG was never subject to the countervailing duty measures.

[117] *See* Correct U.S. Import Value of LRWs, Queried by the United States Using USITC DataWeb, by Country and by HTS Code ("Correct U.S. Import Value of LRWs") (Exhibit USA-9).

[118] *See* U.S. Written Submission, paras. 125-126.

[119] Korea's Written Submission, para. 58.

[120] Hallren and Riker (2017), p. 3.

the United States than the Armington specification, where firms have some market power.

Response:

86. This question is directed to Korea.

24. To the United States: The United States argues that "[u]nder correct economic theory, the effect of the reduction or removal of the WTO-inconsistent U.S. antidumping and countervailing duties applied to LRWs from Korea depends on the substitutability between (1) the domestic like product (LRWs made in the United States), (2) subject imports (LRWs imported from Korea that are subject to the anti-dumping and countervailing duties), and (3) non-subject imports (LRWs imported from countries other than Korea)." Since the same elasticity of substitution applies to the United States and third countries, does the United States agree that treating the United States and third countries as separate regions or treating them as one region leads to the same outcome, given a reduction of anti-dumping duties for Korea in the United States LRW market?

Response:

87. Even though the U.S. antidumping and countervailing duty measures apply only to imports of LRWs from Korea, the model needs to take into account the role of non-subject imports in the U.S. market. Competition from non-subject imports affects the impact of the tariff on subject imports. A model that omits this is incomplete.

88. That being said, the United States agrees that, in this situation, treating the United States and third countries as separate regions or treating them as one combined region leads to the same outcome for Korea, given a reduction of antidumping and countervailing duties for Korea in the U.S. market for LRWs. This is because the elasticity of substitution and the elasticity of supply are assumed to be the same across all suppliers and regions. This would not hold if producers have different supply elasticities.

89. Importantly, the omission of non-subject imports from the model entirely, rather than combining non-subject imports with the domestic product, would have a significant effect on the results. Specifically, it would lead to an overestimation of the U.S. market share of subject imports and would incorrectly cause the reduction of duties on Korean imports to have an overstated economic impact.

25. To the United States: Korea states that "the USITC … found that domestic and imported LRWs were in fact substitutable, and made an affirmative injury determination on that basis."

a. Could the United States please provide a detailed explanation of the USITC's findings on the substitutability of domestic and imported LRWs?

Response:

90. Korea argues that:

> [T]he United States references statements made by LG and Samsung representatives to support its argument that there is no perfect substitution between imported and domestic LRWs. However, it fails to mention that these statements were ultimately rejected by the USITC, which found that domestic and imported LRWs were in fact substitutable, and made an affirmative injury determination on that basis. The United States should not be permitted to reject the Korean respondents' claims that there is not sufficient substitutability in the U.S. market to justify an affirmative injury finding, and then argue that the level of substitutability is not high enough to justify the use of a well-established simulation model that has been widely used in the DSB system to calculate the level of nullification and impairment.[121]

Korea appears to misunderstand the U.S. argument, or the USITC determination, or both.

91. The USITC, in a global safeguard investigation conducted in 2017, explained that "[t]he substitution elasticity measures the responsiveness of the relative U.S. consumption levels of the subject imports and the domestic like products to changes in their relative prices. This reflects how easily purchasers switch from the U.S. product to the subject products (or vice versa) when prices change."[122] The USITC reported that "[c]onsumers view imports and the domestic product as imperfect substitutes," and further found that "there is a moderately high degree of substitutability between domestically produced LRWs and imported LRWs."[123] To be clear, a perfect substitute is "[a] good that is regarded by its demanders as identical to another good, so that the elasticity of substitution between them is infinite."[124] An example of a good that is perfectly substitutable is gasoline. As the price of one brand of gasoline rises, consumers will substitute another brand of gasoline at a ratio of 1:1. Imperfect substitutes have a lesser level of substitutability.

92. In finding that U.S.-produced LRWs and imported LRWs are "imperfect substitutes,"[125] the USITC did not "reject"[126] the argument of Korean producers of LRWs. The USITC was, in

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[121] Korea's Written Submission, para. 48.

[122] USITC LRWs 201 Report, p. V-19, footnote 35 (Exhibit KOR-25).

[123] USITC LRWs 201 Report, pp. 81 and V-9 (Exhibit KOR-25) (emphasis added). The USITC made similar findings concerning the substitutability of U.S.-produced LRWs and imported LRWs in other investigations. *See, e.g.*, Large Residential Washers from China, Investigation No. 731-TA-1306 (Final), USITC Publication 4666 (January 2017), pp. 19 and II-24-II-25 (Exhibit KOR-18); *Certain Large Residential Washers from Korea and Mexico*, Inv. Nos. 701-TA-488 and 731-TA-1199-1200 (Final), USITC Pub. 4378 (Feb. 2013), pp. 16, 23-26, and II-22 (available on the Internet at https://www.usitc.gov/publications/701_731/pub4378.pdf)

[124] *See Deardorff's Glossary of International Economics*, http://www-personal.umich.edu/~alandear/glossary/p.html.

[125] USITC LRWs 201 Report, pp. 81 and V-9 (Exhibit KOR-25).

[126] Korea's Written Submission, para. 48.

large part, agreeing with the arguments of the Korean producers.[127] For example, in a December 2016 joint submission made to the USITC by Samsung and LG in the antidumping and countervailing duty investigation of LRWs from China, the Korean producers argued that:

> This is not a commodity product case. All LRWs sold in the U.S. market are sold under brand names, and brand perception is but one of several important non-price factors which drive purchasing decisions. The Commission must therefore approach its analysis of highly differentiated, branded consumer products differently than its analysis of commodity intermediate goods like steel, or pipe, or chemicals.[128]

In other words, the Korean producers were arguing that U.S.-produced LRWs and imported LRWs are "imperfect substitutes," which is what the USITC ultimately found.

93. Later in that same submission, Samsung and LG recommended a range for the elasticity of substitution to be used by the USITC. Specifically, Samsung and LG recommended that the USITC use an elasticity of substitution in the range of 1 to 3.[129] Ultimately, the USITC found that, "[b]ased on available information, the elasticity of substitution between U.S.-produced LRWs and imported LRWs is likely to be in the range of 3 to 5."[130] The range used by the USITC overlapped with the range for which the Korean producers argued.

94. The USITC arrived at its conclusions concerning the substitutability of domestic and imported LRWs on the basis of the evidence on the record of the proceeding, which included, *inter alia*, responses from purchasers, producers, and importers to questionnaires concerning the LRWs market, as well as arguments made by interested parties. The USITC discusses the information it examined and its analysis of that information in its report. The United States refers the Arbitrator to the discussion of substitutability in the USITC's report on the 2017 global safeguards investigation of LRWs, specifically pages 27-32, 81, and V-9 to V-19.

b. Please explain how these USITC's findings are consistent with the proposal in this Arbitration to use an Armington model (with an elasticity of

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[127] *See* Large Residential Washers from the Republic of Korea and Mexico; Pre-Hearing Brief of LG Electronics, Inc. and LG Electronics USA, Inc. (December 5, 2012) ("LG 2012 Original LRWs from Korea USITC Pre-Hearing Brief"), pp. 19-28 and Exhibit 9 (Exhibit USA-7); In the Matter of Large Residential Washers from China Investigation No. 731-TA-1306 (Final), Pre-Hearing Brief of Samsung and LG (December 1, 2016) ("Samsung and LG 2016 LRWs from China USITC Pre-Hearing Brief"), pp. 17-23 and footnote 39 (discussing the appropriate elasticity of substitution) (Exhibit USA-8).

[128] Samsung and LG 2016 LRWs from China USITC Pre-Hearing Brief, p. 17 (Exhibit USA-8). *See also id.*, pp. 17-23 and footnote 39 (discussing the appropriate elasticity of substitution).

[129] *See* Samsung and LG 2016 LRWs from China USITC Pre-Hearing Brief, pp. 22-23, footnote 39 (Exhibit USA-8).

[130] USITC LRWs 201 Report, p. V-19 (Exhibit KOR-25).

substitution of 4 rather than one of a larger value) instead of Korea's proposed partial equilibrium model.

Response:

95. The USITC's findings concerning the substitutability of U.S.-produced LRWs and imported LRWs are fully consistent with the U.S. proposal in this arbitration to use an Armington-based partial equilibrium model (with an elasticity of substitution of 4 rather than one of a larger value) instead of Korea's proposed partial equilibrium model.

96. Korea's proposed partial equilibrium model assumes that U.S.-produced LRWs and imported LRWs are perfect substitutes.[131] As explained in response to the preceding sub-question, Korean producers argued before the USITC that U.S.-produced LRWs and imported LRWs are imperfect substitutes.[132]

97. Additionally, rather than arguing that the USITC should use a larger value for the elasticity of substitution, the Korean producers of LRWs "recommend[ed] that the elasticity of substitution be reduced to a range of 1 to 3."[133]

98. Ultimately, the USITC found that, "[b]ased on available information, the elasticity of substitution between U.S.-produced LRWs and imported LRWs is likely to be in the range of 3 to 5."[134] The USITC then "used an industry-specific partial equilibrium (PE) model to estimate changes in prices and quantities of imported and domestically produced large residential washers, changes in the revenues and operating income of U.S. producers from their domestic shipments, and changes in U.S. tariff revenues that would result in different remedy scenarios" that incorporated the elasticity of substitution.[135] The partial equilibrium model used by the USITC is very similar to the model that the United States proposes the Arbitrator use here. However, while the USITC's "model simulations isolate the effect of the tariff-rate quotas (TRQs), assuming that other supply and demand fundamentals do not change," the model that the United States proposes the Arbitrator use in this arbitration simulates the effects of a tariff reduction, which is the appropriate counterfactual in this proceeding. Both partial equilibrium models incorporate the elasticity of substitution, or "Armington elasticity."[136]

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[131] *See* U.S. Written Submission, para. 60.

[132] *See* LG 2012 Original LRWs from Korea USITC Pre-Hearing Brief, pp. 19-28 and Exhibit 9 (Exhibit USA-7); Samsung and LG 2016 LRWs from China USITC Pre-Hearing Brief, pp. 17-23 and footnote 39 (discussing the appropriate elasticity of substitution) (Exhibit USA-8).

[133] Samsung and LG 2016 LRWs from China USITC Pre-Hearing Brief, pp. 22-23, footnote 39 (Exhibit USA-8) (emphasis added).

[134] USITC LRWs 201 Report, p. V-19 (Exhibit KOR-25).

[135] USITC LRWs 201 Report, p. 81 (Exhibit KOR-25).

[136] Hallren and Riker 2017, p. 4 (Exhibit KOR-15) ("All three varieties are imperfect substitutes and consumers substitute between the each variety at a constant rate (σ). This term is called the 'Armington elasticity.'" (emphasis added)); WTO & UN (2012), *A Practical Guide to Trade Policy Analysis*, p. 189 (Exhibit KOR-14) ("The choice between domestic and imported intermediate inputs depends on the prices of the goods and the Armington elasticity,

26. To Korea: Korea's proposed partial equilibrium model could be considered one end of a continuum (in which the elasticity of substitution is infinite) with zero substitutability (in which the elasticity of substitution is zero) being the other end and with most goods falling in between (elasticity of substitution between 0 and infinity). Would an Armington specification provide greater flexibility, given that the value of the elasticity of substitution is not prejudged but determined based on estimates drawn from the economic literature? Please explain.

Response:

99. This question is directed to Korea.

27. To Korea: The Arbitrator understands that Korea defends the use of its proposed partial equilibrium model, which assumes that LRWs are perfectly substitutable products. At the same time Korea criticizes the Armington model: "[t]he Armington model relies on several extreme assumptions. For example, the Armington model assumes that, in any one country, each industry produces only one product and this this product is distinctly differentiated from the product of the same industry in any other country."

a. Does a partial equilibrium model require the assumption of homogeneous products?

b. Is there evidence to support the claim that all LRWs sold in the United States are homogeneous products that are considered perfect substitutes by consumers?

c. If the assumption of the production of identical products from one country is criticized, should the assumption of identical products produced by all countries not be criticized as well? Please explain.

Response:

100. This question is directed to Korea.

28. To both parties: Under the assumption that the market for LRWs in the United States contains homogeneous goods with perfect substitutability, both parties seem to agree that the following formula could be used to calculate the annual level of nullification or impairment:

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which is a measure of the substitutability between domestic and imported products." (emphasis added)); Lloyd and Zhang (2006), p. v (Exhibit KOR-34) ("Armington elasticities specify the degrees of substitution in demand between similar products produced in different countries. They are critical parameters which, along with model structure, data and other parameters, determine the results of policy experiments." (emphasis added)).

Level of nullification or impairment = Price change x Import share Korea x (Price elasticity of demand + Price elasticity of supply) x Total import value of washing machines to the US

a. How does this formula compare with the formula used by the United States in *India – Agricultural Products* (Exhibit KOR-29), and, in particular, equations (3)-(6) in paragraphs 30-34 of that Exhibit?

<u>Response:</u>

101. The formula presented in the question cannot be used to measure the level of nullification or impairment in this dispute. The formula is premised on the assumptions that the market for LRWs in the United States contains homogeneous goods with perfect substitutability, that no countries other than Korea export LRWs to the United States, and that the United States is a small country in the global market of LRWs. All of these assumptions are contrary to the evidence before the Arbitrator.[137] Any economic model that is premised on these incorrect assumptions cannot be used to measure accurately the level of nullification or impairment in this dispute.

102. The formula presented in the question is not equivalent to the formula used by the United States in *India – Agricultural Products*. In fact, the formula proposed by Korea is incorrectly specified or simply is not founded on any theoretical basis. The formula that the United States proposed in *India – Agricultural Products*, on the other hand, is based on the model that had been developed by Calvin and Krissoff in 1998, which is well documented in the academic literature and formulates a theoretically grounded basis for estimating trade impacts in a price-wedge framework.[138] The Calvin and Krissoff model is based on a two country model, with perfect substitution of goods. As derived by Calvin and Krissoff, the trade effects (change in imports) due to removal of the measure (import ban) is equivalent to the sum of the change in consumption and the change in production due to the price change that occurs in the market following the removal of the measure (import ban). More specifically, it may be calculated as follows:

> The change in consumption can be calculated as the product of: (a) the price elasticity of demand, (b) the level of consumption in the baseline period, and (c) the percentage change in prices from removing the price wedge;

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[137] *See*, *e.g.*, U.S. Written Submission, paras. 59-61. The formula presented in the question requires that the United States is treated as a small country in the global market of LRWs, with little effect on world prices. However, this assumption is in conflict with actual trade data as U.S. imports under HTS subheading 845020 in 2011-2017 have averaged around 43 percent of combined global imports (Source: Global Trade Atlas). Given this substantial share of total imports, it is highly unreasonable to assume that the United States is a small country with little impact on global prices of LRWs.

[138] *See* Linda Calvin and Barry Krisoff, "Technical Barriers to Trade: A Case Study of Phytosanitary Barriers and U.S.-Japanese Apple Trade," Journal of Agricultural and Resource Economics, 23(2):351-366 (1998), pp. 356-360 (Exhibit USA-18).

> The change in domestic supply can be calculated as the product of: (a) the price elasticity of supply, (b) the level of production in the baseline period, and (c) the percentage change in prices from removing the price wedge.

103. This formula is very different from the formula offered by Korea. Korea's proposed formula (1) includes import market share (not included in *India – Agricultural Products*), and (2) uses total import value (*India – Agricultural Products* uses the level of domestic production). The underlying economic theory (*i.e.*, the basis for the formula used in *India – Agricultural Products*) does not support or derive or lead to the formula proposed by Korea or the formula presented in the question.

104. The more fundamental problem with Korea's comparison of the formula it proposes in this dispute to the formula that the United States proposed in *India – Agricultural Products* is that Korea fails to recognize that the formula it proposes here rests on assumptions about the LRWs market that are inappropriate in this dispute, while the formula the United States proposed in *India – Agricultural Products* rested on assumptions about the poultry market in India that were appropriate in that dispute.

105. The formula that the United States used in *India – Agricultural Products* was the correct model to be used in that dispute because that model quantifies the change in imports that would occur in India's poultry market in the absence of the measure (import ban). Specifically, the equations are used to quantify the changes in consumption and production in India due to the removal of the import ban.

106. The formula used in *India – Agricultural Products* was premised on the assumption that the Indian product and the U.S. product, chicken leg quarters, were perfectly substitutable. That was an appropriate assumption in that dispute. Chicken leg quarters are a homogenous, commodity product. India did not challenge that assumption. LRWs, on the other hand, are not a homogenous product. Again, it was the Korean producers that argued to the USITC that "[t]his is not a commodity product case" and "[t]he Commission must therefore approach its analysis of highly differentiated, branded consumer products differently than its analysis of commodity intermediate goods like steel, or pipe, or chemicals."[139] And the USITC agreed with the Korean producers, finding that "there is a moderately high degree of substitutability between domestically produced LRWs and imported LRWs."[140] Yet now, Korea asks the Arbitrator to approach its analysis of highly differentiated, branded consumer products in precisely the same way that it would approach the analysis of commodity intermediate goods like steel, or pipe, or chemicals, or chicken leg quarters. Doing what Korea asks would prevent the Arbitrator from accurately determining the level of nullification or impairment in this dispute.

107. The formula in *India – Agricultural Products* also was premised on the assumption that "it is unlikely that other major chicken exporters would compete with the United States in the

[139] Samsung and LG 2016 LRWs from China USITC Pre-Hearing Brief, p. 17 (Exhibit USA-8). *See also id.*, pp. 17-23 and footnote 39 (discussing the appropriate elasticity of substitution).

[140] USITC LRWs 201 Report, pp. 27, 81, V-9 (Exhibit KOR-25).

Indian processed poultry market if the import ban were removed."[141] The United States explained the reasons for making that assumption in that dispute, including, for example, that "other major suppliers have not exported to India despite not being subject to the import ban, and, in any event, their products are not price-competitive with U.S. CLQs."[142] Korea has made no attempt whatsoever to explain why the Arbitrator should assume that Korea alone would increase shipments of LRWs to the United States if the WTO-inconsistent aspects of the U.S. antidumping and countervailing duty measures on LRWs from Korea were removed after the expiration of the RPT. Contrary to the facts in *India – Agricultural Products*, evidence here shows that other major suppliers of LRWs export to the United States,[143] and LRWs from countries other than Korea – including LRWs produced by Samsung and LG outside of Korea – are price competitive with LRWs from Korea. Therefore, the substitution effects that would occur following a change in the antidumping and countervailing duty rates must be taken into account in determining the level of nullification or impairment. Ignoring these substitution effects would grossly overstate the level of nullification or impairment.

108. For these reasons, the differences in the factual circumstances lead to the conclusion that the model that the United States proposed in *India – Agricultural Products* was <u>appropriate in that dispute</u> but would be <u>inappropriate in this dispute</u>.

b. Do both parties agree that, under the assumption of perfect substitutability (in the "partial equilibrium" framework) and infinite export supply elasticity, the appropriate formula is as follows?

Level of nullification or impairment = Percentage change price x Price elasticity of demand x Value of demand for washing machines in the United States – Percentage change price x Price elasticity of supply x (Value of domestic supply + Value of imports by third countries)

<u>Response:</u>

109. The formula presented in the question is not the correct formula to use under the assumption of perfect substitutability (in the "partial equilibrium" framework) and infinite export supply elasticity. The appropriate formula under those assumptions is:

> Level of nullification or impairment (change in imports) = Percentage change price x Price elasticity of demand x Value of demand for washing machines in the United States – Percentage change price x Price elasticity of supply x Value of domestic supply

[141] *India – Agricultural Products*, U.S. Responses to Arbitrator Questions, para. 7 (Exhibit KOR-33).

[142] *See India – Agricultural Products*, U.S. Response to Arbitrator Questions, paras. 7-11 (Exhibit KOR-33).

[143] *See*, *e.g.*, Exhibit USA-9.

110. It is incorrect to apply price elasticity of supply to the value of imports by third countries to calculate level of nullification or impairment. The price elasticity of supply is a measure of responsiveness of domestic (U.S.) production to a change in price. That elasticity does not measure the sensitivity of imports to a change in price.

111. It would be correct to apply an Armington model and incorporate the elasticity of substitution. It would be incorrect to use the formula presented in the question in this dispute because, as the United States has demonstrated, LRWs are imperfect substitutes. Also, third countries are not modeled based off of a bilateral trade model, thus making the formula presented in the question inappropriate. Again, the formula does not follow from the assumptions for the LRWs market. Ultimately, the formula presented in the question is not representative of the real world.

29. To both parties: Is there a way that the models proposed by the parties could take into account the existence of LRW plants of Korean firms in the United States and their capacity to supply LRWs to the United States market, in lieu of exporting from Korea. If so, please describe in detail how these modifications can be made. If not, would the parties be able to identify economic models/methods that could be employed for this purpose and considered in this arbitration?

Response:

112. The Armington-based partial equilibrium model proposed by the United States appropriately takes into account LRWs produced in the United States by the U.S. subsidiaries of Samsung and LG as U.S. LRWs that make up part of the market share of domestic producers. However, Samsung only began producing LRWs in the United States in January 2018, and LG has not yet commenced production of LRWs in the United States. As full-year 2017 is the appropriate baseline for determining the level of nullification or impairment, due to data availability, the calculations of the level of nullification or impairment do not reflect the production of LRWs by the U.S. subsidiaries of Samsung and LG.

30. To Korea: Korea cites *EC – Hormones (US) (Article 22.6 – EC)* as a justification for the use of 2011 data relating Korea's share of United States' imports of LRWs. In that arbitration, however, the arbitrator appears, in effect, to use United States' exports in a period prior to the WTO-inconsistent measure as a proxy for what United States' exports might have been in the absence of the WTO-inconsistent measures, subject to certain adjustments. In this proceeding, on the other hand, Korea appears to be starting with 2011 data and then applying that to a formula to account for the effects of the measure. Please comment.

Response:

113. This question is directed to Korea.

31. To Korea: Korea points out that the level of suspension should be based on bringing the measure into conformity at the end of the RPT. Applying an economic model, be it a partial equilibrium, an Armington, or any other model, involves a

counterfactual experiment on a baseline situation. Does Korea agree that if the applied economic model is correct, this would involve using a baseline equal to the actual situation at the end of the RPT and the counterfactual experiment that eliminates the inconsistent measures?

Response:

114. This question is directed to Korea.

32. To the United States: In using the Armington model to calculate the level of nullification or impairment, the United States conducts a separate counterfactual analysis of the anti-dumping and countervailing duties instead of undertaking a single simulation in which the two duties are added together. The United States gives, as the reason for this, its expectation of bringing the countervailing duty measure on LRWs from Korea into conformity with the United States' WTO obligations later this year. Notwithstanding this expectation, please calculate the level of nullification or impairment using the Armington model with the two duties added together.

Response:

115. The results of calculating the level of nullification or impairment using an Armington-based partial equilibrium model with the antidumping and countervailing duties combined is shown below. Exhibit USA-19 **(BCI)** presents tables showing (1) all of the data inputs used in the calculations, and (2) the price and quantity changes for the three varieties of product (domestic, subject, and non-subject) after the simulated reduction of the antidumping duty and the removal of the countervailing duty, which would be obtained by simultaneously solving the Armington system of equations. In addition, the United States also is providing to the Arbitrator as Exhibit USA-20 **(BCI)** a Microsoft Excel version of the model in which the calculations are performed. The United States notes that the results obtained are not the same as simply summing the results when the model is applied separately to the antidumping and countervailing duty rates. This result is expected as the model is solved nonlinearly.

	60% of AHAM Total	**70% of AHAM Total**	**80% of AHAM Total**	**100% of AHAM Total**
Level of Nullification or Impairment:	[[***]]	[[***]]	[[***]]	[[***]]

4 PRODUCTS AT ISSUE

33. To the United States: The USDOC final determinations on imports of LRWs from Korea state "Products subject to this investigation are currently classifiable under subheading 8450.20.0090" of the HTSUS, and that "products subject to this investigation may also enter under HTSUS subheadings 8450.11.0040, 8450.11.0080,

8450.90.2000, and 8450.90.6000"; however, the parties disagree about whether these tariff lines should be included for the purpose of calculating the value of imports of "large residential washers and certain subassemblies thereof from Korea". Given that the United States' authorities are responsible for applying the anti-dumping and countervailing duties, and for collecting data on the value of imports, the Arbitrator requests the United States to provide data on the value of imports from Korea of the above tariff lines on which anti-dumping duties were collected every year from 2011 to 2017.

Response:

116. The United States is providing to the Arbitrator as Exhibit USA-21 **(BCI)** the requested data on the value of imports from Korea of the above tariff lines that were subject to the U.S. antidumping and countervailing duty measures on LRWs from Korea for each year from 2011 to 2017. The United States submits this data as business confidential information, as the data include company-specific import statistics. The United States offers several observations about this data.

117. First, the requested data were compiled by U.S. Customs and Border Protection ("USCBP") using an internal U.S. government system known as ACE. The ACE system operates on a fiscal year basis; the U.S. government fiscal year is October 1 to September 30. Other trade data that the parties have provided to the Arbitrator is presented on a calendar year basis.[144] Accordingly, there is not a direct correspondence between the two sets of data.

118. Second, the antidumping and countervailing duty measures at issue in this dispute apply only to LRWs from Korea. If the CBP data in Exhibit USA-21 **(BCI)** were used together with other data provided by the parties, which was queried using the USITC's DataWeb, that would not be an apples-to-apples comparison. The trade data for Korea would cover LRWs within the scope of the U.S. antidumping and countervailing duty measures, but the data for other countries would include washing machines other than LRWs as well.

119. Third, with that said, the United States notes that, in FY 2017, the total value of imports of LRWs from Korea that were covered by the U.S. antidumping and countervailing duty measures, as reflected in the USCBP data, was [[***]], and, in calendar year 2017, the total value of imports of LRWs from Korea, as reflected in data queried by the United States using the USITC's DataWeb, was $243,682,000.[145] These figures are quite close to each other, which suggests that the trade data provided by the United States is a reasonable proxy for trade data specifically confined to LRWs within the scope of the U.S. antidumping and countervailing duty measures.

120. The total value of imports of LRWs from Korea in calendar year 2017, as reflected in data queried by Korea using the USITC's DataWeb, on the other hand, is $303,596,000.[146] That

[144] *See* Exhibit KOR-8, Exhibit USA-9, and Exhibit USA-10.

[145] *See* Exhibit USA-9.

[146] *See* Exhibit USA-10.

figure is substantially higher than either the CBP data or the data queried by the United States. Using Korea's incorrect data would significantly overstate the level of nullification or impairment.

34. <u>To the United States</u>: Korea has stated that the difference between using 10-digit or 6-digit HTSUS subheadings for imports is insignificant, i.e. 2.1% in 2017. Does the United States agree?

<u>Response:</u>

121. In Exhibit USA-9, the United States provided to the Arbitrator data on the value of U.S. imports of LRWs from Korea for the period 2011-2017 using the correct 10-digit HTS subheadings. In Exhibit USA-10, the United States recreated Korea's original data query to show that the import data Korea submitted in Exhibit KOR-8 incorrectly includes all of the 6-digit HTS subheadings under 8450.11, 8450.20, and 8450.90, which necessarily overstates the value of imports of LRWs.[147]

122. Using 10-digit HTS subheadings, the value of imports from Korea in 2017 is $243,682,000.[148] Using 6-digit HTS subheadings, the value of imports from Korea in 2017 is $303,596,000.[149] The percentage difference between these two values is approximately 21.9 percent, not 2.1 percent.

123. In any event, the most accurate information available should be used to determine accurately the level of nullification or impairment. In its written submission, Korea indicates that it "does not oppose the use of the 10-digit subheadings as included in the scope of the anti-dumping duty order for the relevant years."[150] Accordingly, it appears that the parties are in agreement that the Arbitrator should use 10-digit HTS subheadings.

5 DATA

35. <u>To both parties</u>: Can the parties confirm that LG and Samsung are the only Korean exporters of LRW products to the United States as of the end of the RPT?

<u>Response:</u>

124. The United States is not aware of any Korean producers of LRWs other than Samsung and LG that were exporting LRWs to the United States as of the end of the RPT.

36. <u>To both parties</u>: According to the United States "LG has explained '[t]here is no significant excess capacity that could be shipped to the United States'" and "Samsung represented … it 'has virtually eliminated production capacity in Korea

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[147] *See* U.S. Written Submission, paras. 78-90.

[148] *See* Exhibit USA-9.

[149] *See* Exhibit USA-10.

[150] Korea's Written Submission, para. 61.

and Mexico'." What is the production capacity for LG, Samsung, and any other producers of LRWs in Korea?

Response:

125. Samsung, LG, and any other producers of LRWs in Korea would be best positioned to report their own production capacity in Korea. The United States anticipates that Korea would solicit this information from the Korean producers and provide it to the Arbitrator.

126. To the extent that Korean producers of LRWs have reported their production capacity to the USITC in the past in proceedings that are not within the scope of this dispute settlement proceeding, that information is business confidential information and, absent specific written authorization from the companies that provided the information, the USITC is precluded by U.S. law from disclosing that information to the Office of the U.S. Trade Representative so that it could be provided to the Arbitrator.

37. To Korea: Please clarify whether Korea continues to use the figure of $711 million as its estimate of the level of nullification or impairment or whether it proposes instead to revise that figure to $793 million in light of obtaining full-year data for 2017 on the United States' imports of LRWs.

Response:

127. This question is directed to Korea.

38. To both parties: Korea has proposed to use data on "clothes washers" from the AHAM to measure the size of the LRW market. The United States has criticized this estimate since "clothes washers" will include more than just LRWs. The United States suggests that the size of the LRW market will be no more than 80 percent of the total value of the washing machines market as reported by AHAM and proposes that a lower estimate should be used, such as 70 percent or 60 percent of the value from AHAM. Could either party request AHAM to provide a breakdown of the "clothes washers" market into the LRW and non-LRW segments and to provide this information for the period 2011 to 2017?

Response:

128. In the process of preparing the U.S. written submission, the United States requested that AHAM provide a breakdown of the "clothes washers" market into the LRW and non-LRW segments and to provide this information for the period 2011 to 2017. The United States renewed its request to AHAM in response to the Arbitrator's question. To date, the United States is still awaiting a response from AHAM.

39. To the United States: The United States explains its use of the supply, demand, and substitution elasticities of respectively 6, -0.55, and 4 by referring to the USITC's global safeguard investigation of LRWs. In particular, on the elasticity of substitution this report found that "based on available information, the elasticity of

substitution between U.S.-produced LRWs and imported LRWs is likely to be in the range of 3 to 5."

a. Does the United States have econometric evidence to underpin the employed substitution elasticity of 4?

b. How does the employed substitution elasticity compare with estimates available in the literature, such as in Broda and Weinstein (2006) ?

Response:

129. The United States does not have econometric evidence to underpin the employed substitution elasticity of 4. As the question notes, the USITC, in a global safeguard investigation conducted in 2017, found that, "[b]ased on available information, the elasticity of substitution between U.S.-produced LRWs and imported LRWs is likely to be in the range of 3 to 5."[151] The USITC arrived at its conclusions concerning the substitutability of domestic and imported LRWs on the basis of the evidence on the record of the proceeding, which included, *inter alia*, responses from purchasers, producers, and importers to questionnaires concerning the LRWs market, as well as arguments made by interested parties. The USITC discusses the information it examined and its analysis of that information in its report. The United States refers the Arbitrator to the discussion of substitutability in the USITC's report on the 2017 global safeguards investigation of LRWs, specifically pages 27-32, 81, and V-9 to V-19.

130. The United States proposes using 4 as the value of the elasticity of substitution because that is the median of the range, "3 to 5," found by the USITC in the recent global safeguards investigation of LRWs.[152] The United States took the approach of using the median of the range reported by the USITC because Korea, in its methodology paper, similarly used the medians of the ranges of elasticities of supply and demand published by the USITC, and the United States agrees that this is a reasonable approach.[153]

131. The elasticity of substitution that the United States proposes the Arbitrator use, like the elasticities of demand and supply that Korea proposes be used, are estimates made by the USITC after analyzing responses from purchasers, producers, and importers to questionnaires concerning the LRWs market, as well as arguments made by interested parties.[154] Given that these estimated elasticities were published very recently and they are for the specific product at issue, LRWs, it is preferable, and more reasonable, to use these estimated elasticities, rather than using elasticities generated a number of years ago for a product category that is broader than the specific product at issue here. Broda and Weinstein, for instance, provide an estimate of the substitution elasticity of HTS subheading 8450.20.0090. While that HTS subheading is the most appropriate subheading to use for the purpose of querying trade data for part of the relevant time

[151] USITC LRWs 201 Report, p. V-19 (Exhibit KOR-25).

[152] USITC LRWs 201 Report, p. V-19 (Exhibit KOR-25).

[153] *See* Korea's Methodology Paper, para. 45.

[154] USITC LRWs 201 Report, pp. 27-32, 81, and V-9 to V-19.

period in this proceeding, it nevertheless likely includes products not covered by the U.S. antidumping and countervailing duty measures. Also, the Broda and Weinstein estimates are for the period 1990-2001.[155]

6 VARIABILITY IN THE LEVEL OF SUSPENSION

40. <u>To Korea</u>: What is, in your view, the legal basis for the Arbitrator to incorporate an annual growth rate in the calculation for the level of nullification or impairment for LRW products?

<u>Response:</u>

132. This question is directed to Korea.

41. <u>To the United States</u>: In *US – 1916 Act (EC) (Article 22.6 – US)*, the arbitrator observed that "the quantified amount of nullification or impairment … may vary over time". In a similar vein, in *US - Offset Act (Byrd Amendment)*, the arbitrator noted that "we see no limitation in the DSU to the possibility of providing for a variable level of suspension if the level of nullification or impairment also varies". Please explain how this reconciles with the United States' argument that the calculation of nullification or impairment in the present case "should not include any growth rate factor at all."

<u>Response:</u>

133. As a general matter, neither the DSU nor subsequent arbitrator decisions precludes the possibility that the Arbitrator might base the level of suspension of concessions on a formula, including a growth rate factor formula, as Korea proposes. As the arbitrator in *US – Offset Act (Byrd Amendment) (Brazil) (Article 22.6 – US)* found, there is "no limitation in the DSU to the possibility of providing for a variable level of suspension if the level of nullification or impairment also varies."[156] Similarly, the arbitrator in *US – Antidumping Act of 1916 (EC) (Article 22.6 – US)*, in determining a level of suspension of concessions according to a formula that would vary over time, disagreed with the proposition that the complaining party's "right to suspend obligations must be frozen in time as of the date it made the request under DSU Article 22.2."[157]

134. That being said, the evidence before the Arbitrator establishes that, <u>in this dispute</u>, there is no basis for incorporating any growth rate factor in the determination of the level of nullification or impairment. As explained in section III.C.2 of the U.S. written submission,[158] ample evidence in the form of public statements made by Samsung and LG concerning their

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[155] *See* http://www.columbia.edu/~dew35/TradeElasticities/TradeElasticities.html.

[156] *US – Offset Act (Byrd Amendment) (Brazil) (Article 22.6 – US)*, para. 4.20.

[157] *US – 1916 Act (EC) (Article 22.6 – US)*, para. 6.14.

[158] *See also* U.S. Written Submission, paras. 117-122 (demonstrating that it would be contrary to the DSU to include any growth rate factor in the determination of the level of nullification or impairment <u>in this dispute</u>).

investment decisions and future plans demonstrates that the Korean producers of LRWs lack both the interest and the ability to resume production of LRWs in Korea for export to the U.S. market. Thus, if the U.S. measures on LRWs were brought into compliance with U.S. WTO obligations, the value of U.S. imports of LRWs from Korea would not increase at all, and it certainly would not increase each year in parallel with the projected growth of the market for washing machines in the United States, as Korea proposes.[159] That is why it would be contrary to the DSU to include any growth rate factor in the determination of the level of nullification or impairment in this dispute, as Korea has proposed.

42. <u>To both parties</u>: Should Korea be granted the right to increase the level of suspension of concessions on the basis of a fixed growth rate, would the level of suspension of concessions still be "equivalent" to the level of nullification or impairment if the actual growth rate in a given year differs from this fixed growth rate?

<u>Response:</u>

135. Pursuant to Article 22.4 of the DSU, the DSB will not authorize the suspension of concessions and related obligations unless "the level" of suspension is "equivalent" to the level of nullification or impairment. Arbitrators in the past have recognized that "equivalence" is an exacting standard:

> [T]he ordinary meaning of the word "*equivalence*" is "equal in value, significance or meaning", "having the same effect", "having the same relative position or function", "corresponding to", "something equal in value or worth", also "something tantamount or virtually identical."[160]

136. If the actual growth rate in a given year differs from a fixed growth rate that is incorporated into the suspension of concessions, the level of suspension of concessions would not be equivalent to the level of nullification or impairment. That is why it is critical, as Korea has observed, for the Arbitrator, when estimating the level of nullification or impairment, to "'rely, as much as possible, on credible, factual, and verifiable information' and '[not] base any such estimate on speculation.'"[161] Korea's requested growth rate factor amounts to mere speculation, and that speculation is contrary to ample evidence before the Arbitrator demonstrating that if the U.S. measures on LRWs were brought into compliance with U.S. WTO obligations, the value of U.S. imports of LRWs from Korea would not increase at all,[162] and it

[159] *See* Korea's Methodology Paper, para. 40. *See also id.*, paras. 19, 37, and 46; Appendix A, p. A2; and Appendix C.

[160] *EC – Bananas III (US) (Article 22.6 – EC)*, para. 4.1. *See also US – COOL (Article 22.6 – US)*, para. 4.3.

[161] Korea's Written Submission, para. 14 (quoting *US – 1916 Act (EC) (Article 22.6 – US)*, para. 5.54).

[162] *See* U.S. Written Submission, paras. 39-52, 117-122.

certainly would not increase each year in parallel with the projected growth of the market for washing machines in the United States, as Korea proposes.[163]

43. <u>To the United States</u>: Would a variable level of suspension of concessions, if granted to Korea, be able to accommodate parameters such as, for instance, as argued by the United States, the shift in production by LG and Samsung to countries other than Korea?

<u>Response:</u>

137. Yes. Question 45 below introduces the possibility, for the sake of argument, that the Arbitrator might decide that the level of nullification or impairment from 2018 onwards should be determined through the use of one of the two models proposed by the parties, with that model being applied every year using updated data. Korea's proposed static partial equilibrium model could not be used for this purpose because it grossly overstates the level of nullification or impairment, as the United States has demonstrated.[164] The Armington-based partial equilibrium model that the United States proposes, however, could be employed to apply a variable level of suspension of concessions, with the model applied each year with updated data. It would be necessary for the Arbitrator to specify in its decision with clarity when the model should be applied each year and the sources of data to be used. The United States has described the appropriate sources of data in the U.S. written submission.[165] The level of nullification or impairment could be calculated each year by both parties using the model in the Excel files that the United States has provided to the Arbitrator.[166]

138. Calculating the level of nullification or impairment each year as described in the preceding paragraph would mean that the most recent data are incorporated into the economic model, including trade data showing actual exports of LRWs from Korea and other countries to the United States. If Samsung and LG increase production of LRWs in the United States for the U.S. market and that production "ultimately satisf[ies] the vast majority of U.S. demand for their LRWs,"[167] as the companies themselves have predicted, there would be a corresponding decrease in exports of LRWs by Samsung and LG from Korea to the United States, and an increase in total domestic production of LRWs in the United States. That all would be reflected in updated data.

44. <u>To both parties</u>: Korea has argued that from 2018 onwards, the annual level of nullification or impairment may be calculated by applying a fixed growth rate of 5.8% to the level of nullification or impairment determined in the previous year. The United States has argued that there is no basis for incorporating any growth

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[163] *See* Korea's Methodology Paper, para. 40. *See also id.*, paras. 19, 37, and 46; Appendix A, p. A2; and Appendix C.

[164] *See*, *e.g.*, U.S. Written Submission, paras. 53-68.

[165] *See* U.S. Written Submission, paras. 75-122.

[166] *See* Exhibit USA-16 (**BCI**) and Exhibit USA-17.

[167] USITC LRWs 201 Report, p. 70 (p. 79 of the PDF version of Exhibit KOR-25).

rate factor in the level of nullification or impairment. Assume for the sake of argument that the Arbitrator finds for Korea that the level of nullification or impairment could vary in the future. However, instead of growing at a fixed rate, the level of nullification or impairment will change depending on the growth in the market for LRW. An example of such a formula linking future levels of nullification or impairment to growth in the market for LRWs is:

Yt+1 = (1+gt)*yt

Here, Yt is the level of nullification calculated in year t, and gt is the actual growth in the market for LRWs based on AHAM data.

a. To both parties: Please provide your views regarding the advantages (if any) and drawbacks (if any) of this approach compared to deciding on (i) a constant level of nullification or impairment and on (ii) a variable level of nullification or impairment that grows at a fixed rate of 5.8% per annum.

Response:

139. The approach described in this question cannot be used to estimate accurately the level of nullification or impairment in this dispute. As demonstrated in the U.S. written submission,[168] and as discussed throughout the U.S. responses to the Arbitrator's questions, ample evidence in the form of public statements made by Samsung and LG demonstrates that U.S. imports of LRWs from Korea are expected in the coming years to decline, not grow, irrespective of the rate of growth (or even possibly the rate of decline) of the U.S. washing machines market. Thus, while the approach described in the question might estimate more accurately the rate of growth (or decline) of the U.S. market for LRWs year-on-year, the growth/decline rate of the U.S. washing machines market is not connected to the level of imports of LRWs from Korea in the way that Korea argues.

b. To Korea: Would this approach address Korea's requirement that the level of nullification or impairment changes with the size of the market?

Response:

140. This question is directed to Korea.

45. Assume for the sake of argument that the Arbitrator finds for Korea that the level of nullification or impairment could vary in the future. However, instead of growing at a fixed rate, assume further that the Arbitrator decides that the level of nullification or impairment from 2018 onwards shall be determined through the use of one of the two models proposed by the parties, and applies that model every year with updated data. For example, if the Arbitrator decides for Korea's proposed

[168] *See* U.S. Written Submission, paras. 117-122.

partial equilibrium model, the only input that will be required each year is the United States' imports of LRWs from Korea. If the Arbitrator decides for the Armington model, the only inputs that will be required each year are United States' imports of LRWs from Korea and the size of the market for LRWs which will be measured by data from AHAM.

a. <u>To both parties</u>: Please provide your views regarding the advantages (if any) and drawbacks (if any) of this approach compared to deciding on (i) a constant level of nullification or impairment and on (ii) a variable level of nullification or impairment that grows at a fixed rate of 5.8% per annum.

b. <u>To the United States</u>: Would the application of the model with updated data address the United States' argument that Korean producers will export less to the United States in the future and that the level of nullification or impairment should decline correspondingly?

<u>Response:</u>

141. As the United States explained in response to question 43 above, this question introduces the possibility, for the sake of argument, that the Arbitrator might decide that the level of nullification or impairment from 2018 onwards should be determined through the use of one of the two models proposed by the parties, with that model being applied every year using updated data. Korea's proposed static partial equilibrium model could not be used for this purpose because it grossly overstates the level of nullification or impairment, as the United States has demonstrated.[169] The Armington-based partial equilibrium model that the United States proposes, however, could be employed to apply a variable level of suspension of concessions, with the model applied each year with updated data. It would be necessary for the Arbitrator to specify in its decision with clarity when the model should be applied each year and the sources of data to be used. The United States has described the appropriate sources of data in the U.S. written submission.[170] The level of nullification or impairment could be calculated each year by both parties using the model in the Excel files that the United States has provided to the Arbitrator.[171]

142. Calculating the level of nullification or impairment each year as described in the preceding paragraph would mean that the most recent data are incorporated into the economic model, including trade data showing actual exports of LRWs from Korea and other countries to the United States. If Samsung and LG increase production of LRWs in the United States for the U.S. market and that production "ultimately satisf[ies] the vast majority of U.S. demand for their LRWs,"[172] as the companies themselves have predicted, there would be a corresponding decrease in exports of LRWs by Samsung and LG from Korea to the United States, and an increase in

[169] *See*, *e.g.*, U.S. Written Submission, paras. 53-68.

[170] *See* U.S. Written Submission, paras. 75-122.

[171] *See* Exhibit USA-16 (**BCI**) and Exhibit USA-17.

[172] USITC LRWs 201 Report, p. 70 (p. 79 of the PDF version of Exhibit KOR-25).

total domestic production of LRWs in the United States. That all would be reflected in updated data.

143. Such an approach has significant advantages over a variable level of nullification or impairment that grows at a fixed rate of 5.8 percent per annum. As demonstrated in the U.S. written submission,[173] and as discussed throughout the U.S. responses to the Arbitrator's questions, ample evidence in the form of public statements made by Samsung and LG demonstrates that the Korean producers of LRWs lack both the interest and the ability to resume production of LRWs in Korea for export to the U.S. market. Thus, if the U.S. measures on LRWs were brought into compliance with U.S. WTO obligations, the value of U.S. imports of LRWs from Korea would not increase at all, and it certainly would not increase each year in parallel with the projected growth of the market for washing machines in the United States, as Korea proposes.[174] Given that, as of the end of 2018, "more than 95 percent of LG and Samsung LRWs will be supplied from the LG and Samsung U.S. LRW production factories,"[175] it is expected that the value of U.S. imports of LRWs from Korea will decline, not grow.

144. An approach to the application of a variable level of nullification or impairment that takes into account actual updated data would be far more accurate than the approach proposed by Korea. Additionally, the application of the correct model with updated data would reflect that Korean producers export less to the United States in the future and that the level of nullification or impairment should decline correspondingly, if it indeed is the case that Korean producers export less to the United States in the future, as they themselves have predicted.

7 SUSPENSION OF CONCESSIONS FOR NON-LRW PRODUCTS

46. <u>To both parties</u>: Please comment on whether, in your view, previous arbitrators' rulings under Article 22.6 of the DSU provide relevant guidance for the determination of the level of nullification or impairment with respect to non-LRW products.

<u>Response:</u>

145. Yes. The United States discusses in the U.S. written submission certain previous arbitrator decisions under Article 22.6 of the DSU and their relevance to the determination of the level of nullification or impairment with respect to non-LRW products. The United States refers the Arbitrator to paragraphs 140-145 of the U.S. written submission.

47. <u>To the United States</u>: Do you agree with Korea that "as the United States has not yet modified or terminated the WTO-inconsistent anti-dumping measures, the existence and maintenance of the DPM and the use of zeroing under W-T methodology 'as

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[173] *See* U.S. Written Submission, paras. 117-122.

[174] *See* Korea's Methodology Paper, para. 40. *See also id.*, paras. 19, 37, and 46; Appendix A, p. A2; and Appendix C.

[175] LG 2018 Commerce LRWs Sunset Initiation Response, p. 15 (p. 23 of the PDF Version of Exhibit USA-4).

such' violates the rights of Korea, and each application of such WTO-inconsistent measures further nullifies or impairs benefits accruing to Korea"?

Response:

146. The United States does not agree with Korea's statement. Whether any application of the WTO-inconsistent measures "further nullifies or impairs benefits accruing to Korea"[176] must be established on the basis of evidence. As the arbitrator found in *EC – Bananas III (US) (Article 22.6 – EC)*:

> The *presumption* of nullification or impairment in the case of an infringement of a GATT provision as set forth by Article 3.8 of the DSU cannot in and of itself be taken simultaneously as *evidence* proving a particular level of nullification or impairment allegedly suffered by a Member requesting authorization to suspend concessions under Article 22 of the DSU at a much later stage of the WTO dispute settlement system. The review of the level of nullification or impairment by Arbitrators from the objective benchmark foreseen by Article 22 of the DSU, is a separate process that is independent from the finding of infringements of WTO rules by a panel or the Appellate Body. As a result, a Member's potential interests in trade in goods or services and its interest in a determination of rights and obligations under the WTO Agreements are each sufficient to establish a right to pursue a WTO dispute settlement proceeding. However, a Member's legal interest in compliance by other Members does not, in our view, automatically imply that it is entitled to obtain authorization to suspend concessions under Article 22 of the DSU.[177]

147. The United States has demonstrated that Korea's proposed suspension is contrary to the DSU.[178] The formula that Korea proposes is purely speculative and not based on sound economic analysis. The selection of an appropriate economic model or formula is based on a number of critical factors, such as the appropriate estimation technique to apply (simulation or econometrics), substitutability of products, and other variables that could affect demand and supply conditions. Korea addresses none of these issues. Furthermore, the formula that Korea proposes to use suffers from the same conceptual flaws and data input problems, whether it is applied to LRWs or imports other than LRWs.

48. To Korea: In its methodology paper, Korea states that it "will use individual data for each product at issue. For example, Korea will use USITC data for the

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[176] Korea's Written Submission, para. 93.

[177] *EC – Bananas III (US) (Article 22.6 – EC)*, paras. 6.9-6.10 (emphasis added).

[178] *See* U.S. Written Submission, paras. 130-145.

elasticities of demand and supply of the products at issue, as described in Appendix B".

a. **Please explain, with examples, how Korea would practically calculate the amount of suspension for future cases of products subject to the measures at issue.**

b. **Please clarify if the list of non-LRW products in Appendix B is illustrative or exhaustive.**

c. **How will Korea ensure that factors such as the model or methodology to be applied, the values of the parameters to be used, the choice of counterfactual, the appropriate data, and the selection of data sources (over which parties have usually differed in this and previous Article 22.6 arbitrations) are appropriately taken into account?**

Response:

148. This question is directed to Korea.

49. **To Korea: With respect to Korea's request to be allowed to "use the same formula used to calculate the level of nullification or impairment to LRW imports as of the end of the RPT to imports of non-LRW products that are subject to new investigations or administrative reviews initiated after the end of the RPT, for which the WTO-inconsistent methods (i.e., differential pricing methodology, or 'DPM', and DPM with zeroing) continue to be used" , please provide clarification on the following issues.**

a. **Have previous arbitrators granted a request for the level of annual nullification and impairment to be represented by a formula? If yes, would any of these past cases provide relevant guidance for the current Arbitration?**

b. **With respect to any given non-LRW product, who would determine that dumping margins have been determined in a manner inconsistent with the second sentence of Article 2.4.2 of the Anti-Dumping Agreement?**

c. **What would be the legal means available to the United States, should the United States consider that (i) it acted consistently with the Anti-Dumping Agreement with respect to the non-LRW products concerned, or that (ii) the level of suspension proposed by Korea is not equivalent to the level of nullification or impairment?**

d. **Can Korea quantify the level of nullification or impairment affecting Korea's exports of non-LRW products to the United States at the end of the RPT?**

Response:

149. This question is directed to Korea.

50. To the United States: Are there practical or operational challenges that may be involved in Korea's proposal on suspension of concessions on non-LRW products? Please discuss in light of prior Article 22.6 arbitration decisions.

Response:

150. The United States has demonstrated that Korea's proposed suspension is contrary to the DSU.[179] The formula that Korea proposes is purely speculative and not based on sound economic analysis. The selection of an appropriate economic model or formula is based on a number of critical factors, such as the appropriate estimation technique to apply (simulation or econometrics), substitutability of products, and other variables that could affect market demand and supply conditions. Korea addresses none of these issues. Furthermore, the formula that Korea proposes to use suffers from the same conceptual flaws and data input problems, whether it is applied to LRWs or imports other than LRWs.

151. As the United States has shown, the formula Korea proposes to apply grossly overstates the level of nullification or impairment resulting from the maintenance of the WTO-inconsistent aspects of the U.S. antidumping and countervailing duty measures on LRWs from Korea after the expiration of the RPT. The same would be true if that formula were applied for products other than LRWs. Because they would greatly exceed the actual level of nullification or impairment, the adjustments to Korea's level of suspension of concessions that Korea proposes to make using its formula would not be "equivalent"[180] and thus would not be "justified."[181]

152. Additionally, given the data input problems discussed in the U.S. written submission[182] – including the difficulty of identifying correct market share information for the particular products subject to antidumping measures; the errors that Korea has already made querying U.S. import data; and the entirely unknowable volume and value of imports in future years – the adjustments to Korea's level of suspension of concessions made using Korea's proposed formula would increase "unpredictability" substantially.[183] Indeed, the level of suspension under Korea's proposed approach simply could not be predicted at all.

153. Another operational challenge associated with Korea's proposed approach for determining the level of nullification or impairment for non-LRW products is exemplified by the debate amongst the parties concerning the proper counterfactual for LRWs. Korea argues that the counterfactual should be termination of the U.S. antidumping and countervailing duty measures, and thus, in Korea's economic model, Korea examines what the effect would be if the antidumping and countervailing duties were reduced to zero. The United States has

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[179] *See* U.S. Written Submission, paras. 130-145.

[180] DSU, Art. 22.4.

[181] *US – Offset Act (Byrd Amendment) (Brazil) (Article 22.6 – US)*, para. 4.20 (emphasis added).

[182] *See* U.S. Written Submission, paras. 131-138.

[183] *US – Offset Act (Byrd Amendment) (Brazil) (Article 22.6 – US)*, para. 4.20 (emphasis added).

demonstrated that, with respect to the antidumping duty rate for LG, this would not be an appropriate counterfactual, and the antidumping duty rate should be lowered but not eliminated. If, in a future proceeding involving a non-LRW product, the USDOC employs a differential pricing analysis and zeroing to determine the antidumping duty rate for one or more Korean exporters, but, in the same proceeding, determines the antidumping duty rate for other Korean exporters without using a differential pricing analysis and without using zeroing, how would Korea's proposed formula be applied in such a situation? What tariff rate reduction would be modeled? To what value of imports would that tariff rate reduction be applied? The total value of imports or just the value of the imports for which an antidumping duty rate was determined using a differential pricing analysis and zeroing? How could that latter value be established accurately?

154. Article 22.7 of the DSU precludes the possibility of a "second arbitration," so all possible questions that might arise in relation to any formula approach must be anticipated and resolved before the DSB authorizes Korea to suspend concessions. Korea has not even attempted to address the operational challenges that would be associated with its proposed formula approach. As a result of the lack of facts and data as well as the lack of ability to answer the many relevant questions, Korea's proposed formula does not provide for a level of suspension of concessions that is equivalent to the level of nullification or impairment.

51. <u>To the United States</u>: With respect to Korea's proposed level of suspension for non-LRW products, could the United States provide the following clarifications:

a. Is the United States arguing that (i) the particular formula proposed by Korea in this arbitration is incorrect, or that (ii) the use of any formula would be inconsistent with the DSU?

<u>Response:</u>

155. The United States is not arguing that the use of any formula would be inconsistent with the DSU.

156. However, as the United States has demonstrated, the particular formula proposed by Korea in this arbitration is incorrect. The formula Korea proposes is purely speculative and not based on sound economic analysis. The selection of an appropriate economic model or formula is based on a number of critical factors, such as the appropriate estimation technique to apply (simulation or econometrics), substitutability of products, and other variables that could affect market demand and supply conditions. Korea addresses none of these issues. Furthermore, the formula that Korea proposes to use suffers from the same conceptual flaws and data input problems, whether it is applied to LRWs or imports other than LRWs. Accordingly, the formula Korea proposes cannot be used in this dispute.

157. Additionally, the lack of relevant available data and the inappropriateness of relying on speculation means that it is not possible to determine in advance a formula that could be used in these proceedings.

b. Could the United States explain what, in its view, could be the correct manner to assess the level of nullification or impairment for the "as such" WTO-inconsistent measures at issue in this dispute?

Response:

158. The United States has demonstrated that Korea's proposed suspension is contrary to the DSU.[184] The formula Korea proposes is purely speculative and not based on sound economic analysis. The selection of an appropriate economic model or formula is based on a number of critical factors, such as the appropriate estimation technique to apply (simulation or econometrics), substitutability of products, and other variables that could affect market demand and supply conditions. Korea addresses none of these issues. Furthermore, the formula that Korea proposes to use suffers from the same conceptual flaws and data input problems, whether it is applied to LRWs or imports other than LRWs.

159. The United States has met its burden to make a *prima facie* case in this arbitration that the level of suspension of concessions requested by Korea is not equivalent to the level of nullification or impairment. Accordingly, it is for Korea "to submit arguments and evidence sufficient to rebut" the *prima facie* case that the United States has made.[185] As the arbitrators in the *EC – Hormones* Article 22.6 arbitrations explained:

> The duty that rests on *all* parties to produce evidence and to collaborate in presenting evidence to the arbitrators – an issue to be distinguished from the question of who bears the burden of proof – is crucial in Article 22 arbitration proceedings. The [United States] is required to submit evidence showing that the proposal is *not* equivalent. However, at the same time and as soon as it can, [Korea] is required to come forward with evidence explaining how it arrived at its proposal and showing why its proposal *is* equivalent to the trade impairment it has suffered.[186]

160. The United States recognizes that the Arbitrator may consider, as previous arbitrators have, that, if it considers that Korea's proposed level of suspension of concessions is <u>not</u> equivalent to the level of nullification or impairment, the Arbitrator nevertheless "would be called upon to go further" and "estimate the level of suspension we consider to be equivalent to the impairment suffered."[187] It is primarily Korea's duty to present evidence and argument supporting the estimation of the appropriate level of suspension.[188] If Korea fails in its duty, it would not be appropriate for the Arbitrator to make Korea's case for it.

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[184] *See* U.S. Written Submission, paras. 130-145.

[185] *See EC – Hormones (US) (Article 22.6 – EC)*, para. 9; *EC – Hormones (Canada) (Article 22.6 – EC)*, para. 9.

[186] *EC – Hormones (US) (Article 22.6 – EC)*, para. 11; *EC – Hormones (Canada) (Article 22.6 – EC)*, para. 11.

[187] *EC – Hormones (US) (Article 22.6 – EC)*, para. 12; *EC – Hormones (Canada) (Article 22.6 – EC)*, para. 12.

[188] *See EC – Hormones (US) (Article 22.6 – EC)*, para. 11; *EC – Hormones (Canada) (Article 22.6 – EC)*, para. 11.

161. Given the above, the United States does not have additional views to provide, at this time, concerning what would be the correct manner to assess the level of nullification or impairment for the "as such" WTO-inconsistent measures at issue in this dispute.