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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

DECISION BY THE ARBITRATOR

The Decision by the Arbitrator on *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* is being circulated to all Members, pursuant to the DSU. The Decision is being circulated as an unrestricted document from 31 August 2004 pursuant to the Procedures for the Circulation and Derestriction of WTO Documents (WT/L/452).

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I. INTRODUCTION

A. INITIAL PROCEEDINGS

1.1 On 27 January 2003, the Dispute Settlement Body (DSB) adopted the report of the Panel in this dispute, as modified by the report of the Appellate Body.[1]

1.2 The findings adopted by the DSB were that the measure at issue in this case – the Continued Dumping and Subsidies Offset Act of 2000 (hereafter "CDSOA"):[2]

(a) is a non-permissible specific action against dumping or a subsidy, contrary to Articles

1.5 The amount would be established by adding:

(a) the amount of offset payments attributed to duties collected on products from the European Communities; and

(b)

1.11 On 19 February 2004, the United States submitted a request for preliminary ruling from the Arbitrator applicable to all requests for arbitration. Following consideration of the request, the Arbitrator informed all parties on 23 February that, having regard to the issues raised in the request, the Arbitrator deemed it more appropriate to address the content of the United States' communication of 19 February together with all the other issues and arguments that might be raised throughout the proceedings. The Arbitrator added that parties should feel free to include comments on the United States' request in their submissions, as they saw fit.

1.12 In accordance with the timetable, the Requesting Parties submitted communications concerning the methodology supporting their requests for authorization to suspend concessions or other obligations (hereafter the "methodology paper(s)") on 23 February.[10]

1.13 The United States submitted a single written submission, applicable to all its requests for arbitration, on 12 March 2004.

1.14 All the Requesting Parties filed their written submissions on 31 March 2004.[11]

1.15 On 15 April 2004, the Arbitrator informed the parties that a single, joint substantive hearing with all parties present would be held. However, if a party so requested and if deemed necessary by the Arbitrator, special sessions on specific issues affecting that party might be organized, at which only the party concerned and the United States would be allowed to express their views.

1.16 The joint substantive meeting with all parties present was held on 19 April 2004 and written questions were submitted to the parties on 21 April 2004. The parties replied in writing on 28 April 2004 and were given until 4 May 2004 62.75 0 23e 9 0 Tc 0.1875 eurequest936 Tc 0. on 20z( ) T,9L5 0 Tc -03.25 Tf

1.19 Then, in Section IV, the Decision addresses the level of suspension of concessions or other obligations proposed by the European Communities, and considers the compatibility with Article 22 of the DSU of: (a) a level of suspension of obligations expressed as a duty rather than as a total value of trade; (b) an annual adjustment to the level of suspension; and (c) the suspension of obligations by one WTO Member in relation to a measure also affecting other Members or non-Members.

1.20 Section V of the Decision contains the award of the Arbitrator. It is followed by some concluding remarks in relation to certain wider issues raised in the course of the arbitration.

II. PRELIMINARY ISSUES

A. REQUEST OF THE UNITED STATES FOR A PRELIMINARY RULING

1. Summary of the United States' request

2.1 As mentioned in the previous section, on 19 February 2004, the United States filed a request for a preliminary ruling from the Arbitrator that:

(a) a Requesting Party cannot suspend concessions or other obligations based on the nullification or impairment suffered by other WTO Members; and consequently offset payments for products other than the Requesting Parties' products that are subject to anti-dumping or countervailing duty orders are outside the scope of the arbitration proceeding with respect to that Requesting Party;

(b) the Requesting Parties failed to specify the level of suspension and the level of nullification or impairment in such a way that allows the Arbitrator to determine equivalence; and consequently each party must provide the information necessary to enable the Arbitrator to make the determinations called for under the DSU in relation to that party; and

(c) the proposition that a Requesting Party may establish a new level of suspension each year is inconsistent with Article 22 of the DSU; and is consequently outside the scope of the arbitration proceeding for any party requesting to proceed in that manner.

2. Analysis of the Arbitrator

2.2 On 23 February 2004, we informed the parties that, having regard to the issues raised in the United States' request for a preliminary ruling, they would more appropriately be addressed together with all the issues and arguments that might be raised throughout the proceedings. We added that parties should feel free to include comments on the United States' request in their submissions, as they saw fit.

2.3 The United States has reiterated the claims made in its request for a preliminary ruling in its subsequent submissions. As a result, we deem it necessary for the clarity of our findings to describe how we dealt with these claims.

2.4 First, we note that neither paragraph 6 nor paragraph 7 of Article 22 of the DSU provide for the possibility of a preliminary ruling and there is, strictly speaking, no practice of a preliminary ruling at the request of a party in past arbitrations.

2.5 Second, some of the issues we were asked to rule upon by the United States were intimately linked to questions central to this dispute. We concluded that the relatively expeditious process of a

correlatively, of suspension of obligations should be provided by the Requesting Parties. This is also the case, in our opinion, with the United States' claim regarding the type of measure which the Requesting Parties plan to apply, if they are allowed to suspend concessions or other obligations.[16] We consider that such claims are more appropriately addressed as part of our review of the substance of the case. We nonetheless found that certain aspects of these claims should be discussed separately to the extent that they relate to specific procedural rights of the United States in these proceedings, which ought to be protected.

2.12

obligations. The Requesting Parties specified that the amount of the annual offset payments constitutes the level of nullification or impairment up to which each Requesting Party may suspend concessions or other obligations. As the amount of disbursement is published each year by the United States' authorities, the corresponding levels are clearly defined. The European Communities adds that the arbitrator in *US – 1916 Act (EC) (Article 22.6 – US)* acknowledged that the fact that the requested suspension had not been stated in quantitative terms did not, in and of itself, render a request for suspension of concessions or other obligations inconsistent with Article 22.[21] *A fortiori*, in this case, the level of nullification or impairment and the level of suspension are quantifiable and identified at each moment, thus allowing the Arbitrator to determine their equivalence.[22]

2.17 Regarding the allegation according to which the Requesting Parties failed to identify an amount of trade that would be covered by their request, the European Communities argues that nothing in Article 22 of the DSU requires a "trade effect" test for determining the level of suspension. The European Communities further argues that it is hardly possible to predict the particular "trade effect" of a tariff increase. In addition, arbitrators have never previously considered the trade effect of a requested suspension.[23]

3. Does the European Communities' request fail to meet the minimum specificity standard applicable in an Article 22.6 arbitration?

2.18 In *EC – Bananas III (Ecuador) (Article 22.6 – EC)*, the arbitrators stated that "the specificity standards, which are well established in WTO jurisprudence under Article 6.2 of the DSU were relevant for requests for authorization to suspend concessions under Article 22.2 and for requests for referral of such matter to arbitration under Article 22.6".[24] More particularly, the arbitrator considered that:

(a) the request under Article 22.2 must set out the specific level of suspension (i.e. a level deemed equivalent to the nullification or impairment caused by the WTO-inconsistent measure, pursuant to Article 22.4 of the DSU); and

(b) the request must specify the agreement and sector(s) under which concessions or other obligations would be suspended, pursuant to Article 22.3 of the DSU.

2.19 The specificity issue whether requirement (a) has been met by the European Communities in its request, turns on whether the "specific level of suspension" should be expressed "in dollars and cents", i.e. monetary terms. This in turn depends on the determination of the substantive issue before the Arbitrator of whether the approach to nullification or impairment proposed by the European Communities and the other Requesting Parties is compatible with Article 22 of the DSU. We revert to this matter in Section III below.

2.20 With regard to requirement (b) above, we note that the European Communities' request expressly mentions GATT 1994. In addition, the European Communities' request, to the extent that it specifies that the suspension would consist of the imposition of "an additional import duty above

[21] See *US – 1916 Act (EC) (Article 22.6 – US)*, para. 5.21.

[22] Written submission of Brazil, the European Communities, India, Japan, Korea and Mexico, paras. 69-72.

[23] Written submission of Brazil, the European Communities, India, Japan, Korea and Mexico, paras. 81-86.

[24] See *EC – Bananas III (Ecuador) (Article 22.6 – EC)*, paras. 20-29. See also *EC – Hormones (Canada) (Article 22.6 – EC)*, para. 16.

bound custom duties on a final list of products originating in the United States"[25], unequivocally specifies the sector (trade in goods) concerned.

2.21 The question raised by the United States includes a second dimension if one applies *mutatis mutandis* to this case the standards of specificity developed under Article

Communities' request for suspension exceeds the level of nullification or impairment, the European Communities must also sufficiently support its allegations that its request meets the requirement for equivalence of Article 22.4 of the DSU.

2.26 We also note that, in *EC – Hormones (Canada) (Article 22.6 – EC)*, the arbitrator recalled that:

> "11. 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 EC is required to submit evidence showing that the proposal is *not* equivalent. However, at the same time and as soon as it can, Canada 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. Some of the evidence – such as data on trade with third countries, export capabilities and affected exporters – may, indeed, be in the sole possession of Canada, being the party that suffered the trade impairment. This explains why we requested Canada to submit a so-called methodology paper."[29]

2.27 Having regard to the duty of the parties to supply evidence and, more generally, to collaborate with the Arbitrator, and following the approach of the arbitrators in *Brazil – Aircraft (Article 22.6 – Brazil)*[30] and *in Canada – Export Credit and Guarantees (Article 22.6 – Canada)*[31], we are of the view that if a party makes a particular claim but fails to cooperate and provide evidence sufficiently supporting its claim, we may reach a conclusion on the basis of the evidence available, including evidence submitted by the other party or data publicly available.

III. DETERMINATION OF THE LEVEL OF NULLIFICATION OR IMPAIRMENT

A. MAIN ARGUMENTS OF THE PARTIES

1. United States

3.1 The United States considers that the Requesting Parties, by arguing that a breach is itself a nullification or impairment ignore the critical distinction that the drafters of the WTO agreements have drawn between, on the one hand, a breach of a WTO commitment and, on the other hand, the economic impact that is "the result of" that breach. The United States refers to Article XXIII of GATT 1994, but also to Article 22.8 of the DSU.[32] The United States further claims that the level of nullification or impairment must be established on the basis of the trade loss suffered directly by each Requesting Party. The United States argues that an analysis of the level of nullification or impairment must focus on the "benefit" allegedly nullified or impaired as a result of the failure of the responding party to bring the measure at issue into conformity with the recommendations and rulings of the DSB.[33] In previous cases, arbitrators have compared the actual amount of exports affected by the WTO-inconsistent measure to the amount of exports in a "counterfactual".[34] The difference between the two values typically represented the level of nullification or impairment. The United States is also of the view that the Appellate Body confirmed this approach by focusing on the "trade effect" of the CDSOA, as a non-permissible specific action against dumping or a subsidy. A change in the

[29] See, e.g., *EC – Hormones (Canada) (Article 22.6 – EC)*, paras. 9-11.
[30] Paras. 2.9-2.11.
[31] Para. 3.76.
[32] United States oral statement, paras. 7-13.
[33] United States written submission, para. 40.
[34] i.e., the situation which would exist if the responding party had brought the WTO-inconsistent measure into conformity within the reasonable period of time (United States written submission, para. 41).

3.6 Finally, the United States argues that there is no bar to a finding of "zero" nullification or impairment in an Article 22.6 proceeding. Not every v

3.10

3.24 In fact, 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.

3.25 Referring to the arbitrator's decision in *EC – Bananas III (US) (Article 22.6 – EC)*, the

Article XXIII:1 of GATT 1994. We therefore consider that, while a violation of an obligation may affect all Members, this does not *ipso facto* result in a nullification or impairment of a given Member's benefits up to the "value" of the violation.

(b) Previous arbitrations

(i) Introduction

3.35 We note that previous arbitrations (a) support our approach regarding the interpretation to be given to the provisions relating to nullification or impairment and (b) more specifically, have concluded that the nullification or impairment of benefits resulting from a violation should be expressed in terms of trade or, in two instances, economic effects.[51]

(ii) Interpretation of the provisions relating to nullification or impairment by previous arbitrators

3.36 Previous Article 22.6 arbitrators concluded, as we have, that violation and nullification or impairment are two different concepts. The arbitrator in *EC – Bananas III (US) (Article 22.6 – EC)* stated that the presumption of nullification or impairment contained in Article 3.8 of the DSU could not, 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 or other obligations under Article 22 of the DSU. Such authorization would only arise at a much later stage of the dispute settlement process. The arbitrator added that:

> "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

imports. Since a judicial decision or settlement under the 1916 Act did not automatically restrict trade, the broader concept of economic effect was more appropriate.

3.41 In the present case, we note that disbursements under the CDSOA operate, in economic terms, as subsidies that

> 'The arbitrator acting pursuant to paragraph 6 … shall determine whether the level of such suspension is equivalent to the level of nullification or impairment….' (footnote omitted)

> As we have already noted in our analysis of the text of Article 4.10 of the *SCM Agreement* above, there is, by contrast, no such indication of an explicit quantitative benchmark in that provision. It should be recalled here that Articles 4.10 and 4.11 of the *SCM Agreement* are 'special or additional rules' under Appendix 2 of the *DSU*, and that in accordance with Article 1.2 of the *DSU*, it is possible for such rules or procedures to prevail over those of the *DSU*. There can be no presumption, therefore, that the drafters intended the standard under Article 4.10 to be necessarily coextensive with that under Article 22.4 so that the notion of 'appropriate countermeasures' under Article 4.10 would limit such countermeasures to an amount 'equivalent to the level of nullification or impairment' suffered by the complaining Member. Rather, Articles 4.10 and 4.11 of the *SCM Agreement* use distinct language and that difference must be given meaning."[59]

3.48 Like the *US – FSC (Article 22.6 – US)* arbitrator, we consider that Article 4.11 of the SCM Agreement is a special or additional dispute settlement provision which provides for a *sui generis* approach applicable to prohibited subsidies only. Article 4.11 instructs arbitrators to determine "appropriate countermeasures" rather than whether the level of suspension of concessions or other obligations is equivalent to the level of nullification or impairment. This would seem to leave more discretion to arbitrators in assessing the amount of countermeasures. This was confirmed by the arbitrator in *US – FSC (Article 22.6 – US)*:

> "Thus, as we interpret Article 4.10 of the *SCM Agreement*, a Member is entitled to act with countermeasures that properly take into account the gravity of the breach and the nature of the upset in the balance of rights and obligations in question. This cannot be reduced to a requirement that constrains countermeasures to trade effects, for the reasons we have set out above."

3.49 While the arbitrator in *US – FSC (Article 22.6 – US)* did not exclude the application of a trade effect test under Article 4.11, it would be difficult, in situations other than those relating to prohibited subsidies, to conclude that any disbursement pursuant to an illegal measure automatically causes nullification or impairment at least equivalent to the total amount disbursed.

3.50 The European Communities also relies on the arbitrator's decision in *US – 1916 Act (EC) (Article 22.6 – US)* in support of its position.[60] We do not agree with the European Communities that the passages it relies upon support the position that the violation resulting from the existence of an inconsistent measure itself nullified or impaired benefits accruing to the European Communities. We note that the arbitrator in *US – 1916 Act (EC) (Article 22.6 – US)* agreed with the arbitrators in *EC – Bananas III (US) (Article 22.6 – EC)* that:

> "[T]he *presumption* of nullification or impairment, as provided in Article 3.8 of the DSU, by no means provides evidence of the *level* of nullification or impairment sustained by the Member requesting authorization to suspend obligations."[61]

3.51 We further note that, in that case,

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the costs attached to any settlement or judgement under the 1916 Act – i.e., instances of application – could be considered to correspond to the economic effect of the 1916 Act on EC companies.

3.52

essence of the CDSOA. In the opinion of the European Communities, the CDSOA is not conceivable without disbursements and the disbursements are not possible without the CDSOA. Any attempt to draw a distinction between the existence of the CDSOA and its disbursements is impossible. The European Communities concludes from the approach of the arbitrator in *US – 1916 Act (Article 22.6 – US)* that the existence of the CDSOA cannot be legally distinguished from its application when determining the nullification or impairment caused by this Act. Following the United States approach would mean that, when a measure violates the WTO Agreement *per se*, the requesting party could not suspend concessions or other obligations. It would have to bring a dispute against each specific application of a measure. This would generate more disputes in disregard of the principle of "prompt settlement" of disputes expressed in Article 3.3 of the DSU.[64]

(b) Analysis of the Arbitrator

3.59 First, we recall that the requesting parties have not identified nullification or impairment beyond that resulting from the instances of application of the CDSOA.

3.60 Second, we note that the United States raised two separate questions regarding this issue: one is whether disbursements already made under the CDSOA can be considered by the Arbitrator, the other one is whether future disbursements may be considered.

3.61 At this stage, the question before us is whether we may take into account the economic or trade effects resulting from the instances of application of the CDSOA, given the United States claim that the CDSOA was challenged as such, and, had not been applied when it was first challenged.

3.62 We agree with the United States that the DSB never issued recommendations or rulings with respect to the application of the CDSOA. We also note the arguments of the Requesting Parties that once a measure has been found illegal, any instance of application of this measure is *ipso facto* illegal.

3.63 We take the view that the CDSOA *mandates* disbursements whenever certain conditions are met; that these disbursements have been found by the Panel and the Appellate Body to be a core element in their conclusion that the CDSOA violates the WTO Agreement[65], and that there is no reason, *for the purpose of assessing nullification or impairment*, to exclude instances of the application of the CDSOA from our consideration.

3.64 This approach is in line with the practice of other arbitrators. For instance, the arbitrator in *US – 1916 Act (EC) (Article 22.6 – US)* considered that instances of application could be taken into account in assessing nullification or impairment by a law as such.[66]

3.65 We also recall that, in reply to one of our questions[67], the United States referred to two cases, *US – Section 110(5) Copyright Act (Article 25.3)* and *EC – Hormones (US) (Article 22.6 – EC)*. In those two cases, a law had been challenged as such. Nevertheless, the arbitrators determined the level of nullification or impairment on the basis of an analysis of lost royalties in the first case and lost trade in the second case.

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[64] Written submission of Brazil, the European Communities, India, Japan, Korea and Mexico, paras. 35-40.

[65] See Panel Report, paras. 7.35-7.39 and 8.1; Appellate Body Report, para. 256.

[66] *US – 1916 Act (EC) (Article 22.6 – US)*, para. 7.8.

[67] Reply of the United States of 28 April 2004 (paras. 11 and 12) to question 12 of the Arbitrator of 21 April 2004, which reads as follows:

"Considering its reasoning in paragraphs 15 to 19 of its written submission and more generally its position on nullification or impairment, could the United States give an example of a situation where a law *as such* would cause more than "zero" nullification or impairment?"

and 22.7, we cannot exclude that inducing compliance is part of the objectives behind suspension of

3.79 We recognize that, in relying on an economic model in this arbitration, we may be breaking new grounds. This impression may be correct to the extent that we base our determinations on the results of this model. However, we note that economic modelling has already been applied in the *US – FSC (Article 22.6 – US)* arbitration. We are also mindful that applying economic models in arbitrations under Article 22.6 of the DSU may make such proceedings more complex and costlier. We acknowledge that economic analysis requires expertise that may not be readily available to all WTO Members. We do not believe, however, that this should be a reason to deprive ourselves of a means to reach a credible result through a transparent process in complex cases such as this one. Rather, we see the option of using economic models in Article 22.6 arbitrations as creating an opportunity to ensure full cooperation from the parties and, hence, more precise and credible results where the alternative may be to choose between simplistic and perhaps irreconcilable approaches.

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- offset payments reflect a small fraction of production, hence they cannot have a discernable impact on trade.

3.93 However, in response to the Arbitrator's query on the validity of a zero pass-through value, the United States indicated that a pass-through level of 25 per cent would be "reasonable".[87] It qualified this response by indicating that the economic literature did not point towards any specific value. However, the United States cited a value of 75 per cent for a United States policy contingent on export (the Domestic International Sales Corporation programme), which was reported in an academic study.[88] The United States also cites a study that concludes that 60 per cent of an investment tax incentive was received by the recipients.[89]

3.94 The results of the United States' model as applied according to its assumptions are outlined in Table 1.

(b) Requesting Parties

3.95 The original position of the Requesting Parties was that modelling need not be considered by the Arbitrator to determine the award. Instead, they argued that the value of the CDSOA disbursements was a proxy for the minimum level of nullification or impairment caused by the measure found to be illegal. The position of the Requesting Parties is that the level of nullification or impairment can be quantified on the basis of the value of the CDSOA payments; since their view is that economic modelling of the trade effects in this case would be too difficult.[90]

3.96 However, in response to a question posed by the Arbitrator regarding whether or not a model for estimating the trade effects that meets their criteria exists, the Requesting Parties submitted such a model. Their model is based on the level of CDSOA payments, a gross measure of the elasticity of substitution between domestic and imported products and the ratio of US manufacturing imports to domestic shipments of US manufacturing industries.

[87] United States replies to the Arbitrator's second set of questions, para. 13.
[88] 90

Table 1: Estimated Level of Nullification or Impairment Revised Pursuant to the Model Proposed by the United States

Country	2001	2002	2003
	No p21 Model results		

3.97 The formal specification of the model proposed by the Requesting Parties, as submitted to the Arbitrator, is:[91]

$$\text{Reduction in imports} = \left(\frac{\Delta \; / \;}{\Delta \; / \; \Delta} \right) \left(\Delta \quad Q \right) \left(\frac{P \; M}{P \; Q} \right)$$

taken into account, such as the industry distribution of the payments and the fact that one variable in their computation, the import penetration ratio, can vary significantly across industries.

3.107 We also note that the Requesting Parties have not explained the basis on which they chose the highest value for the elasticity of substitution.

3.108 The model proposed by the United States, while qualitatively similar to that of the Requesting Parties, is slightly more sophisticated. The effect of a CDSOA disbursement depends upon a number of parameters beyond the elasticity of substitution between domestic and imported products. In particular, the response of domestic and foreign firms to any change in the domestic price plays a role in determining the overall trade effect.

3.109 The level of sophistication and the heavy data requirements of this model prevented the United States from applying it at the desired level of detail. We note that of the 66 country-product-year data points, the United States applied its model to 21 such points.[96] This indicates, roughly, that estimation of the CDSOA disbursements could only be done for around a third of the cases. The rest of the cases would require the use of proxy data. In our view, such a heavy reliance on proxy data would cast doubt on the reliability of that model. Furthermore, it would seem to us that the use of proxy data is open to the same criticisms as those made by the United States with respect to the Requesting Parties' model in terms of its degree of aggregation.

3.110 Despite the differences between the parties as to the appropriate model to be used, the two models submitted have qualitatively similar characteristics. Both multiply an assumed level of disbursements by a factor, or coefficient, to arrive at the total trade effect. In the case of the Requesting Parties, this factor is 1.54. In the case of the United States, this factor would appear to be on a product and importer basis for each year as illustrated in Table 2. The range of coefficients as estimated by the United States for the seven products for which they have data is 0.27 to 1.41.

3.111 Table 2 illustrates that, with product-specific data, the aggregate trade effect coefficient could exceed 1. At the same time, it also highlights the different effects that one could obtain at different levels of disaggregation.

[96] An estimate for a given product, in a given year for a given exporter is considered to be one observation. There are considerably more periods of observations, however, the United States chose not to submit the data for those observations that did not meet its assumption of *de minimis* effect.

Table 2: Aggregate Trade Effect Coefficient for Products Estimated by the United States

Product	Exporter	Year	Aggregate trade effect coefficient
Alloy magnesium	Canada	2001	1.24
Ball bearings	EC, Japan	2001	0.77
Ball bearings	EC, Japan	2002	0.74
Ball bearings	EC, Japan	2003	0.70
Pasta	EC, Japan	2001	0.27
Preserved mushrooms	India	2002	0.82
Preserved mushrooms	India	2002	200.1875 Tw

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United States' model in its entirety. Our decision is to reject the United States' model in favour of a modified version of the model proposed by the Requesting Parties.

3.116 We have two principal reasons for taking this decision. The first is the lack of available data to implement the United States' model. As we have noted before, relevant data was available for only a third of the samples proposed by the United States and the United States did not provide any indication as to whether or not additional data would be made available. Our second reason is that the only objections the United States had about the Requesting Parties' model concerned the value of the parameters used in the model and the level of aggregation. We agree with the Requesting Parties in their assessment of the United States' view on their submitted model that the United States "does not critique the economic theory supporting the model, but argues that the parameter values used in the model are inappropriate".[97] This implies that if due account is taken of the legitimate concern of both sides regarding the variance in the values of the parameters, then the model of the Requesting Parties could be used to estimate the trade effect of the measure in question.

3.117 A basic economic model to derive a coefficient for the trade effects of disbursements operating as subsidies can be described as the product of four variables: the value of the subsidy, a measure of the *ad valorem* price reduction caused by the CDSOA disbursements (i.e., "pass-through"), a substitution elasticity of imports, and import penetration. The basic relationship of the trade effect can be expressed as follows:

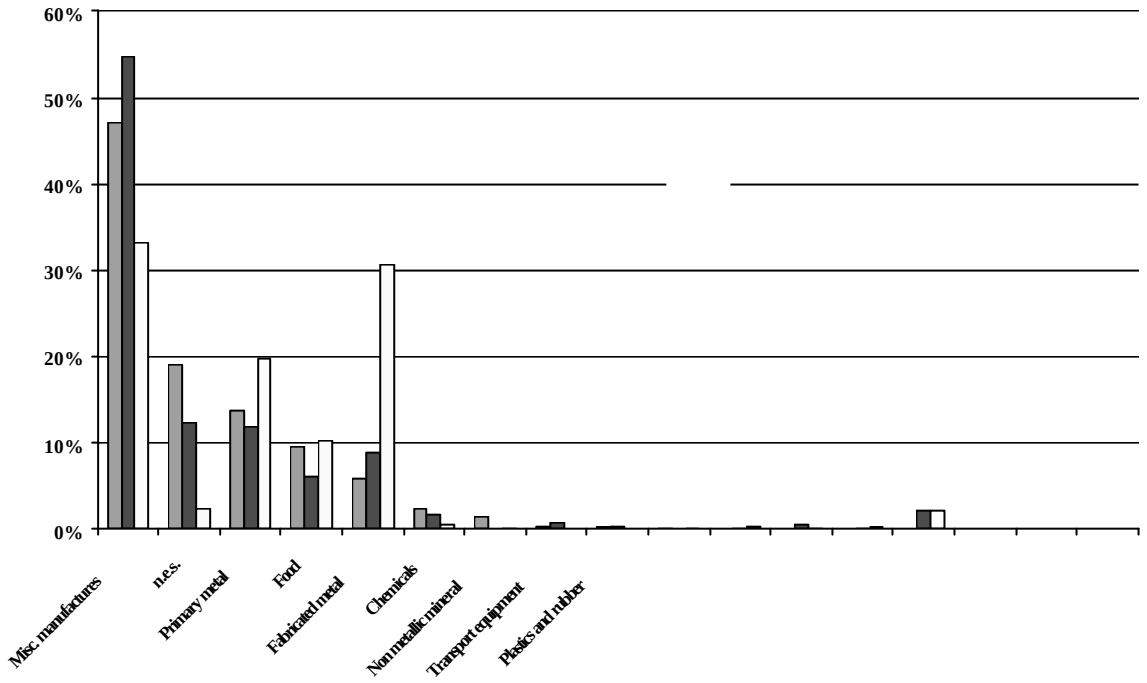
Trade effect = (value of disbursements)*[(pass-through)* (import penetration)*(elasticity of substitution)]

3.118 The term in the square brackets can be defined as a trade effect coefficient. For a given expenditure of CDSOA disbursements that is deemed to affect trade, the product of that expenditure and the coefficient provides the overall trade effect.

3.119 The above expression is identical to the model proposed by the Requesting Parties as presented in equation (5).[98] It differs only in the addition of a separate multiplicative term to reflect the pass-through effect of the disbursements on production. In the Requesting Parties' model, this

companies in the electronics, machinery and primary and fabricated metals industries. In addition, the United States identifies a further 21 per cent of 2002 disbursements as going to the primary and fabricated metal industries. The comparable figures for 2001 are 66 per cent for "miscellaneous manufacturing and not elsewhere specified" (with a similar distribution to that in 2002) and 20 per cent classified as primary and fabricated metal. Chart 1 also highlights the fact that the inter-industry distribution of payments can also vary over time.

Chart 1: Distribution of CDSOA Disbursements by 3-Digit North American Industry Classification, 2001-2003



Industry Classification for our model. Therefore, each of the parameters of the model requires data at that level and both parties were able to submit all the data necessary to run the model. The trade effect expression is, therefore, applied at each industry level for each year to estimate the trade effect of each industry. The sum of these trade effects is then divided by the total annual disbursements for the year to arrive at a trade effect coefficient for that year. This coefficient, by definition, is a weighted average of the CDSOA payments.

3.124 We have also taken into account the reservations of the United States in adopting this approach. The United States underlines four reservations towards this approach: (i) the total payments should not be used; (ii) the total price reduction should not be equivalent to the size of the payments; (iii) industry-specific data should be used; and (iv) greater care should be taken in choosing appropriate elasticity values instead of arbitrarily choosing the highest value. The manner in which these are taken into account is explained later in this section. At this point, we wish simply to recall that the United States' reservations are with how the model is implemented, not with the specification of the model *per se*.

3.125 Our approach is not immune from data difficulties. We are in agreement with the views of the arbitrators in *US –*

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penetration, since there is only one source for this data, the United States' Government. We therefore used the figures provided by the United States regarding import penetration.

3.128 Another issue that needs to be addressed in advance of parameterizing the model is the relevant market to be examined. The Requesting Parties claim that the CDSOA disbursements have an impact on their exports to the United States and also their exports to other markets.[101] Hence, in their view, any analysis of trade effects should take into account the trade effects on the world market.

3.129 We consider that neither the approach advocated by the Requesting Parties, nor the model they proposed would allow us to assess the trade impact of CDSOA disbursements on markets outside the United States. In our opinion, any quantification of this effect would have to heavily rely on speculations and we recall that parties agree that we should not address effects that are too remote or speculative. We are also of the view that, having regard to the nature of the measure at issue, the trade effect of any disbursement to US companies that have supported an anti-dumping or countervailing duty investigation against imports into the United States is more likely to be on the US market than abroad. We therefore limit our analysis to the imports into the United States that are displaced as a result of CDSOA disbursements.

(b) Value of payments

3.130 The Requesting Parties have claimed that, when modelling the trade effects of the disbursements, the total value of all disbursements should be used. In contrast, the United States claims that certain deductions must be applied prior to determining the relevant value of disbursements for modelling purposes.

3.131 In our view, a decision on this issue is not required for modelling purposes. The reason for this is based on the difference between the absolute trade effect and the relative trade effect of a CDSOA disbursement. Unquestionably, a higher value of disbursements used to model the trade effect will yield a higher absolute trade effect value. However, the model we propose is based on the concept of a trade effect coefficient (square brackets in our expression)[102], which is independent of the value of the disbursement.

3.132 In fact, the model proposed by the United States, the so called Armington model, has a similar characteristic. As noted above, the United States has only furnished the Arbitrator with a fully specified model for seven product categories. However, in cases where the model is applied in the same industry to different WTO Members, the relative trade effect is always identical. Only the absolute trade effect varies. For example, take the impact of CDSOA payments on ball bearing imports from the European Communities and Japan in the year 2001. In both cases the aggregate trade effect, according to the United States' model, is 0.77.[103] Similarly, for the years 2002 and 2003 the aggregate trade effects are, respectively, 0.74 and 0.7. Therefore, despite the fact that the payments attributable to the European Communities and Japan are different, the total trade effect in relative terms is identical.

3.133 We recall the United States' arguments that the value of disbursements should be adjusted to take into account administrative errors, reimbursements, revoked anti-dumping or countervailing duty orders. We consider that we should, as a matter of transparency, rely on figures published by

United States' authorities when it comes to assess the value of CDSOA disbursements. As a result, we will disregard administrative errors that have not been corrected at the time of the publication of the relevant figures.[104] Likewise, we see no reason to adjust the figures published by the United States' authorities because reimbursements have been requested but the requests have not yet been finally settled.[105]

3.134 With respect to the United States' argument that disbursements relating to revoked orders should be deducted, we note that, under the CDSOA, payments made in, say, 2004, actually correspond to revenue collected in 2003. If an order was revoked on imports from a given Requesting Party in 2004, this has no influence on the fact that offset payments in 2003 corresponded to duties collected at the time when the order was in place. Under these circumstances, we see no reason to exclude payments made in a given year, even though in that year no duty may have been collected due to the revocation of an existing order, if the payments are based on duties collected while the order was in place. We believe this interpretation to be consistent with the Panel and Appellate Body findings in this case.

3.135 As a result, we decide to use the amount of disbursements published by the United States, without any adjustment.

3.136 The United States has also raised the issue of *de minimis* deductions. We do not have any legal guidance as to why such deductions should be made in these proceedings. In making the deductions, the United States referred to two provisions of the Anti- Tj 11.2ea mase.3334 25 -5.2 .80res in. Tw (5i

(d) Pass-through

3.139 While the concept of pass-through is generally referred to in the economic literature as the extent to which exchange rate changes affect domestic prices, in this case we use the concept in a similar fashion to that used by the arbitrator in the *US – FSC (Article 22.6 – US)* case. The arbitrators in that case noted, in the context of an export subsidy that:

> "[P]ass through relates to the degree to which a company uses a subsidy it receives to lower the price of the product that it exports. At one extreme the company may choose to apply the full amount of the subsidy to the price of its products, thereby lowering its price. At the other, it may choose not to lower the price of the product."[107]

3.140 Therefore, pass-through, in the context of the case before us, is the extent to which a CDSOA disbursement will be applied to reducing the price of a beneficiary firm's products. A 100 per cent pass-through assumption implies an application of the total amount, whereas a zero assumption implies that none will be so employed.

3.141 The United States' position that the pass-through factor is zero is highly unrealistic. A factor of zero would presume that no recipient of a CDSOA payment would ever use the funds in any way that could have a price effect. While this may be the case for some firms, it would seems, it 75 2133 Tw (l amUD

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value we have used the range of 25 per cent to 100 per cent derived from the comments of the parties. The lower point of the range is provided by the United States, whereas the 100 per cent assumption is based, as we stated above, on the assumption that a firm has every incentive to use the funds in a commercially meaningful way. We acknowledge that 100 per cent pass-through is, in practice, not

Table 3: Summary of Trade Effect Coefficient Values by Elasticity and Pass-Through, 2001-2003

2001			
	*Elasticity value*s		
Pass through	Low	Medium	High
25	0.22	0.27	0.33
50	0.43	0.54	0.65
75	0.65	0.81	0.98
100	0.87	1.09	1.30
2002			
	Elasticity values		
Pass through	Low	Medium	High
25	0.25	0.31	0.37
50	0.50	0.62	0.74
75	0.74	0.93	1.12
100	0.99	1.24	1.49
2003			
	Elasticity values		
Pass through	Low	Medium	High
25	0.22	0.28	0.34
50	0.45	0.56	0.67
75	0.67	0.84	1.01
100	0.89	1.12	1.34

D. CONCLUSION: LEVEL OF NULLIFICATION OR IMPAIRMENT

3.149 As mentioned above, the purpose of the development of an economic model in this case was 7 TD (4) Tj 5.25 0 economiTD 0 Tc 0.18755 92.25 0.75 re f 204.o2333e of the development of an economic m50el to define a coefficient by T6h fj 7.5987c 0.28We note5t8at5t8c -soluf 0. c -hybri75 Tt8/Fext 7.5t8at5itTw mbc 0s TfixedD

Amount of disbursements under CDSOA for the most recent year[112] for which data are available relating to anti-dumping or countervailing duties paid on imports from the European Communities at that time, as published by the United States' authorities.

multiplied by

0.72

IV. EQUIVALENCE OF THE LEVEL OF SUSPENSION OF CONCESSIONS OR OTHER OBLIGATIONS WITH THE LEVEL OF NULLIFICATION OR IMPAIRMENT

A. ISSUES RAISED BY THE UNITED STATES IN RELATION TO THE LEVEL OF SUSPENSION OF CONCESSIONS OR OTHER OBLIGATIONS PROPOSE

B. THE LEVEL OF SUSPENSION OF CONCESSIONS OR OTHER OBLIGATIONS DETERMINED BY THE ARBITRATOR TO BE EQUIVALENT TO THE LEVEL OF NULLIFICATION OR IMPAIRMENT

1. Suspension of concessions or other obligations expressed as a duty on an undetermined quantity of trade rather than as a suspension of concessions on a determined value of trade

(a) Arguments of the parties

(i) United States

4.5 The United States contests the Requesting Parties' intention to impose additional import duties on US products which rate will be set so as to collect, over one year, additional duties equivalent to certain offset payments under the CDSOA. The United States contends that the Requesting Parties set no limits on the amount of trade that would be covered by their request. Depending on the amount of duty, the impact on United States exports could exceed by many multiples any impact that the CDSOA may have on exports from the Requesting Parties. The Requesting Parties' suspension proposal stands in stark contrast to the proposals that arbitrators have approved in previous Article 22.6 proceedings.[114] Since equivalence between the amount of disbursement and the duty that the Requesting Parties intend to collect does not, in the view of the United States, ensure a level of suspension equivalent to the level of nullification or impairment, the United States considers that it has established a *prima facie* case that the level of suspension is not equivalent to the level of nullification or impairment.[115]

(ii) European Communities

4.6 The European Communities argues that the United States tries to introduce a "trade effect" test not only for the determination of nullification or impairment but also for the suspension of concessions or other obligations. Nothing in Article 22 of the DSU requires a trade effect test for determining the level of suspension. In any event, the test suggested by the United States would be unworkable in practice, sin

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offset payments attributed to duties collected on products of other Members that are authorized by the DSB to suspend concessions or other obligations in this dispute."[117]

4.9 With the exception of its link with the amount of disbursements under the CDSOA, nothing in the European Communities' proposal enables us to conclude at this stage that the suspension of concessions or other obligations proposed by the European Communities will or will not be equivalent to the level of nullification or impairment in terms of affected trade determined according to this Decision. We are nonetheless concerned that the total impact on trade of an additional duty may not only be difficult to predict in general, but also may vary on the basis of the rate applied and the products subject to that additional duty.

4.10 We are therefore of the view that, in order for the level of suspension of concessions or other obligations proposed by the European Communities to be equivalent to the level of nullification or impairment determined by this Decision:

(a) either the European Communities will have to take appropriate steps to ensure that the total value of United States trade subject to the proposed additional duty does not exceed the *total value of trade* determined to constitute the level of nullification or impairment, or

(b) if and when it submits a revised request for authorization to suspend concessions or other obligations to the DSB further to this arbitration, the European Communities will have to propose other forms of suspension of concessions or obligations that are less likely to have effects on trade exceeding the identified level of nullification or impairment in terms of value of United States exports to the European Communities.

4.11 It does not fall within our mandate to recommend the suspension of specific obligations or the adoption of specific measures by the European Communities.[118] We therefore refrain from taking a decision on this matter. We nonetheless note that the imposition of a 100 per cent *ad valorem* duty on imports of certain goods from the United States, as proposed by requesting parties in other arbitrations, would be a relatively transparent way of addressing the concern expressed above.

2. Suspension of concessions or other obligations by the European Communities and other Requesting Parties so as to cover the total amount of disbursements made under the CDSOA

(a) Main arguments of the parties

(i) United States

4.12 The United States notes that all the Requesting Parties, except Chile, include in their requests, authorization to impose countermeasures in an amount that corresponds to duties collected on dumped and subsidized products from all other countries, including non-WTO Members and WTO Members who either were not complainants in the original dispute or were complainants but did not request authorization to suspend obligations under Article 22.2 of the DSU. The United States is of the view that a Me.171((i)) Tj 11lTD 1suffTj nullres uspendmplnteairhe per tly tsultew

Requesting Party would assume 1/7th of the remaining annual disbursement under the CDSOA, no matter what level of exports each of these parties has with the United States.

(ii) European Communities

4.13 According to the European Communities, the approach pursuant to which all the disbursements under the CDSOA are WTO-inconsistent, constitute in their totality the "level of nullification or impairment" and may be allocated between the Requesting Parties is based on an objective concept of nullification or impairment in relation to the violating measure as such. Article

4.16

which is identifiable at each point in time during the application of the suspension. The European Communities refers to the decision in *US – 1916 Act (EC) (Article 22.6 – US)*, where the arbitrator took into account the objective of Article 22.4, which is to ensure equivalence between two levels in the course of the application of retaliatory reassures. The European Communities considers that it would be speculative to extrapolate a fixed level of nullification or impairment and suspension for the future, given the wide variance among the annual CDSOA offset payments so far. This result is fully justified by the purpose of the retaliatory system, which is to induce compliance. If, in the case of a legislation deemed WTO-inconsistent as such, the suspension of obligations were determined at one point in time, the violating Member could further increase the nullification or impairment after the arbitration in total impunity. The United States' position frustrates the objective of the retaliation. The European Communities adds that a variable level could even be favourable to the United States because it could reduce the level of suspension by reducing the level of nullification or impairment through CDSOA disbursements.[123]

(b) Analysis of the Arbitrator

4.20 We first address the textual arguments. While we note that Article 22.4 refers to "the level" (singular) of nullification or impairment and to "the level" (singular) of suspension of concessions or other obligations, we are not persuaded that these terms impose an obligation to identify a single and enduring level of nullification or impairment. The requirement of Article 22.4 is simply that the two levels be equivalent. As long as the two levels are equivalent, we do not see any reason why these levels may not be adjusted from time to time, provided such adjustments are justified and unpredictability is not increased as a result. In fact, 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.

4.21 Most previous arbitrators have established one single level of nullification or impairment at the level that existed at the end of the reasonable period of time granted to the responding party to bring its legislation into conformity.[124] We do not disagree that this approach is, in the large majority of cases, the most appropriate. However, we do not read anything in Article 22 of the DSU that would preclude us from following a different path if the circumstances of this case clearly required it.

4.22 The economic analysis carried out above suggests that the value and industry distribution of the trade impact of the CDSOA could vary widely from one year to the next, because of the numerous factors affecting the amounts that may be disbursed, the nature of the recipients and how each category of recipient is likely to use the monetary amounts awarded to them under the CDSOA. This variability is, in our opinion, very different in nature and degree from the more steady evolution of exports recorded in other cases where counterfactuals[125] were applied, such as *EC – Bananas III (US) (Article 22.6 – EC)*

that we have calculated above is based on the CDSOA, a law designed and adopted by the United States' authorities, which disbursements are also determined by the United States' authorities. It should be straightforward for the United States' authorities to apply the formula developed in this Decision to find the amount of United States trade that may be subject to

relating to anti-dumping or countervailing duties paid on imports from the European Communities, multiplied by the coefficient identified in Section III.D above.

6.3 On the other hand, the requirement that the level of such suspensions remain equivalent to the level of nullification or impairment suffered by the complaining party seems to imply that suspension of concessions or other obligations is only a means of obtaining some form of temporary compensation, even when the negotiation of compensations has failed.

6.4 In other words, it is not completely clear what role is to be played by the suspension of obligations in the DSU and a large part of the conceptual debate that took place in these proceedings could have been avoided if a clear "object and purpose"

(j) to facilitate the maintenance of the record of the arbitration, and to maximize the clarity of submissions and other documents, in particular the references to exhibits submitted by parties, parties shall sequentially number their exhibits throughout the course of the arbitration.

ANNEX B

METHODOLOGY FOR CALCULATING THE TRADE EFFECT OF CDSOA DISBURSEMENTS

A. INTRODUCTION

1. Section III.C.2 of this Decision outlines the proposed approaches of the parties to estimating the decline in imports arising from the disbursement of funds as part of the United States Continued Dumping and Subsidy Offset Act. The purpose of this Annex is to explain the methodology used to calculate the values in Table 3 in the main text. Section B outlines this methodology. This is followed, in Section C, by an explanation of the changes made to the Requesting Parties' model by the Arbitrator in its application of this model. Section D discusses the issue of the values to be assigned to the various parameters. The last section presents the overall results.

B. METHODOLOGY

2. The role of economic modelling of trade effects is discussed at length in the *US – FSC (Article 22.6 – US)* Arbitration decision.[132] The arbitrator in that case faced an issue similar to that faced by us, which is the selection of an appropriate model. Its approach, however, differs from the one we have taken, since the arbitrator decided to use, in its entirety, the model proposed by one of the parties. In support of its decision, the arbitrator in that case pointed to the fact that the model it used, although proposed by the European Communities, had actually been developed by the United States Government to explain the trade effects of the FSC programme to the United States Congress. Hence, the arbitrator concluded that, if the model was suitable for the United States Congress, it would be suitable for the arbitration.[133]

3. In this case, we received two models in response to our request to all parties to submit what they viewed as suitable models to simulate the trade impact of the CDSOA disbursements. However, as explained in Section III.C.2, the models proposed by the Requesting Parties and the United States, although broadly similar, differed in their level of aggregation and, to some extent, in the variety of parameters that estimate the counterfactual decline in the value of imports arising from CDSOA payments.[134] The model of the Requesting Parties relied on aggregate numbers for each of the three parameters, whereas the model of the United States calculated results at the product level for each

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[132] Section VI.B of WT/DS108/ARB.

[133] On this point the arbitrator in the *US – FSC (Article 22.6 – US)* case states: "In this regard, the very fact that the US Treasury report was submitted to Congress is, in our view, of considerable weight. That report did suggest that it may have somewhat overstated the results. Indeed, it may not be absolutely exact. Nonetheless, the US Treasury obviously made the judgement that, in the context of presenting the effects of the FSC scheme to US Congress (the authors, we note, of the legislation concerned), this report, including the modelling assumptions on which it is based, had sufficient credibility to represent a reliable reflection of the impact of the scheme when it came to the matter of informing the US Congress on its operation and effects. That was presumably not undertaken lightly and, at the very least, it was presumably considered to be not manifestly misleading." Para 6.48.

[134] The US model, although based on the same basic economic framework as the model proposed by the Requesting Parties, is specified differently, since it includes separate parameters for the supply elasticity and the own-price elasticity of demand. It is based on Francois and Hall (1997), "Partial Equilibrium Modelling" in Francois, J. and Rennert, K. (eds.), *Applied Methods for Trade Policy Analysis: A Handbook*, Cambridge: Cambridge University Press. By similar framework we mean that the mechanism by which CDSOA disbursements affect imports is the same. Imports are displaced due to an increase in their price relative to domestic goods sold by US firms benefiting from CDSOA disbursements.

affected WTO Member. The aggregate estimate using this approach was obtained by summing the individual estimates for each product.

4. Despite the relative merits of the proposed models, as presented in these proceedings, each possessed fundamental flaws that made them unworkable for this case. The model of the Requesting Parties required economy wide values. Hence, a single elasticity parameter was used to capture the substitutability between domestic and imported goods. Similarly, the import penetration value in this model was assumed to be the economy-wide average. The difficulty with this approach is that it ignores the substantial industry variation in CDSOA disbursements. Intuitively, one would expect the values for the elasticity of substitution and import penetration for industries with relatively larger shares of CDSOA disbursements to have a greater weight in the overall number.

5. The US model, although well accepted in the literature, could not be applied to all products for which there are CDSOA disbursements. This meant that, for these products, an assumption was required to proxy the trade effect. This raised the question whether or not the greater complexity of the US model would be warranted if, in the end, assumptions about key parameters would have to be made in a seemingly ad hoc fashion.

6. Furthermore, precise estimates for each of the elasticity parameters were not available. Hence, a range of values would have been required for the own-price elasticity of demand, elasticity of substitution and the supply elasticities of domestic and foreign producers. As stated by the Requesting Parties this introduces "greater parameter shortcomings than the Requesting Parties' proposed model".[135]

7. Since it is difficult, technically, to run the US model on an independent basis we have opted for a modified version of the model proposed by the Requesting Parties. In particular, we adjusted it to take into account technical concerns identified by the United States. While the principal reason for using the model of the Requesting Parties is the ease with which it can be employed, we also take note of the fact that the United States did not criticise the specification of the Requesting Parties' model. Thus criticisms were focussed predominantly on the values assigned to the various parameters.[136]

8. The basic model of the Requesting Parties is specified below as equation (A1). This equation is identical to equation (5) in the main text:

$$\text{Reduction in imports from CDSOA Disbursements} = h * S * R \quad \text{(A1)}$$

Where[137],

- η is the elasticity of substitution $h = \left(\frac{\Delta M / M}{\Delta P_q / \Delta P_q} \right)$
- S is the total value of the payments expressed as a margin of the price reduction on domestic production financed by payments and can be expressed as $S = \Delta P_q * Q$

[135] Comments of the Requesting Parties to additional questions of the Arbitrator, para. 23.

[136] "The United States does not critique the economic theory supporting the model, but argues that the parameter values used in the model are inappropriate", Comments of the Requesting Parties to additional questions of the Arbitrator, para. 21.

[137] All the variables are explained in paragraph 3.96.

- R is the ratio of the value of imports to the value of domestic shipments in the markets in question and can be expressed as $R = \left(\frac{P\ M}{P_P Q} \right)$

Standard Industrial Classification, the United States provided the necessary data at the 3-digit level of the North American Industrial Classification ("NAIC"), which is more appropriate.

15. In a subsequent set of questions, we requested each of the parties to submit the additional data required to run an economic model at the 3-digit level of the NAIC system.[139] In responding to these questions, both the Requesting Parties and the United States expressed concern about conducting a counterfactual trade effects analysis at the 3-digit NAIC level. Consequently, before proceeding we should state and address these concerns.

16. The Requesting Parties' view was that:

> "3-digit NAIC levels cannot accurately represent substitution elasticities for products receiving CDSOA payments. The 3-digit NAIC level is not at a sufficiently disaggregated level and covers too broad a range of products. In fact, most products under dumping orders are specified at a highly disaggregated level. The use of aggregate estimates of substitution elasticities for disaggregated products would result in biased results for the calculated trade effects."[140]

17. They further submitted that this bias is likely to be downward, since the product specific elasticities are likely to be higher than the aggregate elasticities.[141] This assertion is substantiated through the example of pasta. This product would be included with breakfast cereals and candy bars, which tend to be branded products. The Requesting Parties also highlighted a similar problem associated with various categories of bearings by distinguishing between high-precision bearings used in aircraft and those used in the automotive industries and home appliances.

18. The United States shared the same view as the Requesting Parties that a 3-digit analysis would necessarily be biased. They stated, "all of the parties agree that any model based on data from the three-digit North American Industry Classification or from the Global Trade Analysis Project (GTAP) would result in a relatively imprecise estimate of the effect the CDSOA has on the trade of the Requesting Parties".[142]

19. The parties have placed us in a difficult position with respect to choosing an appropriate level of aggregation. We agree with the United States that a more product specific methodology is preferable to an aggregate methodology. However, given that if the product-specific methodology lacks the appropriate data, we do not see how a disaggregated methodology would be more accurate than an aggregate methodology. Furthermore, we note that the solution of the United States for cases where necessary data was missing was to assume the results of their analysis with available data applied to those products for which data was not available.[143] The United States, in effect, assumes that the analysis for one set of products could automatically be applied to another set of products, which must implicitly introduce the very same sorts of biases and inaccuracies that the United States argued against.

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[139] Question 1 of the second set of questions of the Arbitrator.

[140] Replies of the Requesting Parties to the second set of questions of the Arbitrator.

[141] Replies of the Requesting Parties to the second set of questions of the Arbitrator, para. 6.

[142] Comments of the United States to replies of the Requesting Parties to the second set of questions of the Arbitrator, para. 1.

[143] See footnote 6 of US Exhibit 18. The United States adopts the same approach that we adopt, which is to assume a trade effect coefficient. It defines the level for these products for which information is not available by the product of the offset payments and the ratio of the modelled trade impact for all complaining parties in the given year and the total modelled offset payments for all complaining parties in the given year.

variance in values should be explored. In this regard, the model of the Requesting Parties narrows the debate over relevant elasticity values to only the elasticity of substitution.

26. The Requesting Parties themselves acknowledge the difficulties in obtaining precise estimates. They submitted two sets of elasticities as evidence of possible values that could be used to model the trade effect. One set was sourced from the Global Trade Analysis Project ("GTAP") based on the sectors within their basic model. The second submitted set for the same sectors was sourced from United States International Trade Commission ("USITC") researchers. The two sets differed considerably (Annex Table 1). The standard GTAP range has a lower mean (2.7) than the USITC estimates (3.1), smaller range (4 compared to 3.4), but both have the same median (2.8). The USITC has higher values in 22 of the categories and the same value in eight of the categories.

27. In an attempt to develop a workable framework for modelling, the parties were requested to submit elasticities of substitution at the 3-digit NAIC level.[147] The Requesting Parties, while expressing some reservations, responded positively to this request and provided the data. The United States did not, but stated many of the difficulties confronting any methodology to concord data from one classification to another. It also offered to respond positively to the request, but only at a later stage.[148] As a result, we did not have any choice, but to proceed with the elasticity estimates provided by the Requesting Parties. However, before doing so, we reviewed the estimates submitted by the United States according to the product categories for which CDSOA disbursements were made. Basic summary statistics are presented in Annex Table 1 for each of the four sets of elasticity values: GTAP, USITC estimates of GTAP, US submitted elasticities (low, high and mid-point) by CDSOA product categories and NAIC 3-digit industry category as submitted by the Requesting Parties.

Annex Table 1: Summary Statistics of Sets of Elasticities of Substitution

	GTAP	USITC GTAP	Requesting Parties NAIC	US Product Low*	US Product Mid-Point*	US Product High*
Mean	2.68	3.09	2.67	2.83	3.99	5.17
Median	2.8	2.80	2.8	3	4	5
Std. Deviation	0.8	1.18	0.79	0.87	0.92	1.12
Minimum	1.8	1	1.8	1	2	3
Maximum	5.2	5	5.2	5	6.5	8
Count	41	41	31	65	65	65

* Does not include values for seamless pipe and sugar, since specific values for these products were not provided. They were only listed as "high" and "perfect" respectively.

28. The table confirms the view of the Requesting Parties that aggregate elasticities tend to be lower. The first three columns reflect the values from the GTAP classification, including the concorded classification into the NAIC category. The median for all three sets is 2.8 and the mean ranges from 2.67 to 3.09. In contrast, the mean of the mid-point values of the US product elasticity estimates is 3.99 and the median value is 4. The highest value for this category is 6.5, whereas the highest value for the aggregated values is 6.2. In general terms the descriptive statistics of the low category proposed by the United States corresponds to the statistics of the first three columns.

29. The table also confirms that the issue of what values to assign to the various elasticities of substitution that a modeller may use is far from being resolved. Our case is complicated by the fact

[147] Question 1 of the additional set of questions of the Arbitrator.

[148] "If the Arbitrators so request, the United States could calculate such concorded elasticity estimates using where necessary, either simple averages or trade-weighted averages." Replies of the United States to additional questions of the Arbitrator, para. 2.

that, despite asking specifically for values that we could use, we only have one set of values for the 3-digit NAIC level. In order to account for measurement error and, of course, aggregation bias, we

Annex Table 2: Import Penetration Ratios by 3-digit NAIC Industry, 2001-2003

Industry	NAIC Code	2001	2002	2003
Agricultural products	111	0.16	0.16	0.17

Annex Table 3: Counterfactual Trade Effect of CDSOA Disbursements
Assuming 100 per cent Pass-through by 3-digit NAIC, 2001

					Reduction in imports (US dollars)		
NAIC Code	Industry	Disbursements (US dollars)	Elasticity	Market Penetration	Low	Mid-point	High
111	Agriculture	25251.96	2.2	0.16	7111	8889	10666
114	Fish products	63576.45	2.8	20.60	2933672	3667090	4400508
311	Food	22086937.38	2.2	0.05	1943650	2429563	2915476
313	Textiles and fabrics	0	2.2	0.18	0	0	0
314	Textiles mill products	21673.08	2.2	0.25	9536	11920	14304
321	Wood products	0	2.8	0.18	0	0	0
322	Paper	413729.38	1.8	0.13	77450	96813	116175
325	Chemicals	5444564.42	1.9	0.22	1820662	2275828	2730994
326	Plastics and rubber	694385.83	1.9	0.11	116101	145127	174152
327	Non metallic mineral	3253894.67	2.8	0.15	1093309	1366636	1639963
331	Primary metal	31938114.29	2.8	0.30	21462413	26828016	32193619
332	Fabricated metal	13801060.19	2.8	0.11	3400581	4250727	5100872
333	Machinery, except electrical	27551.75	2.8	0.38	23452	29315	35178
336	Transportation equipment	714537.7	5.2	0.44	1307890	1634862	1961835
337							

Annex Table 4: Counterfactual Trade Effect of CDSOA Disbursements
Assuming 100 per cent Pass-through by 3-digit NAIC, 2002

					Reduction in imports (US dollars)		
NAIC Code	Industry	Disbursements (US dollars)	Elasticity	Market Penetration	Low	Mid-point	High
111	Agriculture	535685.42	2.2	0.16	150849	188561	226274
114	Fish products	261675.49	2.8	26.89	15761657	19702071	23642485

Annex Table 5:

Annex Table 6: Summary of Results for Various Values for Substitution Elasticity and Pass-through, 2001-2003

2001			
	Low	Medium	High
25 per cent	0.22	0.27	0.33
50 per cent	0.43	0.54	0.65
75 per cent	0.65	0.81	0.98
100 per cent	0.87	1.09	1.30
2002			
	Low	Medium	High