WORLD TRADE ORGANIZATION

WT/DS217/ARB/KOR
31 August 2004

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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

the rate of this additional import duty will be set so as to collect, over one year, additional duties equivalent to:

(a) the offset payments made in the latest annual distribution under the CDSOA from duties collected on products from the Republic of Korea; plus

(b) a proportionate amount of the balance of total offset payments less the offset payments attributed to duties collected on products from other Members that are authorized by the DSB to suspend concessions or other obligations in this dispute.

1.6 Every year, prior to the adjustment of the additional import duty, Korea will notify to the DSB a detailed list indicating the level of the additional duty on the selected products in the light of the changes in the level of the disbursements made under the CDSOA.

B. REQUEST FOR ARBITRATION AND SELECTION OF THE ARBITRATOR

1.7 On 26 January 2004, the United States submitted a communication to the DSB[6] objecting to the level of suspension of tariff concessions and related obligations under GATT 1994 proposed by Korea, on the grounds, *inter alia*, that Korea's request failed to specify the level of suspension it proposed to implement, and was therefore an inadequate basis for an arbitrator to make the determinations provided for in Article 22.7 of the DSU.

1.8 At the DSB meeting of 26 January 2004, Korea's request under Article 22.2 of the DSU and the United States objection were referred to arbitration in accordance with Article 22.6 of the DSU.[7]

1.9 The arbitration was undertaken by the original panel, namely:

Chairman: Mr Luzius Wasescha

Members: Mr M. Maamoun Abdel-Fattah
Mr William Falconer

1.10 On 13 February 2004, the Arbitrator held a joint organization meeting with the United States and all the parties who requested authorization to suspend concessions or other obligations pursuant to Article 22.2 of the DSU[8], and in respect of which the United States had also requested arbitration. During this meeting, the parties expressed their views on the draft timetable and working procedures prepared by the Arbitrator covering all the arbitrations requested. The Arbitrator adopted its working procedures on 18 February 2004 and its timetable on 23 February 2004.[9]

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

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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 otwmythe partiy oncernid and ihe United States'wou Tj 225 0 TD -0.21339 Tc 0.3231 Tw (ld be hll wev to texpess t

1.19 Then, in Section IV, the Decision addresses the level of suspension of concessions or other obligations proposed by Korea, 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. R

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preliminary ruling was not appropriate to the matters the United States had raised. The purpose of that process is essentially to eliminate from an arbitration issues that could not be deemed to fall within the mandate of the Arbitrator.[5]

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 We consider this to be the case in relation to the claim that there should be a minimum degree of specificity supporting any request for suspension of concessions or other obligations so as to allow the respondent in the main dispute to exercise its right to request arbitration.[17]

2. Main arguments of the parties

(a) United States

2.13 The United States claims that the Requesting Parties have failed to specify the level of suspension of concessions and the level of nullification or impairment, both in their requests under Article 22.2 of the DSU and subsequently in the course of this arbitration, in a way that enables the Arbitrator to determine equivalence. The United States presents this issue as one of specificity of the request under Article 22.2 of the DSU and, more generally as a question of duty to cooperate with the Arbitrator by providing information on the level of nullification or impairment.[18]

2.14 The United States contends that the Requesting Parties have failed to quantify either the level of suspension or the level of nullification or impairment. The Requesting Parties replace specific

an dispute to exercise its right to request arbitration.

United States

the level

prejudice the ability of the United States to defend itself (i.e., in this case, to make an informed decision to request, or not, arbitration under Article 22.6 and to argue its case before the Arbitrator).[26] This question may be answered by reviewing the United States' submissions in these proceedings. Having reviewed those submissions, we note that the degree of specification of the level of suspension proposed by Korea in no way prejudiced the ability of the United States to exercise its rights under Article 22.6.

2.22 We therefore conclude that the request of Korea for authorization to suspend concessions or other obligation, while it could have certainly been more informative, is acceptable in terms of the minimum specificity requirement applicable to Article 22.2 requests. In this respect, we consider that the United States did not demonstrate that either its ability to reach an informed decision to request arbitration, or its ability to defend itself in these proceedings had been prejudiced as a result of the way Korea's request was formulated.

C. BURDEN OF PROOF

1. Main arguments of the parties

2.23 The parties have repeatedly raised the question of the burden of proof in these proceedings. Korea recalls that, according to the numerous precedents in Article 22.6 proceedings, the United States has to prove that the requested level of suspension of obligations is not equivalent to the level of nullification or impairment. As the United States asserts that the nullification or impairment of the CDSOA is "zero", it also bears the burden of proof for such an allegation.[27]

2.24 The United States acknowledges that it bears the burden of proof in these proceedings. However, it argues that it only has to submit evidence sufficient to establish a "presumption" that the level of suspension proposed is not equivalent to the level of nullification or impairment. According to the United States, it does not bear the burden to show that the level of nullification or impairment is "zero". By contrast, the Requesting Parties failed to substantiate their claim that the level of nullification or impairment corresponds to the full amount of disbursements made under the CDSOA, despite the fact that Korea itself asserts that the level of nullification or impairment must be based to the extent possible, on credible, factual and verifiable information, and not on speculation.[28]

2. Position of the Arbitrator

2.25 Since burden of proof has been extensively addressed in previous Article 22.6 arbitrations, we need not dwell on this matter. Like the arbitrator in *EC – Bananas III (Ecuador) (Article 22.6 – EC)*, we simply note the considerations of the arbitrator in *EC – Hormones (Canada) (Article 22.6 – EC)* on this matter and conclude that, while it is for the United States to prove that Korea's request for suspension exceeds the level of nullification or impairment, Korea 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:

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> 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 –WT/DS217/ARB/KOR* *in*

Article 30

to an anti-dumping or countervailing duty order) was not relevant to the findings of the Panel or the Appellate Body under Article 18.1 of the Anti-Dumping Agreement and Article 32.1 of the SCM Agreement. A Member cannot suffer nullification or impairment as a result of a non-permissible specific action against dumping or against a subsidy if no order is in place and if no duties can be collected on that Member's products. The allocation of the total annual disbursements advocated by the Requesting parties shows that the Requesting Parties have not even attempted to relate the levels of suspension proposed to the level of nullification or impairment suffered.

3.3 In addition, the United States argues that special accounts relating to revoked orders should not be considered because, in the case of revoked orders, a link does not exist between offset payments and an anti-dumping or countervailing duty order. When there is no anti-dumping or countervailing duty order in place, any payment received by an affected domestic producer in 2003 cannot nullify or impair any benefits related to Article 18.1 of the Anti-Dumping Agreement or Article 32.1 of the SCM Agreement.[36]

3.4 The United States further claims that disbursements under the CDSOA, i.e. the concrete application of the CDSOA, are not part of the measure found inconsistent with the WTO Agreement. As a result, an examination of the actual disbursements made under the CDSOA would go beyond the terms of reference of the original disputes.[37]

3.5 Yet, even if one were to consider these payments, the United States recalls that the DSB found that the CDSOA offset payments caused no adverse effect[38] and there is no evidence that CDSOA offset payments have in reality affected Requesting Parties' dumped or subsidized trade. There is no requirement under the CDSOA for how offset payments are to be used. Likewise, a There is no requi.22.5 0 TD0.0830 TD 0.0036S.5 -12.711.2,s1.719-2Dlats are t7

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3.11 Korea disagrees with the United States that previous arbitrations support the view that the level of nullification or impairment should be based on the measure's trade effect. The decisions in *EC – Hormones (US) (Article 22.6 – EC)* and *EC – Bananas III (Article 22.6 – EC)* dealt with traditional market access barriers such as tariffs, quotas and other import restrictions. The situation is different in the case of the CDSOA. Korea also contests the argument of the United States that the CDSOA does not have any trade effect because the use of the disbursements by the recipient companies is not pre-determined or the trade effect of such disbursements is *de minimis*. It also contests the attempt of the United states to equate the findings of the Panel that the CDSOA causes no "adverse effects" under Article 5(b) of the SCM Agreement to an absence of "nullification or impairment". The Panel explicitly drew a distinction between the two concepts. Korea also notes that the arbitrator in *US – 1916 Act (Article 22.6 – US)* based its conclusion on the broader notion of "economic effects" of the measure at issue. The arbitrator in that case did not examine the economic effect of the application or the economic consequence of the measure (i.e. the court judgements or the settlement agreements). If the same logic were to be applied in this case, it would ensue that only the economic effect of the CDSOA (i.e. the offset payments made there under) should be taken into account for determining the quantitative level of nullification or impairment of the CDSOA. As for the relationship between offset payments and anti-dumping and countervailing duty orders, Korea recalls that neither the Appellate Body nor the Panel excluded any offset payments from their analysis. Likewise, Korea notes that, even in case of revoked orders, the United States domestic industry would still receive a disbursement as part of the CDSOA offset payment. The adverse effect on foreign producers/exporters would remain the same.

3.12 Korea also contests the fact that the level of nullification or impairment could be "zero". The Panel concluded that nullification or impairment existed and the Appellate Body upheld this conclusion. For Korea, claiming that a level of nullification or impairment is "zero" amounts to saying that there is no nullification or impairment. While the arbitrator in *EC – Bananas III (Article 22.6 – EC)* stated that the presumption under Article 3.8 of the DSU cannot be taken as evidence of a particular level of nullification or impairment, this does not mean that no nullification or impairment exists. Korea notes that the arbitrator in *US – 1916 Act (Article 22.6 – US)* acknowledged that any amount payable pursuant to court judgements or settlement agreements would constitute nullification or impairment. The issue in that case was one of proving the amount of those payments. It had nothing to do with the substantive determination of the level of nullification or impairment. The arbitrator did not conclude that the level of nullification or impairment was *de facto* "zero".[45]

3.13 Finally, regarding the risk alleged by the United States that the approach advocated by Korea would lead to each Requesting Party suspending obligations in excess of its respective level of nullification or impairment, Korea argues that this approach is based on an objective concept of nullification or impairment in relation to the violating measure as such, not in relation to individual nullifications or impairments. As all offset payments constitute nullification or impairment, the suspension of obligations should be authorized to the same amount.[46]

B. ANALYSIS OF THE ARBITRATOR

1. Introduction

3.14 The approaches of the parties are – in appearance at least – based on diametrically opposed conceptions of "nullification or impairment". However, while the United States' approach seems to rely largely on the practice of other arbitrations under Article 22.6 of the DSU, the approach defended

[45] Written submission of Brazil, the European Communities, India, Japan, Korea and Mexico, paras. 45-68.

[46] Written submission of Brazil, the European Communities, India, Japan, Korea and Mexico, paras. 73-80.

by Korea is, if one excludes the arbitrations carried out under Article 4.10 and 4.11 of the SCM Agreement, novel in the context of Article 22.6 of the DSU.

3.15 Consistent with the practice of previous arbitrators[47], we proceed with the review of the approach advocated by Korea. If we find it to be compatible with the DSU, we will proceed with a determination of the level of nullification or impairment on that basis. If we do not find it compatible with the DSU, we will determine the level of nullification or impairment by applying a methodology appropriate in this case.[48]

3.16 Korea's contention that the level of nullification or impairment corresponds, at the minimum, to the total amount disbursed by the United States under the CDSOA seems, in our understanding, to be based essentially on the following premises:

(a) a violation is a form of nullification or impairment;

(b) the notion of "benefit" under Article XXIII of GATT 1994 and the DSU encompasses rights under the WTO Agreement;

(c) Korea has a right under the WTO Agreement to expect that the CDSOA should not exist. As a result, Korea, together with the other Requesting Parties in this case, have the right to suspend concessions or other obligations up to the full amount of disbursements under the CDSOA.

3.17 We will hereafter address these elements. We will also subsequently address a core issue for our determination of the level of nullification or impairment, i.e. whether we can consider disbursements under the CDSOA in our calculation.

2. Review of the approach proposed by Korea

(a) Article XXIII of GATT 1994 and the DSU

3.18 After careful consideration we are not persuaded that the position of Korea is supported by Article XXIII of GATT 1994 or the DSU, for the reasons stated below.

3.19 First, in order to assess Korea's arguments, it seems appropriate to revisit the source of the concept of nullification or impairment, i.e., Article XXIII of GATT 1994, on which the DSU is based.[49] Article XXIII:1 of GATT 1994 provides – in relevant parts – as follows:

> "If any contracting party should consider that any benefit accruing to it directly or indirectly under this agreement is being nullified or impaired [...] as a result of
>
> (a) the failure of another contracting party to carry out its obligations under this Agreement, or
>
> (b) the application by another contracting party of any measure, whether or not it conflicts with the provisions of this Agreement, or
>
> (c) the existence of any other situation,

[47] See, e.g., *Brazil – Aircraft (Article 22.6 – Brazil)*, paras. 1.5 and 3.18.
[48] *EC – Hormones (Canada) (Article 22.6 – EC)*, para. 12.
[49] See Article 3.1 of the DSU. This provision makes clear that the DSU must be applied in a manner consistent with the principles embodied in Article XXIII of GATT 1994.

> The contracting party may, with a view to the satisfactory adjustment of the matter, make written representations or proposals to the other contracting party or parties which it considers to be concerned."

3.20 Considered in the context of Article XXIII of GATT 1994, nullification or impairment and violation are clearly separate concepts. Article XXIII:1 basically provides that nullification or impairment of benefits is what must be ultimately demonstrated.[50] Nullification or impairment may essentially exist "as a result of": (a) a violation; (b) a situation of non-violation; or (c) "any other situation". Therefore, violation is not to be confused with nullification or impairment of a benefit.

3.21 We find support for this position in Article 3.8 of the DSU, which reads as follows:

> "In cases where there is an infringement of the obligations assumed under a covered agreement, the action is considered *prima facie* to constitute a case of nullification or impairment. This means that there is normally a presumption that a breach of the rules has an adverse impact on other Members parties to that covered agreement, and in such cases, it shall be up to the Member against whom the complaint has been brought to rebut the charge."

3.22 A violation generates, pursuant to Article 3.8 of the DSU, a *presumption* of nullification or impairment. Article 3.8 does not treat violation as *a form* of nullification or impairment. Article 3.8 merely exempts the party having demonstrated the violation from also having to demonstrate nullification or impairment. It does not modify the fundamental requirement that what is ultimately to be demonstrated is nullification or impairment.

3.23 This is confirmed by the last sentence of Article 3.8, which provides the opportunity for the alleged violating party to rebut the presumption of nullification or impairment. If violation was conceptually equated by Article 3.8 to nullification or impairment, there would be no reason to provide for a possibility to rebut the presumption. The theoretical possibility to rebut the presumption established by Article 3.8 can only exist because violation and nullification or impairment are two different concepts.

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)*, Korea argues that, even though the presumption under Article 3.8 cannot be taken as evidence of a particular level of nullification or impairment, that nullification or impairment exists and cannot be "zero". Korea also cites the *US – 1916 Act (EC) (Article 22.6 – US)* arbitration in support of its position.

3.26 We accept 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.

3.27 We note that Korea refers to Articles 22.3(a) and 23.1 of the DSU in support of its position that violation is a form of nullification or impairment.

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[50] Since "impediment of the attainment of an objective of the Agreement" is not discussed in this case, we refrain from referring to it.

3.28 Article 22.3(a) reads as follows:

> "[T]he general principle is that the complaining party should first seek to suspend concessions or other obligations with respect to the same sector(s) as that in which the panel or Appellate Body has found a violation or other nullification or impairment."

3.29 Article 23.1 reads as follows:

> "When Members seek the redress of a violation of obligations or other nullification or impairment of benefits under the covered agreements or an impediment to the attainment of any objective of the covered agreements, they shall have recourse to, and abide by, the rules and procedures of this Understanding."

3.30 We are of the view that, taken in their context, including Article XXIII of GATT 1994 and Article 3.8 of the DSU, those provisions simply deal with the principles to be applied in the suspension of concessions or more generally in dispute resolution. They reinforce, rather than contradict, the basic distinction between violation, on the one hand, and nullification or impairment the result of a violation, on the other hand.

3.31 Korea considers that the concept of "benefit" in the DSU encompasses the rights and obligations of Members under the WTO Agreement.

3.32 As mentioned above, pursuant to Article XXIII of GATT 1994, nullification or impairment of a benefit may be "the result of" a violation of a right, which implies that a violation is not to be confused with the nullification or impairment itself. Rather, the violation is the *cause* of a nullification or impairment of a benefit. In other words, rights *confer* benefits (e.g., predictable conditions of competition), they are not *themselves* benefits within the meaning of Article XXIII of GATT 1994 and the DSU.

3.33 Korea also argues that, since violation is a form of nullification or impairment, and since a right generally applies *erga omnes*, each Member should be entitled to retaliate up to the full effect of the violation.

3.34 Again, we consider that this argument fails to recognize the distinction between the violation of a right and the consequence thereof, i.e., nullification or impairment within the meaning of 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]

[51] See *US – Section 110(5) Copyright Act (Article 25.3)*, para. 3.18 and US – *1916 Act (EC) (Article 22.6 – US)*, para. 5.23.

> under Article 22.6 of the DSU.[54] Moreover, like the parties to this dispute, the Arbitrators will proceed on the assumption that the licensing royalties realizable by copyright holders constitute an adequate measure of the economic benefits arising from Articles 11*bis*(1)(iii) and 11(1)(ii)."

3.39 We further note that, with the exception of the arbitrations carried out under Article 4.11 of the SCM Agreement, previous arbitrators have relied on an approach based on the economic or trade effect of the violation.[55] While most arbitrations have relied on the narrower concept of trade effect, we note that both the *US – Section 110(5) Copyright Act (Article 25.3)* arbitrator and the *US – 1916 Act (EC) (Article 22.6 – US)* arbitrators referred to economic effects.[56] The use of direct trade effect in most case reflects the fact that trade loss is generally more directly identifiable and quantifiable and that, in such a context, arbitrators preferred to rely on verifiable figures.

3.40 In both *US – Section 110(5) Copyright Act (Article 25.3)* and *US – 1916 Act (EC) (Article 22.6 – US)*, reliance on the broader concept of economic impact was dictated by the nature of the measures at issue. In *US – Section 110(5) Copyright Act (Article 25.3)*, no actual trade took place, but rights had been breached which conferred economic benefits to the holders of intellectual property rights in the form of royalties. In *US – 1916 Act (EC) (Article 22.6 – US)*, the law at issue dealt with the possibility of civil and/or criminal proceedings being taken against companies importing dumped imports. Since a judicial decision or settlement under the 1916 Act did not automatically restrict

imports

3.42 This said, our task is not to determine whether this is the only approach acceptable under Article 22.6 of the DSU.[57] On the contrary, it is to determine whether the approach advocated by Korea is compatible with the DSU.

3.43 From a review of the arbitrations which would seem to support Korea's approach, we note that the only arbitration decisions based on the value of violation itself were those under Article 4.10 and 4.11 of the SCM Agreement.

3.44 The position adopted by Korea seems to be based essentially on the approach followed by the arbitrator in *US – FSC (Article 22.6 – US)*, who relied on the *prohibited nature* of the subsidy concerned and the *erga onmes* nature of the violation to conclude that "appropriate countermeasures" under Article 4.10 SCM could correspond to the full amount of the subsidy illegally granted, irrespective of its trade effect.

3.45 First, we note that disbursements under the CDSOA are different from the export subsidy addressed by the *US – FSC (Article 22.6 – US)* arbitrator.

3.46 Second, we consider that the reasoning underlying the *US – FSC (Article 22.6 – US)* decision cannot be extended to the present case. One reason is that the mandate of arbitrators under Article 4.11 of the SCM agreement is different from that of arbitrators under Article 22.7 of the DSU. In this regard, Article 4.11 reads as follows:

> "In the event a party to the dispute requests arbitration under paragraph 6 of Article 22 of the Dispute Settlement Understanding ("DSU"), the arbitrator shall determine whether the countermeasures are appropriate."[58]

3.47 The *US – FSC (Article 22.6 – US)* arbitrator expressly differentiated the situation under Article 4.10 and 4.11 of the SCM Agreement and that under Article 22.4 of the DSU:

> "We recall that Article 22.4 of the *DSU* provides as follows:
>
> > 'The level of the suspension of concessions or other obligations authorized by the DSB shall be equivalent to the level of the nullification or impairment.'
>
> The drafters have explicitly set a quantitative benchmark to the level of suspension of concessions or other obligations that might be authorized. This is simila5 r816 Twg2u0a75 Tfthion This i

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 therefore

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3.75 Moreover, we note from past arbitrations that, in all instances, arbitrators have quantified or valued the benefit nullified or impaired. In the present case, both parties have also attempted to quantify the level of nullification or impairment. Such quantification or valuation exercises show, in our view, that even though each party relies on a radically different legal approach, the economic rationales underlying these approaches seem to be very close. We consider that, beyond the legal argumentation of the Requesting Parties, their choice of the total disbursement made under the CDSOA is ultimately a benchmark, which they expect to yield a higher level of nullification or impairment than the more "classical" benchmark based on lost trade. All the more so as the United States has taken the view that the level of nullification or impairment caused by the CDSOA was in fact "zero" in terms of direct trade loss. As we see it, the Requesting Parties in effect use the amount of disbursements under the CDSOA as simply a proxy for the conduct of an economic analysis of the impact of the CDSOA disbursements on their exports or, more generally, on the competitive situation of the businesses concerned. Under those circumstances, we believe that our decision to rely on the trade effect resulting from the violation to determine the level of nullification or impairment does not, in economic terms, significantly depart from the rationale of the Requesting Parties' approach.

3.76 We are also mindful that other arbitrators have taken a prudent approach by avoiding claims that were "too remote", "too speculative" or "not meaningfully quantified".[69] We recall that parties have also cautioned us against the risk of relying on overly speculative data.[70]

3.77 For this reason, we considered it inappropriate to try to apply a counterfactual based on a relatively simple equation and simple parameters, as in *EC – Hormones (US) (Ae rerfe71ters,95 0 TD 0 Tc 0.1875 T*

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.

C. CALCULATION OF THE LEVEL OF NULLIFICATION OR IMPAIRMENT THROUGH AN ECONOMIC MODEL

1. Introduction

3.80 As mentioned above, we consider that an appropriate way to assess the trade effect of a law operating, in economic terms, like a domestic subsidy[72] was to endeavour to establish an economic model. This model, when applied to the facts of this case, would identify a coefficient which, when multiplied by the amount of disbursements over a given period, would produce a figure corresponding to a trade effect which could reasonably be deemed to correspond to the level of nullification or impairment for that period.

3.81 We also noted that when establishing an economic model, we would need to address a number of arguments made by the United States in relation, *inter alia*, to the calculation proposed by the Requesting Parties: its own view that the level of nullification or impairment would, in fact, be "zero"; the combined effect of offset payments and an anti-dumping or countervailing duty order; and the effect of CDSOA payments vis-à-vis the United States or foreign competitors not subject to anti-dumping or countervailing duties.[73] These arguments are addressed in the relevant parts of this section in relation to the determination of the amount of disbursements to be used in the application of the model, together with the United States' arguments regarding the fact that the figures published by the United States' authorities may either not be accurate or not definitive.[74]

2. Review of the approaches of the parties regarding economic models

(a) United States

3.82 The United States originally took the view that the trade effect of the CDSOA disbursements can be estimated to be zero.[75] This position is grounded in the view that benefiting firms would not expend the CDSOA disbursements to enhance their commercial position. Instead, the funds would be used elsewhere. The United States did not disagree that modelling was appropriate in this case, but because the input to the model would be zero, the output, or conclusion about trade effects would also necessarily be zero.[76] The United States added that even if the firms concerned did use the funds to enhance their competitive position, there would be a *de minimis* effect on output and hence on trade. In other words, the United States considered that the pass-through effect of the government transfers, i.e. the *ad ad*

3.83 However, the United States ultimately acknowledged that modelling could actually be done with some precision and volunteered a possible model.[77]

3.84 The model proposed by the United States adopts a disaggregated approach to estimating trade effects. Instead of treating the United States' economy as a whole and estimating a single trade effect number, it estimates the trade effect at the product level for each importer. These individual values are then summed to obtain the total trade effect. The model proposed by the United States also divides the countries in the world into three groups: the United States, WTO Members affected by the CDSOA disbursements and other exporters to the United States, thereby isolating the effects of the CDSOA payments only on the WTO Members subject to active anti-dumping or countervailing duty orders. The inputs required to run the model include:[78]

- A current market value share for each source of the products;
- An *ad valorem* measure of the CDSOA distribution that actually affected production;
- An estimate of the elasticity of substitutability as between products produced in the United States and imports (the elasticity of substitution);
- An estimate of the price sensitivity of supply for each product (the elasticity of the United States' supply, complaining party import supply, and rest-of-the-world import supply); and
- An estimate of the market demand elasticity.

3.85 Estimates of the supply, demand and substitution elasticities were taken from various US International Trade Commission reports. Supply elasticities for WTO Members with dumped or subsidized exports into the United States were arbitrarily set at 100 to reflect that they would not be able to adjust the price of their product downwards.[79] Trade and production data for the model is sourced from the Bureau of the Census, US Department of Commerce, and USITC investigations.[80]

3.86 The output of the model for each WTO Member affected by the CDSOA payments and each industry is as follows:[81]

- "An estimate of the decrease in US domestic shipments"; and
- "An estimate of changes in foreign trade partner exports to the United States, specifically breaking out the gain to the individual complaining party, the exemption of whose duty payments from CDSOA served as the basis for the particular counter factual estimation."

3.87 While the model is straightforward and based on the standard literature in applied international economics, implementation of the model by the United States in this case was not. The United States made a number of assumptions, which in its view were specific to the current case. These assumptions affect the input of the model, the values of the elasticities and the treatment of unavailable data.

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[77] In commenting on the view of the Requesting Parties that modelling would be "complex and burdensome" and Chile's comment that modelling would be "tedious", the United States stated that:

> "The fact that an exercise is complex, tedious, or even burdensome does not mean it can be dispensed with."

Comments of the United States of 4 May 2004 on answers of the Requesting Parties to the questions of the Arbitrator, para. 3.

[78] Exhibit US-18.

[79] Exhibit US-18.

[80] Exhibit US-18.

[81] Exhibit US-18.

3.88 These are:

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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.

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

$$\text{Reduction in imports} = \left(\frac{\Delta M / M}{\Delta P_q / \Delta P_q} \right) * \left(\Delta P_q * Q \right) * \left(\frac{P_m M}{P_q Q} \right) \qquad (1)$$

where,
M = volume of imports
Δ M = change in the volume of imports
P_m = the price of imports
Q = the volume of domestic shipments
P_q = the price of domestic goods
ΔP_q = change in the price of domestic goods

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

2001	2002	2003

3.98 The Requesting Parties further simplify this expression by reducing it to the following three components:

- the elasticity of substitution (η), which is the first term and can be expressed as:

$$h = \left(\frac{\Delta M / M}{\Delta P_q / \Delta P_q} \right) \qquad (2)$$

- the total value of the payments expressed as a margin of the price reduction on domestic production financed by payments (S), the second term in the equation and can be expressed as: $S = \Delta P_q * Q$ (3)

- the ratio of the value of imports to the value of domestic shipments in the markets in question: (R), the third term in the equation and can be expressed as $R = \left(\frac{P_m M}{P_q Q} \right)$ (4)

3.99 Taken together, the model of the Requesting Parties as expressed by equation (1) can be presented as the product of the above three variables (equations (2)-(4)).

$$\text{Reduction in imports} = h * S * R \qquad (5)$$

3.100 The Requesting Parties operationalize their model for the year 2002 with data from public sources. For the elasticity of substitution, they adopt the highest elasticity in the classification of sectors used by the Global Trade Analysis Project of 5.2.[92] They argue that this is appropriate since "the kinds of products that are typically subject to anti-dumping and countervailing duties tend to be commodities and commoditised manufactured goods that compete under conditions much closer to perfect competition".[93] They further argue that:

> "elasticities of substitution specific to the products benefiting from the CDSOA payments would be higher than the aggregated average GTAP or NAIC data because CDSOA disbursements typically relate to commodities and commoditised manufactured products, for which preference of buyers is largely determined by price. Moreover, it is generally acknowledged in the economic literature that the more disaggregate the sample the higher the estimated substitution elasticity. Therefore the Requesting Parties consider that an elasticity drawn from the upper end of the GTAP range (5.2) is justified as typical degree of price sensitivity".[94]

3.101 In addition to the homogeneity of products as implied by the assumption of commoditized manufactured products, the Requesting Parties submit that elasticity values should be taken from

[92] See joint replies of Brazil, Canada, the European Communities, India, Japan, Korea and Mexico to the questions of the Arbitrator of 21 April 2004, para. 36.

[93] Ibid.

[94] Joint replies of the Requesting Parties to the second set of questions of the Arbitrator, 7 June 2004, para. 6.

long-run estimates and not short-run estimates. They note that these estimates are "on average, twice as large as short-run elasticities".[95]

3.102 Data on domestic shipments are sourced from public sources. The Requesting Parties estimate that in the year 2002 the ratio of imports to domestic production was 0.295.

3.103 Using total payments for 2002 of US$329 million, the Requesting Parties, therefore, conclude that the total trade effect of the CDSOA programme is US$505 million. In simple terms, they conclude that for the year 2002 the trade effect coefficient would be 1.54 times the level of disbursements. At this point we should note that this coefficient is independent of the value of disbursements. It depends only on the assumed value of the elasticity of substitution and the import penetration ratio. Changes in either one of these values will change the overall value of the coefficient.

3.104 We also recall that, in commenting on the model submitted by the Requesting Parties, the United States observed that the Requesting Parties include the amount of all CDSOA offset payments. This is equivalent to assuming that every CDSOA dollar disbursed by the United States under the CDSOA would be put towards reducing the price of domestic products (i.e. pass-through effect). The United States also notes that an aggregate measure of import penetration is used as opposed to a measure specific to those industries where there is an incidence of CDSOA payments. In addition to these criticisms, the United States notes that the Requesting Parties used the highest elasticity value available.

3. Analysis of the Arbitrator

(a) Comparison of the models

3.105 We note at the outset that the modelling approaches of the parties differ in terms of their level of aggregation and also in terms of their specification.

3.106 The model proposed by the Requesting Parties is aggregated and contains two terms in addition to the level of disbursements. Certain known elements of the CDSOA programme are not 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

[95] Comments of Brazil, Canada, the European Communities, India, Japan, Korea and Mexico on the responses of the United States to the second set of questions of the Arbitrator, page 14.

[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.

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.

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

Product	Exporter	Year	Aggregate trade effect coefficient

assumption that only 50 per cent of a given CDSOA disbursement will have an impact on output, will necessarily reduce any estimate of the trade effect by 50 per cent.

(b) Choosing an appropriate model

3.114 The previous sections presented the approaches to economic modelling submitted by the parties and a number of shortcomings we identified with both approaches. In general, we considered the approach of the Requesting Parties to be too aggregated, hence not specific enough to this case. While the model specification proposed by the United States is disaggregated and well specified, we concluded that there is insufficient data to run that model with any degree of accuracy.

3.115 Our 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. However, as mentioned above, the United States failed to provide sufficient data to employ such a model, despite it being in the United States' interest to do so. Moreover, the United States decided to apply a *de minimis* threshold for assessed trade impacts. The result was that the United States' model could not be implemented independently. This left us with the option of either accepting or rejecting the 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

[97] Comments of Brazil, Canada, the European Communities, India, Japan, Korea and Mexico of 14 June 2004 on the United States replies to the second set of questions of the Arbitrator, para. 21.

[98] See Box 1 of the joint replies of Brazil, Canada, the European Communities, India, Japan, Korea and Mexico to questions of the Arbitrator, dated 28 April 2004.

the pass-through effect of the disbursements on production. In the Requesting Parties' model, this

difficulties should not be confused with those resulting from the failure of the parties to supply data, where those parties are generally the source of the relevant information. While the first type of difficulty (the intrinsic difficulties attached to the use of an economic model) is one of the elements arbitrators must consider in deciding whether to apply an economic model, the second type of difficulty (that resulting from the failure of the parties to supply data) should not be part of that consideration. We therefore remain convinced that it is appropriate to rely on the information available when the arbitrator is of the view that an economic model would be the most effective way of calculating the level of nullification or impairment and one or more parties do not fully cooperate with the arbitrator in providing data and do not submit convincing reasons for not doing so. In other words, we consider that we are expected to produce, at a minimum, an outcome which is robust in a lowest common denominator sense, but which is nonetheless, in our opinion, a fair measure of the level of nullification or impairment.

4. Data issues

(a) Introduction

3.127 A complete explanation of the approach we have adopted is appended as Annex B. This section addresses the data issues related to economic modelling in this case. It discusses the value of the payments, the pass-through effect and the elasticity of substitution. It does not discuss import 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

[101] Joint replies of the Requesting Parties to the second set of written questions of the Arbitrator, 7 June 2004, paras. 13-14.

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

disbursement, then we do not see any grounds, legal or economic, to round that value down to zero and issue an award of "zero".

(c) Elasticity of substitution

3.137 The views of the parties also differ on the appropriate value of the elasticity of substitution to be used in modelling, although they are all in agreement that it is possible to calculate values at the 3-digit NAIC level.[106] The Requesting Parties submitted a set of elasticities at that level. The United States did not submit these elasticities when requested, and failed to convincingly contest the validity of the values submitted by the Requesting Parties. As a result, we used in our model the values submitted by the Requesting Parties.

3.138 In recognition of the fact that different aggregation methodologies exist, we decided to vary the elasticity values submitted by the Requesting Parties by 20 per cent. Therefore, three different sets of simulations are performed; one using the submitted elasticities and one each for values that are 20 per cent lower and 20 per cent higher than these elasticities.

(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 arbitrator 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 h22.6

payments to train their workers, to upgrade their technology or machinery, or to expand their capacity and/or production. While using the funds in these sorts of ways clearly will have supply side effects that may have eventual consequential effects on prices, these price effects will be inter-temporal. Finally, some firms may, as the United States argues, not use the funds in any way that would have price effects.

3.143 In order to identify a suitable value for the pass-through coefficient we sought supplemental submissions and guidance from the parties.[108] On the one hand, the United States responded that a study of their Domestic International Sales Corporation programme had identified a pass-through of that export subsidy of 75 per cent of the payment, but expressed the belief that "a pass-through of 25 per cent is reasonable".[109] This statement was not supported by any methodology or based on any factual evidence. On the other hand, the Requesting Parties did not alter their position that the only reliable pass-through is 100 per cent.

3.144 In the absence of precise information on the value of the pass-through, we adopt the same approach as we adopted for the value of the elasticity of substitution; instead of using one specific 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 realistic for the reasons mentioned above, and we do not wish to give any credit to the Requesting Parties for not having justified their position that the pass-through is 100 per cent. However, we were not provided with any better information allowing us to apply another percentage as the upper end of our range and we are intuitively of the view that, if the upper end of the range is not 100 per cent, it is probably very close to that percentage.

5. Application of the model

3.145 We now proceed to apply the model. Table 3 summarizes our results for the range of assumed elasticities of substitution and for a range of assumed pass-through values for 2001, 2002 and 2003. For each year we have 12 values, giving us 36 values in all. At the outset we note that the range for 2003 differs from the ranges for the other two years. This arises due to the change in the industry distributions for that year (see Chart 1 above). The yearly change in the industry distribution is also one of the reasons why we use an average based on 2001-2003, even though the United States was not required to bring its legislation into conformity with its WTO obligations until 27 December 2003.

3.146 Since our approach is based on assigning a single value of a trade effect coefficient we need a methodology to reduce the 36 estimates to a single value. Since we have no guidance from the literature or from the submissions of the parties, we have decided to take for each year, the average of the middle two rows and the middle column and average these three values. In doing so, we obtain a value of 0.68 for 2001, 0.78 for 2002 and 0.70 for 2003 and an overall value of 0.72.

3.147 The United States contests the right of the Requesting Parties to "retaliate on behalf of other Members" and we now proceed to address how this point is taken into account in our modelling. Our core rationale is that the trade effect of the CDSOA measure can be estimated to be the nullification or impairment that the Requesting Parties have suffered as a result of the measure having not been

based on total disbursements on Requesting Parties products of US$190,199,701.02. Our remaining task is to allocate this total trade effect amongst the Requesting Parties. One possibility is to use the aggregate share of total imports for each Requesting Party. This, however, has an obvious bias, especially due to the industry concentration of the disbursements as discussed earlier. More detailed trade data could circumvent the problem of industry concentration, but, in our view, this is also problematic, due to the fact that the trade data would be biased since they reflect import values when the anti-dumping and countervailing duties were in place.

3.148 In our view, a better measure is based on the distribution of CDSOA payments, which is in turn based on aggregate duty collections on imports of products subject to anti-dumping duty or countervailing duty orders, but which can be analysed to determine the distribution of those imports amongst the various exporting countries. From this we may conclude that a WTO Member's share of the total disbursements is a better indicator of the share of their exports that will be lost in consequence of the disbursement than the aggregate share of imports. Therefore, we decide to allocate the total trade effect amongst the Requesting Parties on the basis of the share of CDSOA disbursements attributable to duties collected on their respective exports. In doing so, we note that the level of nullification or impairment will not exceed, for each Requesting Party, the level of nullification or impairment that results from the disbursements relating to that party's exports subject to anti-dumping or countervailing duty orders.

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

2001			
	Elasticity values		
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		

3.150 We note that this solution is hybrid to the extent that it combines a fixed coefficient calculated on the basis of actual disbursement patterns over a particular period of time – in this case 3 years[110], with variable amounts of future disbursements. We also acknowledge that this coefficient is based on past disbursements (2001-2003) which may reflect neither the amount nor the categories of products which will be subject to anti-dumping or countervailing duty orders and lead to CDSOA disbursements in the future. We nevertheless note that this approach is consistent with past arbitrations where representative periods where used to determine volumes and prices of exports[111] in order to calculate levels of nullification or impairment and levels of suspension fixed once and for all. It is also consistent with the practice under Article XIII of GATT 1947 and 1994 for allocation of quotas or tariff quotas.

3.151 As a result we conclude that: the level of nullification or impairment in this case may be deemed to correspond, for Korea and for a given year, to the following:

> 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 Korea 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 PROPOSED BY KOREA

4.1 The United States has argued, in relation to Korea's request for suspension[113], that Korea has failed to specify the level of suspension of concessions or other obligations in a way that allows the Arbitrator to determine equivalence. The United States also claims that other features of Korea's request are not compatible with Article 22 of the DSU. The United States considers that Korea's request to collect additional duties based on offset payments places no limits on the level of suspension proposed. It also considers that Korea should not be allowed to, as the United States puts it, "retaliate for other Members". Finally, Korea should not be allowed to impose a variable level of suspension each year.

4.2

impairment as we have decided to determine it (i.e., in terms of trade effect). This issue is addressed

considered the amount of additional duty as related to the *nature* of the envisaged suspension, which falls outside the mandate of arbitrators under Article 22.7 of the DSU.[116]

(b) Analysis of the Arbitrator

4.7 In the approach we decided to follow in order to determine the level of nullification or impairment, disbursements made under the CDSOA were only a starting point in assessing the *trade effect* of the CDSOA on each Requesting Party. The figure reached as a result of the application of an economic model by the Arbitrator is, consequently, a *value of trade*.

4.8 Comparatively, Korea's proposed suspension of concessions or other obligations is not based on a value of trade but aims at equating, through the imposition of a special duty, the amount disbursed by the United States under the CDSOA in relation to imports from Korea and "a proportionate amount of the balance of total offset payments less the offset payments attributed to duties collected on products from 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 Korea's proposal enables us to conclude at this stage that the suspension of concessions or other obligations proposed by Korea 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 Korea to be equivalent to the level of nullification or impairment determined by this Decision:

(a) either Korea 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, Korea 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 Korea.

4.11 It does not fall within our mandate to recommend the suspension of specific obligations or the adoption of specific measures by Korea.[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.

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

[117] See para. 1.5(b) above.

[118] See, e.g., *EC – Hormones (US) (Article 22.6 – EC)*, para. 19. We note in this respect that no claim was raised in relation to Article 22.3 of the DSU.

2. Suspension of concessions or other obligations by Korea 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

(b) Position of the Arbitrator

4.14 For reasons already stated above, we are of the view that the reasoning applied in the context of arbitrations pursuant to Article 4.10 and 4.11 of the SCM Agreement is not automatically applicable to arbitrations under Article 22.6 of the DSU, *inter alia* because the test applied under Article 4.10 and 4.11 of the SCM Agreement is not the same – the terms of Article 4.10 and 4.11 and Article 22.6 are different –

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)* or *EC – Hormones (US) (Article 22.6 – EC)*. In those cases, the trade loss identified on the basis of a counterfactual was artificially fixed once for all. In the present case, there is an economic justification for allowing a variable level of nullification or impairment and, correlatively, a variable level of suspension of concessions or other obligations.

4.23 We are mindful of the United States' arguments that the ability to vary the level of suspensions could make the level of countermeasures applied unpredictable from one year to the next, and that no formula could be developed to introduce sufficient predictability. We do not find these arguments compelling. Indeed, the level of nullification or impairment in terms of the trade effect 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 the suspension of concessions or other obligations in each following year. Any unpredictability ought correspondingly to be minimal.

4.24 Moreover, in this case, the United States would control the levers to make the actual level of suspension of concessions or other obligations go down. Indeed, in other arbitrations where the level of nullification or impairment was set once and for all, the responding party could not influence the level of countermeasures applied to its trade, unless the requesting party agreed to modify it. In this case, the level of suspension of concessions will automatically depend on the amount of disbursements made under the CDSOA in a given year. If this amount decreases, so will the level of suspension of concessions or other obligations that the Requesting Parties will be entitled to impose. If no disbursements are made, the level of suspension will have to be "zero".

4.25 Finally, while we have expressed some reservations about the notion of "inducing compliance", we note that variable levels could achieve this objective without affecting the requirement of "equivalence" between the level of nullification or impairment and the level of suspension under Article 22.4 of the DSU. We have been presented with convincing evidence that, if the CDSOA remains in force, the amount of disbursements is likely to increase in the coming years. We are conscious of the fact that higher countermeasures may not actually induce compliance in all instances. However, if we were to decide on a level of suspension fixed once for all on the basis of the first years of application of the CDSOA, it is possible that the level of suspension of concessions or other obligations would become, as time goes by, significantly less than the actual level of nullification or impairment resulting from the continued application of the CDSOA. In other words, the cost of the violation for the United States could decrease. In such a case, the incentive to comply would most probably decrease too. We believe that such a risk exists in the present case and justifies that we determine a variable level of nullification or impairment and, consequently, a variable level of suspension of concessions or other obligations.

4.26 We also consider this approach to be consistent with the principle of prompt and effective resolution of disputes, contained in Article 3.3 and 3.4 of the DSU.[126]

4.27 Finally, like the arbitrators in *EC – Hormones (US) (Article 22.6 – EC)*[127] and *US – 1916 Act (EC) (Article 22.6 – US)*[128], we note that the United States may have recourse to the appropriate dispute settlement procedures in the event that it considers that the application of the suspension by

[125] For a definition of "counterfactual", see footnote 34 above.
[126] See *EC – Hormones (Canada) (Article 22.6 – EC)*, para. 38. E C

Korea exceeds, for a given period, the level of nullification or impairment that Korea has sustained as a result of the violation of the United States' obligations by the CDSOA, as calculated using the formula developed above.[129]

V. AWARD OF THE ARBITRATOR

5.1 For the reasons set out above, we determine that, in the matter *United States – Continued Dumping and Subsidy Offset Act of 2000 (Original Complaint by Korea)*, the level of nullification or impairment suffered by Korea in a particular year can be deemed to be equal to the total of disbursements made under the CDSOA for the preceding year relating to anti-dumping or countervailing duties paid on imports from Korea, multiplied by the coefficient identified in Section III.D above.

5.2 Accordingly, we decide that the suspension by Korea of concessions or other obligations in the form of the imposition of an additional import duty above bound custom duties on a final list of products originating in the United States covering, on a yearly basis, a *total value of trade* not exceeding, in US dollars, the amount resulting from the following equation:

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

multiplied by:

> 0.72

would be consistent with Article 22.4 of the DSU.

5.3 In this respect, we note that *Korea* will notify the DSB every year, prior to the adjustment of the additional import duty, a detailed list indicating the level of the additional duty on the selected products in the light of the changess ha1.7 Tc 0.11g-221461.25ies1465 Tcs. 61.2.25 Tfch75 25 Tf 4c 0.292in

concessions or other obligations is intended to induce compliance, as has been acknowledged by previous arbitrators.[130] However, exactly what may induce compliance is likely to vary in each case, in the light of a number of factors including, but not limited to, the level of suspension of obligations authorized.[131]

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" were identified.

6.5 The WTO dispute settlement system authorizes Members to challenge a law as such, i.e. irrespective of whether it has been applied or not. The "classical" approach based on an assessment of the trade effect of a given measure may not always contribute to the identification of the actual level of nullification or impairment, in particular if no instances of application had arisen at the time. This may be because the trade effect of a measure may be difficult to assess due to the lack of verifiable figures. We are of the view that, while parties share a duty to cooperate with the Arbitrator in the establishment of the facts, there is no reason *a priori* to sanction the requesting party or the respondent if supporting figures are difficult or impossible to find. We believe that this is a situation that has to be addressed in order to reach a decision on what may be achievable through recourse to suspension of obligations in such cases.

6.6 In this arbitration, we have interpreted the concept of nullification or impairment, *inter alia*, from the terms of Article XXIII of GATT 1994 and Article 3.8 of the DSU. We believe, however, from the extensive discussion of this concept by the parties, that the actual meaning of this provision is disputed and needs to be addressed in the appropriate forum.

6.7 Finally, we note that an issue that arose as a consequence of following the approach whereby each party would be granted the right to suspend obligations exclusively in relation to its own exports is that there will remain disbursements under the CDSOA in respect of goods from other Members and non-WTO Members for which no suspension of concessions or other obligations have been authorized.

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[130] *EC – Bananas III (US) (Article 22.6 – EC)*, para. 6.3.

[131] While the value of the suspension or concessions or other obligations easily comes to mind as a relevant factor in inducing compliance, it must also be acknowledged that the actual role of the value of such suspension in securing compliance or not may vary from one case to the next. In some cases, even a very high amount of countermeasures may not achieve compliance, whereas in some others a limited amount may.

(j)

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 $h = \left(\frac{\Delta M / M}{\Delta P_q / \Delta P_q} \right)$
-

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]

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

values for each of the years are not too dissimilar from the overall value of 0.295 presented by the Requesting Parties, which could also be used as a proxy.

D. IMPLEMENTING THE MODEL

34. Having dealt with the specification and various parameters of the model, we turn now to its implementation. The adopted aggregation methodology for the results at the 3-digit industry level is similar to that of the United States. Each counterfactual estimation of the trade loss arising from CDSOA disbursements at the 3-digit industry level is summed to obtain the total trade effect. This total trade effect is then divided by the total CDSOA disbursements for that year to obtain a value of the trade effect coefficient. This value, by definition, would be specific to the assumptions about the values of the elasticities of substitution and the pass-through effect. Changes in the assumptions of these variables will necessarily alter the final result. As explained previously, the approach with respect to the values of the elasticities of substitution is to vary the values by 20 per cent below and above the submitted values.

35. This process is repeated for each year from 2001 through to 2003, assuming a value of 100 per cent pass-through. Annex Tables 3-5 present the results of these simulations. In these tables,

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

NAIC Code	Industry	Disbursements (US dollars)	Elasticity	Market Penetration	Reduction in imports (US dollars)		
					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

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

NAIC Code	Industry	Disbursements (US dollars)	Elasticity	Market Penetration	Reduction in imports	
					Low	Me59(Penetra9g8E472.5 5.2 Tw (Low) Tj 20.25 0 T47.55 T

Annex Table 5: Counterfactual Trade Effect of CDSOA Disbursements
Assuming 100 per cent Pass-through by 3-digit NAIC, 2003

					Estimated Reduction in Imports (US dollars)		
NAIC Code		Disbursements (US dollars)	Elasticity	Market Penetration	Low	Mid-point	High
111	Agriculture	417142.63	2.2	0.17	124809.1	156011	187214
114	Fish products	668638.52	2.8	23.75	35571569.3	44464462	53357354
311	Food	19378335.76	2.2	0.05	1705293.5	2131617	2557940
313	Textiles and fabrics	92126.35	2.2	0.21	34049.9	42562	51075
314	Textiles mill products	4153133.37	2.2	0.30	2192854.4	2741068	3289282
321	Wood products	71164.16	2.8	0.19	30287.5	37859	45431
322	Paper	354593.19	1.8	0.13	66379.8	82975	99570
325	Chemicals	1185138.69	1.9				

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
25 per cent	0.25	0.31	0.37
50 per cent	0.50	0.62	0.74
75 per cent	0.74	0.93	1.12
100 per cent	0.99	1.24	1.49
2003			
	Low	Medium	High
25 per cent	0.22	0.28	0.34
50 per cent	0.45	0.56	0.67
75 per cent	0.67	0.84	1.01
100 per cent	0.89	1.12	1.34