UNITED STATES – SUBSIDIES ON UPLAND COTTON

Recourse to Arbitration by the United States under Article 22.6 of the DSU and Article 4.11 of the SCM Agreement

DECISION BY THE ARBITRATOR
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## LIST OF ABBREVIATIONS

<table>
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<tr>
<th>Acronym</th>
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<tr>
<td>2002 Farm Bill</td>
<td>Farm Security and Rural Investment Act of 2002</td>
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<tr>
<td>ATPSM</td>
<td>Agricultural Trade Policy Simulation Model</td>
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<td>CCC</td>
<td>Commodity Credit Corporation</td>
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<td>CCPs</td>
<td>Counter-cyclical payments</td>
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<td>CY</td>
<td>Calendar year</td>
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<td>DSB</td>
<td>Dispute Settlement Body</td>
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<td>DSU</td>
<td>Dispute Settlement Understanding</td>
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<td>ECGs</td>
<td>Export credit guarantees</td>
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<td>FAPRI</td>
<td>Food and Agricultural Policy Research Institute</td>
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<td>FAS</td>
<td>Foreign Agricultural Service</td>
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<td>FSRI</td>
<td>Farm Security and Rural Investment</td>
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<td>FY</td>
<td>Fiscal year</td>
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<td>GATS</td>
<td>General Agreement on Trade in Services</td>
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<td>GATT 1994</td>
<td>General Agreement on Tariffs and Trade 1994</td>
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<td>GSM</td>
<td>General Sales Manager</td>
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<td>ILC</td>
<td>International Law Commission</td>
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<td>IRS</td>
<td>Interest rate subsidies</td>
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<td>ML</td>
<td>Marketing loans</td>
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<td>MY</td>
<td>Marketing year</td>
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<td>ROW</td>
<td>Rest of the World</td>
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<td>RMSE</td>
<td>Root mean square error</td>
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<td>SCM Agreement</td>
<td>Agreement on Subsidies and Countervailing Measures</td>
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<td>SCGP</td>
<td>Supplier Credit Guarantee Programme</td>
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<td>Step 2</td>
<td>User Marketing Step 2</td>
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<td>TRIPS</td>
<td>Trade-Related Aspects of Intellectual Property Rights</td>
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<td>USDA</td>
<td>United States Department of Agriculture</td>
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<td>US</td>
<td>United States</td>
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<td>Vienna Convention</td>
<td>Vienna Convention on the Law of Treaties</td>
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I. INTRODUCTION

A. INITIAL PROCEEDINGS

1.1 On 21 March 2005, the Dispute Settlement Body ("DSB") adopted the Appellate Body report and the report of the Panel in this case, as modified by the Appellate Body.

1.2 The Appellate Body upheld the conclusions of the panel that the Step 2 payments made to domestic users and those made to exporters were subsidies within the meaning of Article 3.1(b) of the SCM Agreement (in the case of the former) and Article 3.1(a) of the same Agreement (in the case of the latter), and were prohibited by those provisions respectively and granted and maintained inconsistently with Article 3 of that Agreement. The Appellate Body also upheld the Panel's findings that the export credit guarantee programmes at issue, i.e. GSM 102, GSM 103 and SCGP, constituted per se export subsidies within the meaning of Item (j) of the Illustrative List of Export Subsidies in Annex I of the SCM Agreement and therefore were subsidies inconsistent with Article 3.1(a) and 3.2 of the SCM Agreement. The Appellate Body also upheld the Panel's conclusion that the effect of marketing loan programme payments, Step 2 payments, market loss assistance payments and countercyclical payments (the "price-contingent subsidies") was significant price suppression in the same world market within the meaning of Article 6.3 (c) of the SCM Agreement.3

1.3 As recommended by the original panel under Article 4.7 of the SCM Agreement, the compliance period for the prohibited subsidies expired on 1 July 2005. In accordance with Article 7.9 of the SCM Agreement, the compliance period for the actionable subsidies expired on 21 September 2005, six months after the date on which the DSB adopted the Appellate Body report.4

1.4 On 30 June 2005, the United States Department of Agriculture (the "USDA") announced that the United States Commodity Credit Corporation (the "CCC") would no longer accept applications for export credit guarantees under the GSM 103 programme.5 The USDA also announced that the CCC would use a new fee structure for the GSM 102 and SCGP programmes.6

1.5 In October 2005, the CCC ceased issuing export credit guarantees under the SCGP.7

1.6 On 1 February 2006, United States Congress adopted legislation repealing the Step 2 payments programme for upland cotton effective as of 1 August 2006.8

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1 Appellate Body Report, United States – Subsidies on Upland Cotton, WT/DS267/AB/R (hereafter the "Appellate Body Report").
2 Panel Report, United States – Subsidies on Upland Cotton, WT/DS267/R (hereafter the "Panel Report").
3 See Appellate Body Report, para. 763 (c), (d) and (e).
4 See WT/DS267/21, WT/DS267/26.
5 See Panel Report, para. 3.16 (referring to "USDA announces changes to export credit guarantee programs to comply with WTO findings", USDA Foreign Agricultural Service (FAS) Online News Release of 30 June 2005 (Exhibit Bra-502 submitted by Brazil to the Panel); and "Notice to GSM-103 Program Participants", USDA FAS Program Announcement of 30 June 2005 (Exhibit Bra-503 submitted by Brazil to the Panel)).
6 See Panel Report, para. 3.16.
7 See ibid. (referring to United States' first written submission to the Panel, para. 20, and "Summary of FY 2006 Export Credit Guarantee Programme Activity for GSM-102 as of close of business: 9/30/2006" (Exhibit Bra-513 submitted by Brazil to the Panel)).
8 See Panel Report, para. 3.7 (referring to Section 1103 of the Deficit Reduction Act of 2005, Public Law No. 109-171 (Exhibit Bra-435 submitted by Brazil to the Panel)).
1.7 On 18 August 2006, Brazil requested the establishment of a panel pursuant to Article 21.5 of the Dispute Settlement Understanding ("DSU") concerning the alleged failure of the United States to implement the recommendations and rulings of the DSB. At its meeting of 28 September 2006 the DSB decided, in accordance with Article 21.5 of the DSU, to refer this matter, if possible, to the original Panel. The compliance panel report was circulated to Members on 18 December 2007.

1.8 With respect to the export credit guarantees issued under the revised GSM 102 programme after 1 July 2005, the compliance panel found that the United States had failed to comply with the DSB recommendations and rulings by acting inconsistently with Articles 10.1 and 8 of the Agreement on Agriculture and Article 3.1(a) and 3.2 of the SCM Agreement:

"Regarding GSM 102 export credit guarantees issued after 1 July 2005 the United States acts inconsistently with Article 10.1 of the Agreement on Agriculture by applying export subsidies in a manner which results in the circumvention of US export subsidy commitments with respect to certain unscheduled products and certain scheduled products, and as a result acts inconsistently with Article 8 of the Agreement on Agriculture. Regarding GSM 102 export credit guarantees issued after 1 July 2005 the United States also acts inconsistently with Article 3.1(a) and 3.2 of the SCM Agreement by providing export subsidies to unscheduled products and by providing export subsidies to scheduled products in excess of the commitments of the United States under the Agreement on Agriculture. By acting inconsistently with Articles 10.1 and 8 of the Agreement on Agriculture and Article 3.1(a) and 3.2 of the SCM Agreement the United States has failed to comply with the DSB recommendations and rulings. Specifically, the United States has failed to bring its measures into conformity with the Agreement on Agriculture and has failed 'to withdraw the subsidy without delay'."

1.9 The compliance panel concluded that "to the extent that the measures taken by the United States to comply with the recommendations and rulings adopted by the DSB in the original proceeding are inconsistent with the obligations of the United States under the covered agreements, these recommendations and rulings remain operative."

1.10 On 12 February 2008, the United States notified the DSB of its intention to appeal certain issues of law covered in the Report of the compliance panel and certain legal interpretations developed by the panel and filed a Notice of Appeal. On 25 February 2008, Brazil notified the DSB, pursuant to Article 16.4 of the DSU, of its intention to appeal certain issues of law covered in the Report of the compliance panel and certain legal interpretations developed by the Panel and filed a Notice of Other Appeal.

1.11 The Appellate Body report was circulated on 2 June 2008. The Appellate Body upheld the compliance panel's conclusions with respect to the marketing loan and counter-cyclical payments as well as the conclusions on the GSM 102 export credit guarantees issued under the revised GSM 102 programme.

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9 WT/DS267/30.
12 WT/DS267/33.
13 WT/DS267/34.
14 Although the Appellate Body found that the compliance panel failed to make an objective assessment of the revised GSM 102 programme pursuant to item (j) of the Illustrative List by not considering certain re-estimated data submitted by the United States, it also found that this did not affect the compliance panel's conclusion on the revised GSM 102 programme payments.
1.12 The DSB adopted the Appellate Body report and the compliance panel report as modified by the Appellate Body on 20 June 2008.

B. REQUEST FOR ARBITRATION AND ARBITRATION PROCEEDINGS

1.13 On 4 July 2005, Brazil notified the DSB of its "Recourse to Article 4.10 of the SCM Agreement and Article 22.2 of the DSU" with respect to the prohibited subsidies found to be inconsistent by the original Panel and the Appellate Body. These prohibited subsidies were identified as follows: (i) the export credit guarantees under the GSM 102, GSM 103 and SCGP export credit guarantee programmes in respect of exports of upland cotton and other unscheduled agricultural products supported under the programmes, and in respect of one scheduled product (rice); (ii) Section 1207(a) of the Farm Security and Rural Investment (FSRI) Act of 2002 providing for user marketing (Step 2) payments to exporters of upland cotton; and (iii) Section 1207(a) of the FSRI Act of 2002 providing for user marketing (Step 2) payments to domestic users of upland cotton. Brazil requested an authorization to take appropriate countermeasures in the amount corresponding: (i) to the Step 2 payments made in the most recent concluded marketing year; and (ii) to the total amount of exporter applications received under GSM 102, GSM 103, and SCGP for the most recent concluded fiscal year. Brazil also requested cross-sector suspension of obligations under the TRIPS Agreement and the GATS pursuant to Article 22.3(c) of the DSU.

1.14 On 5 July 2005, Brazil and the United States notified "Agreed Procedures under Articles 21 and 22 of the Dispute Settlement Understanding and Article 4 of the SCM Agreement in the follow-up to the dispute" ("Agreed Procedures") to the DSB.

1.15 On 14 July 2005, the United States notified the DSB of its objection "to the appropriateness of the countermeasures and the level of suspension of concessions or other obligations proposed by Brazil". The United States also claimed that the principles and procedures set forth in Article 22.3(c) of the DSU for requesting cross-sector suspension of concessions and obligations had not been followed by Brazil.

1.16 On 15 July 2005, at the meeting of the DSB, it was agreed that the matter raised by the United States in WT/DS267/23 was referred to arbitration as required by Article 22.6 of the DSU and Article 4.11 of the SCM Agreement. The Arbitrator was constituted on 19 July 2005. It was composed of the members of the original Panel, namely Mr Darius Rosati as Chairman, and Mr Mario Matus and Mr Daniel Moulis as Members.

1.17 On 17 August 2005, the United States and Brazil jointly requested suspension of the arbitration proceedings according to their "Agreed Procedures" until Brazil might subsequently request the resumption or termination of the Arbitration. The Arbitrator suspended the arbitration proceedings on 18 August 2005.

1.18 On 6 October 2005, Brazil notified to the DSB its "Recourse to Article 7.9 of the SCM Agreement and Article 22.2 of the DSU by Brazil" with respect to the actionable subsidies found to be inconsistent by the original panel and the Appellate Body. The subsidies in question were identified as marketing loan programme payments, user marketing (Step 2) payments, market loss assistance payments and counter-cyclical payments. Brazil requested the DSB to grant Brazil authorization to take countermeasures in the annual amount of US$1.037 billion until the

\[15\] WT/DS267/21.
\[16\] See WT/DS267/22.
\[17\] See WT/DS267/23.
\[18\] See WT/DS267/24.
\[19\] WT/DS267/25.
United States withdrew the relevant subsidies or removed their adverse effects. Brazil also requested cross-sector suspension of obligations under the TRIPS Agreement and the GATS pursuant to Article 22.3(c) of the DSU.20

1.19 On 17 October 2005, the United States notified to the DSB its objection to the level of suspension of concessions or other obligations and the countermeasures proposed by Brazil. The United States contended that the countermeasures proposed were not commensurate with the degree and nature of the adverse effects determined to exist within the meaning of Article 7.9 of the SCM Agreement. Further, the United States contended that the level of suspension proposed was not equivalent to the level of nullification or impairment within the meaning of Article 22.7 of the DSU. The United States also claimed that the principles and procedures set forth in Article 22.3(c) of the DSU had not been followed by Brazil in requesting cross-sector suspension of concessions and obligations.21

1.20 On 18 October 2005, at the meeting of the DSB, it was agreed that the matter raised by the United States was referred to arbitration. On 18 November 2005, the Arbitrator was constituted. It was composed of the members of the original Panel, namely Mr Darius Rosati as Chairman, and Mr Mario Matus and Mr Daniel Moulis as Members.22

1.21 On 21 November 2005, Brazil and the United States jointly notified the Arbitrator of their request that the arbitration proceedings be suspended until either party were to subsequently request their resumption. The Arbitrator suspended the arbitration proceedings on 7 December 2005.23

1.22 On 25 August 2008, Brazil notified a request of resumption of these arbitration proceedings (in relation to prohibited subsidies) and also the resumption of the other arbitration proceedings (in relation to actionable subsidies).24

1.23 On 1 October 2008, due to the unavailability of two members of the Arbitrator upon resumption of the proceedings, the parties agreed on the following composition of the Arbitrator for both proceedings:

- Mr Eduardo Pérez-Motta, as Chairman
- Mr Alan Matthews
- Mr Daniel Moulis25

1.24 An organizational meeting was held on 24 October 2008 to discuss the proposed working procedures and timetables for both arbitration proceedings. The final working procedures and timetables were sent to the parties on 29 October 2008. Brazil requested a further extension of the deadline for its written submission on 31 October 2008. The Arbitrator, after considering the arguments of both parties in relation to Brazil’s request, revised the timetables and sent them to the parties on 19 November 2008.

1.25 On 31 October 2008, Brazil submitted its Methodology Paper for the calculation of the proposed countermeasures. The United States provided a written submission on 9 December 2008. Brazil provided its written submission on 13 January 2009. The Arbitrator sent written questions to

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21 See WT/DS267/27.
22 See WT/DS267/28.
23 See WT/DS267/29.
the parties on 30 January 2009. The parties provided their replies to these questions on 13 February 2009.

1.26 The Arbitrator met with the parties on 3 March 2009. After the meeting, the Arbitrator posed additional written questions to the parties on 6 March 2009 and received their written responses on 20 March 2009. The parties also provided their comments on each other's written responses to questions from the Arbitrator on 31 March 2009. On 20 April 2009, the Arbitrator informed the parties that in light of the voluminous materials received from parties after the meeting with parties, and also taking into account the time needed for translation of the reports into the other two working languages, the issuance date of the Arbitrator's Decision was delayed. The Arbitrator asked the parties an additional question on 11 June 2009. On 30 June and 5 August 2009, the Arbitrator informed the parties of further delays in the circulation of the Decision. The Decision by the Arbitrator was circulated on 31 August 2009.

C. ORGANIZATION OF THE PROCEEDINGS AND PRESENTATION OF THE DECISION

1.27 As described above, two separate arbitration proceedings were initiated pursuant to Article 22.6 of the DSU in this dispute, one in relation to the prohibited subsidies at issue in the underlying proceedings, and the other in relation to the actionable subsidies. These proceedings were conducted in parallel and the same persons served as arbitrators in both proceedings. The parties presented single submissions in relation to both proceedings.

1.28 The Arbitrator therefore sought the views of the parties whether it should issue a single decision or two decisions for both proceedings and how it should treat the arguments presented in the parties' single submissions.

1.29 The United States indicates that there are two arbitration requests and two arbitrations, and that it therefore expects the Arbitrator to issue a separate decision for each of the two arbitrations. With respect to the use of submissions, the United States indicates that the sections of the submissions that are not clearly related to prohibited subsidies or to actionable subsidies may be relevant to either proceeding. Brazil on the other hand argues that the two proceedings should be harmonized as much as possible and considers that a single decision would be sufficient for the two arbitrations. Also, Brazil has no objection to the Arbitrator taking into account arguments made in the entirety of Brazil's submissions for the purpose of rendering decisions in either proceeding.

1.30 With respect to the treatment of the parties' submissions, the Arbitrator notes that although each party submitted a single written submission, the sections on prohibited subsidies are separate from the sections on actionable subsidies. It is therefore generally possible to distinguish the arguments relating to the proposed countermeasures against the prohibited subsidies at issue, from those relating to countermeasures against the actionable subsidies. In addition, some sections of the submissions, such as the introduction and the sections on cross-retaliation, may be relevant to both proceedings. The Arbitrator will therefore refer to such arguments in this Decision as appropriate.

1.31 With respect to the presentation of its Decision, the Arbitrator notes that the United States presented two distinct objections to the two distinct requests for countermeasures presented by Brazil. Although the conduct of the two proceedings was harmonized and the parties both provided a single written submission covering both the prohibited and actionable subsidies at issue, the fact remains that there are two arbitration proceedings, and that the proceedings against prohibited subsidies are based on Article 4.10 of the SCM Agreement whereas the proceedings relating to the actionable subsidies in the same dispute are based on Article 7.9 of the SCM Agreement. Under these circumstances, and in

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26 US responses to questions from the Arbitrator, question 2.
27 Brazil's responses to questions from the Arbitrator, question 2.
the absence of an agreement of the parties on the issuance of a single decision, the Arbitrator considered it appropriate to issue a separate decision with respect to each of the two proceedings.

D. TREATMENT OF CONFIDENTIAL INFORMATION

1.32 The United States designated one figure in double brackets as confidential information in footnote 204 of its written submission. Another figure in footnote 67 relating to its response to the Arbitrator's question was designated in the same manner. It requests the Arbitrator to treat such designated information as confidential and not to be disclosed to the public. In response to a question from the Arbitrator, Brazil argues that Article 18.2 of the DSU is sufficient to deal with the issue of treatment of confidential information during the proceedings.

1.33 The Arbitrator recalls that its Working Procedures provide that "[t]he deliberations of the Arbitrator and the documents submitted to it shall be kept confidential. This is without prejudice to the parties' disclosure of statements of their own positions to the public". The Working Procedures of the Arbitrator also provide that "[t]he Arbitrator will follow the normal working procedures of the DSU where relevant and as adapted to the circumstances of the present proceedings". The parties did not raise the issue of submission of confidential information during the organizational meeting. However, Article 18.2 of the DSU provides "Members shall treat as confidential information submitted by another Member to the panel or the Appellate Body which that Member has designated as confidential." The Arbitrator considers that the same rule also applies to these arbitration proceedings. Therefore Members shall treat the information designated by the United States as confidential, and are under an obligation not to disclose it to anyone not involved in the proceedings. The Arbitrator is also under an obligation not to disclose such confidential information in its Decisions. Ultimately, the Arbitrator did not find it necessary to refer to this information in its Decisions.

II. OVERALL APPROACH OF THE ARBITRATOR

2.1 The United States has initiated these proceedings pursuant to Article 22.6 of the DSU and Article 4.11 of the SCM Agreement.

2.2 Article 22.6 of the DSU provides in relevant part:

"When the situation described in paragraph 2 occurs, the DSB, upon request, shall grant authorization to suspend concessions or other obligations within 30 days of the expiry of the reasonable period of time unless the DSB decides by consensus to reject the request. However, if the Member concerned objects to the level of suspension proposed, or claims that the principles and procedures set forth in paragraph 3 have not been followed where a complaining party requested authorization to suspend concessions or other obligations pursuant to paragraph 3(b) or (c), the matter shall be referred to arbitration. Such arbitration shall be carried out by the original panel, if members are available, or by an arbitrator appointed by the Director-General and shall be completed within 60 days after the date of expiry of the reasonable period of time."

2.3 With regard to countermeasures taken in response to violations of Article 3.1 of the SCM Agreement, Article 4.11 of that Agreement provides the following mandate for the arbitrator:

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28 US responses to questions from the Arbitrator, question 1.
29 Brazil's responses to questions from the Arbitrator, question 1.
"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."  

(Original footnote) This expression is not meant to allow countermeasures that would be disproportionate in light of the fact that the subsidies dealt with under these provisions are prohibited.

2.4 In this proceeding, the United States challenges two distinct aspects of Brazil's proposed countermeasures. The United States objects first to the level of suspension of concessions or other obligations and the countermeasures proposed by Brazil. In addition, the United States claims that the principles and procedures set forth in Article 22.3 of the DSU have not been followed by Brazil and therefore the United States requests the Arbitrator to reject Brazil's request to suspend concessions with respect to TRIPS and GATS. We will therefore consider these two aspects in turn. In light of the fact that our determination in relation to the level of the proposed countermeasures may have an impact on our determination in relation to the form of countermeasures to be taken, we consider first the level of the proposed countermeasures.

2.5 Brazil's requested level of countermeasures, as expressed in its request to the DSB, involved two distinct amounts: an amount corresponding to "the Step 2 payments made in the most recent concluded marketing year" and an amount corresponding to "the total of exporter applications received under GSM 102, GSM 103, and SCGP for the most recent concluded fiscal year".

2.6 In its Methodology Paper, Brazil subsequently limited its request to: (i) one-time countermeasures in relation to the Step 2 programme, in the amount of the disbursements made by the United States in Marketing Year ("MY") 2005, which is US$350 million in total, and (ii) countermeasures proportionate to the annual amount of prohibited GSM 102 export credit guarantees issued for export transactions involving unscheduled products, rice, pig meat and poultry meat, which amounts to US$1.294 billion for fiscal year ("FY") 2006. We therefore consider Brazil's requested level of countermeasures relating to these two measures in turn.

III. BRAZIL'S PROPOSED LEVEL OF COUNTERMEASURES IN RELATION TO STEP 2

3.1 In its request to the DSB, with respect to the Step 2 programme, Brazil indicated that it sought countermeasures in an amount corresponding to the Step 2 payments made in the most recent concluded marketing year.

3.2 In its methodology paper, Brazil further explains that it seeks one-time countermeasures in relation to the Step 2 programme, in the amount of the disbursements made by the United States in Marketing Year ("MY") 2005, which is US$350 million in total. These countermeasures, Brazil explains, relate to the payments made in the period from 1 July 2005, when the United States should have withdrawn the subsidies at issue, to 30 July 2006, when the United States repealed the Step 2 programme.

3.3 The United States considers, however, that there is no longer any basis for Brazil to impose a countermeasure based on past payments under Step 2 programmes because the Step 2 measure was terminated as of August 2006 and because the compliance panel did not make any findings on the Step 2 measure. The United States also argues that the DSU and the SCM Agreement require that no
countermeasure be imposed with respect to the Step 2 subsidy, because there is no disagreement that
the United States has complied with the rulings and recommendations of the DSB in relation to Step 2
payments.34

3.4 We must therefore consider first the legal basis for Brazil to seek "one-time" countermeasures
in relation to the failure by the United States to comply with the recommendations and rulings of the
DSB between 1 July 2005 and 31 July 2006, before considering the proposed level of such
countermeasures.

A. IS BRAZIL ENTITLED TO SEEK "ONE-TIME" COUNTERMEASURES IN RELATION TO THE FAILURE
BY THE UNITED STATES TO WITHDRAW THE STEP 2 PAYMENTS BETWEEN 1 JULY 2005 AND
31 JULY 2006?

1. Main arguments of the parties

3.5 Brazil considers that Article 4.10 of the SCM Agreement provides conditions requiring the
DSB to authorize countermeasures when "the recommendation of the DSB is not followed within the
time period specified by the panel". The time period specified by the original panel was 1 July 2005.
The United States did not withdraw Step 2 until 31 July 2006. Therefore, Brazil argues that the DSB
is under an obligation to authorize appropriate countermeasures according to Article 4.10 of the
SCM Agreement.35 In Brazil's view, the only relevant fact is whether the United States had withdrawn
the subsidies by the end of the implementation period and the fact that the United States repealed
the Step 2 programme after the end of the implementation period is not relevant.36 Such a
countermeasure, in Brazil's view, is not a retroactive remedy.37

3.6 The United States considers that by the time of the compliance panel's findings, Step 2
payments had been eliminated by legislation38 and that the DSU does not permit countermeasures to
be retroactively applied.39 The United States points out that Brazil requested findings, during the
compliance panel proceedings, that there was no measure taken by the United States to comply with
the rulings of the DSB during the period between 22 September 2005 and 31 July 2006 since the
Step 2 measure was not repealed during that period of time. However, the compliance panel declined
to make rulings on this request. Therefore, the United States argues that since the compliance panel
has not made rulings on the Step 2 subsidy during the period immediately before it was repealed,
there is no legal basis for Brazil to take countermeasures against the Step 2 subsidy.40

3.7 The United States also argues that countermeasures may be authorized only where a Member
has not come into compliance with the DSB recommendations and rulings. Since the United States
has come into compliance today, there is no measure, and no WTO inconsistency, which could serve
as the legal basis for a countermeasure with respect to Step 2.41

3.8 Brazil considers the fact that the compliance panel did not make rulings on the Step 2 subsidy
to be irrelevant. The original panel and Appellate Body reports already imposed a legal obligation on
the United States to withdraw the subsidy. Because the United States has not achieved substantive

34 US responses to questions from the Arbitrator, question 57.
35 Brazil's written submission, paras. 246-249.
36 Brazil's written submission, para. 251.
37 Brazil's oral statement, para. 101.
38 US responses to questions from Arbitrator, question 4, para. 19.
39 US responses to questions from Arbitrator, question 57, para. 143.
40 US oral statement, paras. 61-62.
41 US comments to Brazil's responses to questions from the Arbitrator, question 107, paras. 119-120.
compliance, Brazil argues that it is entitled to take countermeasures in relation to the Step 2 subsidy between 1 July 2005 and 31 July 2006.42

3.9 Brazil further argues that while the United States withdrew the Step 2 subsidy in August 2006, it replaced this subsidy with other prohibited subsidies in the 2008 Farm Bill. Brazil claims that the 2008 Farm Bill replaced the export subsidy component of the Step 2 programme with "additional marketing loan subsidies" that continued the competitiveness boost for US cotton exporters as had the Step 2 programme previously, and that it therefore constitutes a subsidy de facto contingent upon export performance. Also, Brazil claims that the 2008 Farm Bill replaced the Step 2 subsidy for domestic cotton users with the "Economic Adjustment Assistance to Users of Upland Cotton", which pays US textile mills 4 cents per pound of upland cotton used. Brazil considers that this component of the subsidy is de facto contingent upon the use of domestic over imported cotton.43 Brazil argues that the enactment of the 2008 Farm Bill negated the compliance that the United States had originally achieved, and that this factor needs to be taken into account by the Arbitrator when considering the "appropriateness" of the one-time payment countermeasure proposed by Brazil against the Step 2 subsidy.44

3.10 The United States points out that Brazil is not seeking a countermeasure for measures under the 2008 Farm Bill since no findings of inconsistency have been made with respect to this new legislation, but that Brazil makes factual allegations about new programmes and asks the Arbitrator to give certain weight to them in its decision-making. The United States considers that any analysis of the new programmes would only be speculation, given that no panel has examined these programmes and made findings on their WTO-inconsistency, and that Brazil has not pursued them in these proceedings. In the view of the United States, a request for the Arbitrator to consider the new programmes in the new legislation when considering the appropriateness of the proposed countermeasure with respect to the now expired Step 2 subsidy is in essence a request for countermeasures on these new programmes. Countermeasures against these newly enacted measures would be in contravention of Article 23 of the DSU, and would not have any basis in findings or recommendations and rulings by the DSB.45

3.11 The United States argues that a Member may only obtain countermeasures where there is a WTO inconsistency. Otherwise, there is nothing to counter. It contends that the fact the 2008 Farm Bill was not considered by the compliance panel is a critical factor for the Arbitrator. In the view of the United States, Brazil's request for the Arbitrator to consider the 2008 Farm Bill is inconsistent with Article 23 of the DSU, because Brazil is "seeking redress" concerning the 2008 Farm Bill without having had recourse to the DSU.46

3.12 Brazil has clarified that it is not seeking to take countermeasures against the replacement components of Step 2 subsidy in the 2008 Farm Bill but, rather, is seeking a one-time countermeasure for the past inconsistency during the 13-month period when the United States was not in compliance.47 In response to a question by the Arbitrator, Brazil also clarifies that it does not request the Arbitrator to make conclusions on whether these new subsidies under the 2008 Farm Bill are "measures taken to comply" within the meaning of Article 21.5 of the DSU, nor to make rulings on

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42 Brazil responses to questions from the Arbitrator, question 11, paras. 137-139.
43 Brazil's written submission, paras. 262-263.
44 Brazil's written submission, paras. 277 and 280.
45 US comments to Brazil's responses to questions from the Arbitrator, question 108, paras. 121-123.
46 US comments to Brazil's responses to questions from the Arbitrator, question 109, para. 124; question 110, para. 126.
47 Brazil's responses to questions from the Arbitrator, question 108, para. 196.
whether they are prohibited subsidies within the meaning of Article 3 of the *SCM Agreement*. Such findings, in Brazil's view, would not be within the mandate of the Arbitrator.48

3.13 However, Brazil argues that the fact of these "new subsidies" can be considered by the Arbitrator in deciding whether substantive compliance has been achieved with respect to the Step 2 subsidy.49 It also argues that the Arbitrator can take into account the enactment of the 2008 Farm Bill in assessing the "appropriateness of countermeasures" and that this would be consistent with the *Canada – Aircraft Credits and Guarantees* arbitration decision, where the appropriate level of the countermeasures was adjusted considering the fact that, at the time the arbitration took place, Canada had not withdrawn the subsidy concerned.50

3.14 Brazil further argues that, as the parties disagree whether there is substantive compliance at present, Article 22.8 of the DSU does not prevent Brazil from taking countermeasures against the Step 2 subsidy for the period 1 July 2005-31 July 2006.51 Brazil considers that Article 22.8 of the DSU does not apply in these proceedings, as it only applies to the time after concessions or other obligations have been suspended. Even if it does apply, Brazil argues that, presently, substantive compliance has not been achieved, or that the inconsistent measure has not been removed, and that therefore a countermeasure is legally permitted.52 Brazil relies on the concept of "substantive compliance" used by the Appellate Body in the *US – Continued Suspension* dispute, to the effect that there is no longer substantive compliance since the enactment of the US 2008 Farm Bill, which contains two replacement measures with the same effects as the repealed Step 2 measure.53 Brazil considers that the phrase "until such time" in Article 22.8 of the DSU has been respected by Brazil in its one-time countermeasure request, because it has proposed countermeasures based on the amount of the Step 2 payments made after the end of the implementation period and before Step 2 was repealed and/or the subsidy was withdrawn.54

3.15 The United States notes that Brazil requested a countermeasure based on the amount of "the Step 2 payments made in the most recent concluded marketing year" in its original request for countermeasures.55 However, Brazil adopted a different one-time retroactive payment methodology during the later proceedings of this arbitration. In the view of the United States, neither of these approaches can be used to calculate the "appropriate countermeasures" for Step 2, since Step 2 has been repealed.56

2. **Assessment by the Arbitrator**

3.16 The expressions "Step 2" and "User Marketing Step 2 payments" refer to a special marketing loan provision for upland cotton that had been authorized since 1990 under successive legislation, including the FAIR Act of 1996 and the FSRI Act of 2002.57

3.17 The original panel made the following findings, *inter alia*, with respect to Step 2 payments:

"(e) Concerning section 1207(a) of the FSRI Act of 2002 providing for user marketing (Step 2) payments to exporters of upland cotton:

48 Brazil's responses to questions from the Arbitrator, question 12, para. 141.
49 Brazil's responses to questions from the Arbitrator, question 11, paras. 140-143.
50 Brazil's responses to questions from the Arbitrator, question 108, paras. 197-199.
51 Brazil's responses to questions from the Arbitrator, question 10, para. 136.
52 Brazil's oral statement, paras. 104-108.
53 Brazil responses to questions from the Arbitrator, question 10, paras. 134-135.
54 Brazil's oral statement para. 114.
55 WT/DS267/21.
56 US comments to Brazil's responses to questions from the Arbitrator, question 106, paras. 117-118.
57 Panel Report, paras. 7.209-7.211.
(iii) section 1207(a) of the FSRI Act of 2002 providing for user marketing (Step 2) payments to exporters of upland cotton is an export subsidy prohibited by Article 3.1(a) and 3.2 of the SCM Agreement.

(f) concerning section 1207(a) of the FSRI Act of 2002 providing for user marketing (Step 2) payments to domestic users of upland cotton: it is an import substitution subsidy prohibited by Article 3.1(b) and 3.2 of the SCM Agreement.\(^{58}\)

3.18 The Appellate Body upheld these conclusions of the original panel.\(^{59}\)

3.19 On 18 August 2006, Brazil requested the establishment of a compliance panel. In its request, Brazil indicated that "[o]n 3 February 2006, the United States Congress approved a bill that repeals the Step 2 subsidy programme for upland cotton. The bill was signed into law on 8 February 2006, and took effect on 1 August 2006."\(^{60}\)

3.20 During the compliance proceedings, Brazil requested the compliance panel to consider the failure of the United States to take measures to remove the adverse effect or to withdraw, inter alia, the Step 2 programme in the period between 22 September 2005 and 31 July 2006.\(^{61}\) The compliance panel however declined to consider that failure.\(^{62}\) Rather, the compliance panel considered the measures taken to comply as of the date of its establishment. On the date of establishment of the compliance panel, the Step 2 subsidy had been repealed. While the compliance panel analysed the impact of the elimination of the Step 2 measures on the existence of significant price suppression in the world market for cotton within the meaning of Article 6.3(c) of SCM Agreement, it made no separate finding on the repealed Step 2 payments programme.\(^{63}\) Brazil did not appeal the compliance panel's decision not to consider the measures as they existed during the period between 22 September 2005 and 31 July 2006.

3.21 It is undisputed that the Step 2 programme, which had been found to be inconsistent with Article 3 of the SCM Agreement, had not been withdrawn as of the end of the implementation period. This was the time at which Brazil presented its request for authorization to take countermeasures, in relation to this and other prohibited subsidies in this dispute. However, the measure had been repealed by the time that the compliance panel was established, and the compliance panel declined to make any findings on it.

3.22 In these proceedings, Brazil is seeking an authorization to take countermeasures specifically in relation to the period between the end of the compliance period and the repeal of the measure. Brazil has also claimed that "new prohibited subsidies" have recently been enacted by the United States, which effectively serve the same purpose as the previous Step 2 payments. Brazil has made it clear, however, that it is not seeking findings from this Arbitrator on the consistency of these new measures, and also that it is not asking the Arbitrator to authorize countermeasures in relation to the application of these new measures. Rather, Brazil is seeking an authorization to apply countermeasures only in relation to past payments under the now repealed Step 2 programme.

\(^{58}\) Panel Report, para. 8.1
\(^{59}\) Appellate Body Report, para. 763(d).
\(^{60}\) This US Bill is referred to as "Deficit Reduction Act of 2005, US Public Law 109-171, Section 1103", WT/DS267/30. This Act was reproduced in Exhibit Bra-435 during the compliance panel proceedings. See footnote 20 of the compliance panel report, WT/DS267/RW.
\(^{63}\) Panel Report, US – Upland Cotton (Article 21.5 – Brazil), paras. 10.228-10.239.
3.23 The question before us is, therefore, whether Brazil is entitled to seek countermeasures in relation to past payments under the Step 2 programme, notwithstanding the fact that it is undisputed that this programme has been repealed and that payments have ceased under it, and that there has been no determination, in the context of the compliance proceedings, that the United States had failed to comply with the relevant rulings and recommendations of the DSB in relation to this measure.

3.24 In approaching this question, we find it useful to consider first the legal basis for Brazil's request at the time that it presented it. We will then turn to the question of Brazil's entitlement to pursue such authorization in the present circumstances.

(a) Legal basis for Brazil's request for countermeasures in relation to Step 2 payments

3.25 Article 22.1 of the DSU provides that:

"Compensation and the suspension of concessions or other obligations are temporary measures available in the event that the recommendations and rulings are not implemented within a reasonable period of time."

3.26 Article 22.2 of the DSU further provides that:

"If the Member concerned fails to bring the measure found to be inconsistent with a covered agreement into compliance therewith or otherwise comply with the recommendations and rulings within the reasonable period of time ..., such Member, shall, if so requested, and no later than the expiry of the reasonable period of time, enter into negotiations with any party having invoked the dispute settlement procedures, with a view to developing mutually acceptable compensation. If no satisfactory compensation has been agreed within 20 days after the date of the reasonable period of time, any party having invoked the dispute settlement procedures may request authorization from the DSB to suspend the application to the Member concerned of concessions or other obligations under the covered agreement."

3.27 Under the terms of these provisions, the suspension of concessions or other obligations is available where there is non-compliance by the expiry of the reasonable period of time ("[i]f the Member concerned fails to bring the measure found to be inconsistent with a covered agreement into compliance therewith or otherwise comply with the recommendations and rulings within the reasonable period of time") and if no compensation agreement is reached within 20 days after the expiry of the reasonable period of time. In that situation, the original complaining Member may request authorization from the DSB to suspend concessions or other obligations owed to the respondent under the covered agreements.

3.28 In these proceedings, it is undisputed that the Step 2 measure found to be inconsistent by the original panel was unchanged by the expiry of the reasonable period of time set by the original panel on 1 July 2005. Brazil requested an authorization to take countermeasures in relation to, inter alia, the Step 2 payments, on 4 July 2005. The United States challenged Brazil's request and the matter was therefore referred to arbitration.

3.29 At the time when Brazil requested an authorization to take countermeasures, and when these arbitral proceedings were first initiated, there was therefore a legal basis for seeking such authorization, to the extent that the Step 2 payments had been found by the original panel, as upheld by the Appellate Body, to be inconsistent with the SCM Agreement, and it is undisputed that they had not been withdrawn by the time Brazil made its request.
3.30 In accordance with their "Agreed Procedures" in this case, the parties subsequently jointly requested the suspension of the arbitration proceedings on 17 August 2005. Brazil then requested the establishment of a compliance panel on 18 August 2006. The Step 2 measure had been repealed on 1 August 2006.

3.31 The compliance panel was requested to make findings in relation to "the three price-contingent upland cotton subsidy programmes under the FSRI Act" (including Step 2) in the period between 22 September 2005 and 31 July 2006.\(^{64}\) The compliance panel however declined to make such findings. Rather, it found that:

"[I]t is not appropriate to make a finding on Brazil's claim that the United States failed to take any measures to remove the adverse effects or to withdraw the three price-contingent upland cotton subsidy programmes under the FSRI Act of 2002 between 22 September 2005 and 31 July 2006 and that, as a consequence, measures taken to comply with the adverse effects-related recommendations and rulings of the DSB did not exist in this period."\(^{65}\)

3.32 This finding was not appealed.

3.33 Against this background, the question before the Arbitrator is whether Brazil is entitled, in these proceedings, to seek countermeasures in relation to past payments under the Step 2 programme during essentially the same period, namely between the end of the implementation period and the repeal of the measure.

(b) Whether Brazil is entitled to seek countermeasures in relation to past non-compliance with rulings relating to Step 2 payments

3.34 The United States considers that, since the Step 2 Programme has been repealed, there is no longer any legal basis for the authorization of countermeasures with respect to past payments under that programme.

3.35 Brazil has indicated, and confirmed repeatedly in the course of these proceedings, that it is seeking "one-time" countermeasures in relation to the Step 2 programme as it continued to apply in the period immediately following the end of the implementation period and until its repeal, i.e. from 1 July 2005 to 31 July 2006. In Brazil's view, "the only relevant fact is whether by the end of the implementation period, the United States had withdrawn the subsidies" and the fact that the United States later repealed the programme is not relevant.\(^{66}\)

3.36 Brazil therefore considers that it is entitled to seek countermeasures with respect to a past period of non-compliance from the end of the implementation period to a past point in time, regardless of subsequent developments, including the removal of the measure at issue.

3.37 As we have seen above, Articles 22.1 and 22.2 of the DSU foresee that the entitlement to seek countermeasures (or the suspension of concessions or other obligations, as expressed in these provisions) arises when compliance with the rulings and recommendations of the DSB has not taken

\(^{64}\) We note that Brazil's request in the context of the compliance panel proceedings was in relation to the US measures under the FSRI Act of 2002 as "price-contingent" measures causing serious prejudice to the interests of Brazil within the meaning of Article 5 of the SCM Agreement. In the original proceedings, the Step 2 payments had given rise to rulings under that provision, as actionable subsidies, and also to rulings under Article 3 of the SCM Agreement, as a prohibited subsidy. Brazil therefore apparently did not seek specific rulings on Step 2 as a prohibited subsidy in the compliance proceedings.


\(^{66}\) Brazil's written submission, para. 251.
place by the end of the implementation period. This is therefore the first moment at which countermeasures become available, as remedies. To that extent, we agree with Brazil that the absence of implementation as of the end of the implementation period gives rise to an entitlement to seek countermeasures. At the same time, these two provisions do not constitute the entirety of the applicable legal requirements in respect of suspension of concessions or other obligations (or countermeasures).

3.38 The suspension of concessions or other obligations is a remedy of an exceptional character, that allows the Member concerned to temporarily suspend its own obligations toward the responding party under the covered agreements. This exceptional remedy is only available in limited circumstances and for a limited time period. As observed by the Appellate Body on US – Continued Suspension, "the authorization to suspend concessions is contingent and limited in time". As also observed by the Appellate Body, the authorization to suspend concessions is granted "following a long process of multilateral dispute settlement in which relevant adjudicative bodies, as well as the DSB, render multilateral decisions at key stages of the process".

3.39 In this dispute, following the initial proceedings, compliance proceedings took place, in which Brazil requested the compliance panel to make a determination concerning the United States' failure to comply with the recommendations and rulings of the DSB in the period between 22 September 2005 and 31 July 2006, i.e. the period between the end of the implementation period under Article 7.9 and 7.10 of the SCM Agreement and the time of repeal of the Step 2 programme, prior to the panel's establishment. However, as noted above, the panel declined to make such findings. In considering Brazil's request, the panel determined in particular that:

"Where a panel makes a finding under Article 21.5 of the DSU that a Member has not complied with the DSB recommendations and rulings in the original dispute, the consequence of that finding is that the Member remains subject to obligations that flow from the recommendation issued in the original proceeding and is thus required to take steps to bring itself into compliance with that recommendation. A finding by the panel that the Member also failed to comply with the DSB recommendations and rulings in the original proceeding at an earlier point in time would have no additional operative value in terms of the nature of the obligations of the Member in question. On the other hand, if a panel under Article 21.5 finds that the Member has brought itself into compliance with the DSB recommendations and rulings as of the time of the establishment of the panel, such finding logically would supersede and render irrelevant any finding that the Member was not in compliance with those recommendations and rulings at an earlier point in time."

3.40 The compliance panel thus saw no useful purpose to findings that would address a past period of non-compliance, when the measure has been repealed and the Member concerned has brought itself into compliance as of the compliance panel's establishment. In considering Brazil's request, the panel also specifically addressed an argument by Brazil to the effect that such findings were relevant to the assessment of countermeasures in Article 7.9 and 7.10 of the SCM Agreement, and that it sought "a multilateral basis for the DSB to authorize countermeasures against the United States for its failure to take any implementation measures by the date required in Article 7.9 of the SCM Agreement". The panel, however, determined that:

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"[W]hile a finding ... may be required to provide 'a multilateral basis' for DSB authorization of countermeasures under Article 7.9 of the SCM Agreement, it does not logically follow that such a panel must make a finding of non-compliance as of the end of the six-month period referred to in Article 7.9 of the SCM Agreement."\(^{71}\)

3.41 In light of these considerations, the panel found that it was "not appropriate" to make a finding on Brazil's claim that the United States had failed to bring itself into compliance in relation to the period of time between the expiry of the implementation period and the repeal of the measure, prior to the panel's establishment.

3.42 There has therefore been no multilateral determination that the United States has failed to comply with the recommendations and rulings of the DSB in respect of Step 2, despite a specific request by Brazil to make such findings precisely with respect to the same past period of time in relation to which it now seeks to be authorized to take countermeasures. We consider that this is an important aspect of the legal situation before us, which we must take into account in these proceedings.

3.43 Furthermore, we note that, as Brazil has highlighted consistently in these proceedings, the purpose of countermeasures under Article 4.10 of the SCM Agreement (and of suspension of concessions or other obligations under the DSU) is to induce compliance. As expressed by the arbitrator on EC – Bananas III (US) (Article 22.6 – EC):

"[T]he authorization to suspend concessions or other obligations is a temporary measure pending full implementation by the Members concerned. We agree with the United States that this temporary nature indicates that it is the purpose of countermeasures to induce compliance."\(^{72}\) (emphasis added).

3.44 Article 22.8 of the DSU further provides that:

"The suspension of concessions or other obligations shall be temporary and shall only be applied until such time as the measure found to be inconsistent with a covered agreement has been removed, or the Member that must implement recommendations or rulings provides a solution to the nullification or impairment of benefits, or a mutually satisfactory solution is reached."

3.45 Brazil argues that Article 22.8 is not applicable to the circumstances of this case, because it concerns the application of countermeasures, not their authorization. We agree that this provision addresses the time during which suspension of concessions or other obligations may be applied, once authorized, rather than the conditions for the authorization per se. Nonetheless, this provision usefully informs our analysis of the legal basis and purpose of countermeasures. It confirms to us that the suspension of concessions or other obligations, as a remedy, is available where compliance has not been achieved, and in order to induce such compliance. In other words, the entitlement to countermeasures arises as of the end of the implementation period, if there has been no compliance by that moment, and it continues to exist for so long as compliance has not been achieved in relation to the measure at issue.

3.46 Article 22.1 reinforces the importance of full implementation of recommendations of the DSB, in preference to compensation or the suspension of concessions or other obligations. Article 22.1 provides that:

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\(^{71}\) Panel Report, US – Upland Cotton (Article 21.5 – Brazil), para. 9.68.

\(^{72}\) Decision by the Arbitrators, EC – Bananas III (US) (Article 22.6 – EC), para. 6.3.
"Compensation and the suspension of concessions or other obligations are temporary measures available in the event that the recommendations and rulings are not implemented within a reasonable period of time. However, neither compensation nor the suspension of concessions or other obligations is preferred to full implementation of a recommendation to bring a measure into conformity with the covered agreements. Compensation is voluntary and, if granted, shall be consistent with the covered agreements."

3.47 Brazil considers, however, that countermeasures can be authorized independently of the existence of any current non-compliance, and that the role of the Arbitrator is not to consider the purpose of a determination that it is required to make based on its mandate under Article 4.10 and 4.11 of the SCM Agreement.73 In Brazil's view, "the Arbitrator's role is limited to a determination of the amount of those countermeasures based on the fact that the United States had failed to withdraw the Step 2 subsidy for a 13-month period".74

3.48 Brazil seeks a determination in relation to an amount of countermeasures covering "the 13-month period when the United States was not in compliance" (emphasis added).75 Brazil has also made it very clear that it "is not seeking authorization for countermeasures covering the period since the enactment of these new subsidies [i.e. the new subsidies Brazil alleges the United States has introduced under the 2008 Farm Bill] in 2008".76

3.49 Brazil is therefore seeking an authorization to take countermeasures by reason of a past period of non-compliance, on the basis of a past measure which has been repealed, and not in relation to a continuing period of non-compliance that would still be in existence today.

3.50 In light of our determinations above that countermeasures are a temporary remedy available only where compliance has not been achieved and with a view to inducing such compliance, and that full implementation is preferred to the suspension of concessions or other obligations, we do not consider that there would be a legitimate basis to such countermeasures as requested by Brazil in relation to past payments made until the repeal of Step 2, in the absence of a multilateral determination of non-compliance in relation to such payments and independently of any continuing situation of non-compliance.

(c) Whether the "new measures" under the 2008 Farm Bill should be considered

3.51 As observed above, Brazil has expressly not based its request for countermeasures in relation to Step 2 payments on any current situation of non-compliance. Brazil's request is based exclusively on non-compliance in the period between 1 July 2005 and 30 July 2006.

3.52 Nonetheless, in response to the United States' arguments that it had complied with the rulings and recommendations of the DSB with respect to the Step 2 programme, Brazil has indicated that the United States has adopted "new prohibited subsidies" under the 2008 Farm Bill that "effectively replace" Step 2.77 Brazil contends that since the enactment of the 2008 Farm Bill, the United States is no longer in substantive compliance. However, Brazil does not seek from the Arbitrator a determination of consistency of the 2008 Farm Bill per se with the SCM Agreement.

73 Brazil's responses to questions from the Arbitrator, question 109, paras. 200-201.
74 Brazil's responses to questions from the Arbitrator, question 109, para. 201.
75 Brazil's responses to questions from the Arbitrator, question 108, para. 196.
76 Brazil's responses to questions from the Arbitrator, question 108, para. 196.
77 Brazil identifies specifically two components of the 2008 Farm Bill, namely, "the additional market loan subsidies" and "the Economic Adjustment Assistance to Users of Upland Cotton".
3.53 Brazil "does not request the Arbitrator [to] reach any definitive conclusions as to whether these subsidies are 'measures taken to comply' pursuant to Article 21.5 of the DSU or whether they are prohibited subsidies within the meaning of Article 3.1(a), or (b) of the SCM Agreement." Brazil considers that "such a finding would not be within the mandate of the Arbitrator". Rather, Brazil requests that the Arbitrator "take into account the existence of the new US measures and the facts surrounding their enactment when determining the amount of appropriate countermeasures". 

3.54 Brazil invites the Arbitrator to consider the existence of these measures in the context of its assessment of whether the proposed countermeasures are "appropriate", as "circumstances and actions of a subsidizing Member". Specifically, Brazil invites the Arbitrator to take into account inter alia "whether these new Step 2 replacement measures are consistent with an intent to eliminate subsidies that are both prohibited and geared towards sustaining significant price suppression". Brazil believes that "these are relevant questions to consider in determining the amount of one-time countermeasures for the US lack of compliance".

3.55 We understand Brazil to be requesting the Arbitrator to take into account the existence of the measures adopted under the 2008 Farm Bill as a factual circumstance that would be relevant in the assessment of the "appropriateness" of its proposed amount of countermeasures, and not as a legal basis for these proposed countermeasures. However, in light of our determination above that there is no basis for Brazil's request for countermeasures in relation to a past period of non-compliance, we have no basis on which to proceed with a determination whether Brazil's proposed countermeasures are "appropriate" within the meaning of Article 4.10 of the SCM Agreement. Brazil's request that we take into account the 2008 Farm Bill in this determination is therefore without object and we need not consider it further.

3.56 We take note of the parties' arguments in relation to the consistency or inconsistency of the measures identified by Brazil contained in the 2008 Farm Bill. We also take note in this context of the findings of the Appellate Body in US – Continued Suspension, as cited by Brazil, to the effect that compliance with the DSB recommendations and rulings would not be considered to be achieved, if the inconsistent measure is simply removed and subsequently replaced by another inconsistent measure. Specifically, the Appellate Body has interpreted the words "the measure found to be inconsistent with a covered agreement has been removed" in Article 22.8 of the DSU to mean that "substantive compliance" must have been achieved in relation to the removal of that measure:

"The issue that arises in this dispute, however, is whether an inconsistent measure should be considered 'removed' when it is replaced by a new implementing measure. Taken literally, removal of the inconsistent measure could mean that the implementing Member has adopted an act that formally repeals the inconsistent measure and replaces it with another measure, regardless of the content of the new measure and, in particular, of its compliance with the DSB's recommendations and rulings. Such a literal interpretation of the first condition in Article 22.8, however, does not comport with the other two conditions provided in that provision ..."

Reading the first sentence of Article 22.8 as a whole, the 'removal' of 'the measure found to be inconsistent' should be properly understood to require nothing less than substantive removal of the inconsistent measure. Substantive removal may be achieved by repealing the inconsistent measure. Where a WTO Member adopts an

78 Brazil's responses to questions from the Arbitrator, question 12, para. 141.
79 Brazil's responses to questions from the Arbitrator, question 111, para. 203.
80 Brazil's responses to questions from the Arbitrator, question 108, para. 197.
81 Brazil's responses to questions from the Arbitrator, question 108, para. 199.
82 Brazil's responses to questions from the Arbitrator, question 109, para. 199.
implementing measure that replaces the inconsistent measure, the implementing measure must bring about substantive compliance, that is, compliance with the DSB's recommendations and rulings and consistency with the covered agreements ... .\(^{83}\)

3.57 The Arbitrator takes note of the fact that, in these proceedings, Brazil and the United States agreed that the Step 2 subsidy was repealed as of 1 August 2006 and that Brazil is not seeking countermeasures covering the period since the enactment of these new subsidies in 2008. Brazil has indicated that it "does not do so because there has not been a multilateral determination of the WTO inconsistency of the new Step 2 replacement subsidies."\(^{84}\) We also note that Brazil does not seek such a determination from us.

3.58 In response to a question from the Arbitrator, Brazil observes that "it is Brazil's position that the United States is no longer in substantive compliance with the recommendations and rulings of the DSB, even if it was in compliance for a brief 23-month period – from 1 August 2006 through 18 June 2008, after the repeal of the Step 2 subsidy."\(^{85}\) Brazil considers that since the parties disagree whether the United States is presently in substantive compliance, "DSU Article 22.8 does not operate to bar the suspension of concessions for the period 1 July 2005-31 July 2006".\(^{86}\)

3.59 At the same time, Brazil "emphasizes that it is not seeking countermeasures in this proceeding covering the period after enactment of the 2008 Farm Bill containing the replacement measures for Step 2, or covering that 23-month period of time (1 August 2006 – 18 June 2008) in which the United States was in compliance with the recommendations and rulings of the DSB. Rather, the evidence and argument presented by Brazil is relevant to rebut the US assertions that there is no basis for countermeasures covering the period of 1 July 2005-31 July 2006 because, allegedly, the United States would presently be in "substantive compliance" as required by Article 22.8 of the DSU.\(^{87}\)

3.60 These statements by Brazil confirm that the only period of non-compliance in respect of which Brazil seeks to apply countermeasures is the period from 1 July 2005 to 31 July 2006, prior to the repeal of Step 2. The legal situation arising from the enactment of the new measures in the 2008 Farm Bill has no bearing on the question of whether Brazil is entitled to seek to retaliate in relation to this past period of non-compliance, and Brazil invokes it only to rebut the argument that the United States would presently be in compliance with the recommendations and rulings of the DSB. However, our view that countermeasures cannot be authorized in relation to this past period of non-compliance does not depend, and is not based, on a finding that the United States is presently in compliance with the recommendations and rulings of the DSB.

3.61 The question of whether or not the "new measures" under the 2008 Farm Bill represent compliance with the recommendations of the DSB in relation to the Step 2 measures is not before us. We make no determinations with respect to the legal status of the measures under the 2008 Farm Bill identified by Brazil as Step 2 "replacement" measures.\(^{88}\)

3. Conclusion

3.62 In light of our determinations above, we conclude that there is no legal basis for Brazil to seek countermeasures in relation to the absence of compliance by the United States with the

\(^{83}\) Appellate Body Report, US – Continued Suspension, paras. 304-305.

\(^{84}\) Brazil's responses to questions from the Arbitrator, question 108, para. 196.

\(^{85}\) Brazil's responses to questions from the Arbitrator, question 10, para. 135.

\(^{86}\) Brazil's responses to questions from the Arbitrator, question 10, para. 136.

\(^{87}\) Brazil's responses to questions from the Arbitrator, question 10, para. 136.

\(^{88}\) The Arbitrator does not express any opinion about the ability of an arbitrator to rule on questions of compliance.
recommendations and rulings of the DSB during the period from 1 July 2005 and 30 July 2006. We make no determination as to the consistency or inconsistency of the "new measures" applied by the United States under the 2008 Farm Bill and identified by Brazil as "replacement" measures with the SCM Agreement, and note that Brazil does not seek an authorization to take countermeasures against those "replacement" measures.

B. ASSESSMENT OF BRAZIL’S REQUESTED AMOUNT OF COUNTERMEASURES IN RELATION TO STEP 2 PAYMENTS

3.63 As noted above, Brazil seeks one-time countermeasures in relation to the Step 2 programme, in the amount of the disbursements made by the United States in Marketing Year ("MY") 2005, which is US$350 million in total.89

3.64 In light of our conclusion in paragraph 3.62 above that there is no legal basis for this request, we need not consider further the countermeasures requested by Brazil in relation to Step 2 payments.

IV. BRAZIL’S PROPOSED LEVEL OF COUNTERMEASURES IN RELATION TO GSM 102

A. BRAZIL’S REQUEST

4.1 In its request pursuant to Article 4.10 of the SCM Agreement and Article 22.2 of the DSU, Brazil seeks an authorization to take appropriate countermeasures in an amount that corresponds to "the total of exporter applications received under GSM 102, 103, and SCGP for the most recent concluded fiscal year".90 In that request, Brazil estimated the value of this amount, together with the amount for Step 2 payment, at a total of US$3 billion, using FY 2004 as reference.91

4.2 In its Methodology Paper, Brazil advanced a different methodology for the amount of appropriate countermeasures to be determined, namely "a methodology to calculate countermeasures proportionate to the annual amount of prohibited GSM 102 export credit guarantees ("ECGs") issued for export transactions involving unscheduled products, rice, pig meat and poultry meat. Applying this methodology to data for FY 2006 results in countermeasures in the amount of US$1.294 billion".92

4.3 In the course of the proceedings, the United States asked Brazil to clarify whether it was requesting a fixed amount of annual countermeasures for prohibited subsidies, or a variable amount, and, in the event that Brazil was requesting a variable amount, in what manner the amount would vary. Brazil responded, as stated in an earlier response to a question by the Arbitrator, that it had "proposed a methodology to calculate IRS and additionality, in light of relevant GSM 102 data generated and maintained on a fiscal year basis". Brazil referred to the following response it had made to a question from the Arbitrator: "By virtue of the United States' failure to withdraw prohibited GSM 102 export subsidies, Brazil has proposed a formula for the determination of appropriate countermeasures. In this response, therefore, Brazil explains its choice of FY 2006 data as a reference to illustrate the application of its formula."93

4.4 The United States took note of Brazil's response, and stated that "arbitrators have usually awarded a fixed annual amount for countermeasures, but some arbitrators have used a formula", and

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89 Brazil's Methodology Paper, para. 4.
90 WT/DS267/21.
91 WT/DS267/21, footnote 1.
92 Brazil's Methodology Paper, para. 5.
93 Brazil's responses to questions from the Arbitrator, question 3, cited in its response to question 1 from the United States.
that where they have used formula, the arbitrators have carefully explained in their awards the content of that formula, which would be necessary to permit both parties and the DSB to be aware of the amount the arbitrators deemed justified under that relevant standard.\textsuperscript{94} The United States therefore submitted that, for the sake of transparency, and to ensure that the countermeasures in each year will be "appropriate" and "not disproportionate", the Arbitrator's award should "clearly set out any formula to be used in calculating countermeasures and the source of any information for input variables in the formula each year".\textsuperscript{95} The United States also requested that if the Arbitrator does not authorize a formula approach, this should also be made clear.

4.5 The Arbitrator notes that Brazil's responses indicate that it is seeking an authorization that would be variable on an annual basis, depending on "the total of exporter applications received under GSM 102 ... for the most recent concluded fiscal year". The Arbitrator therefore understands Brazil's request to be for the Arbitrator to endorse not only the specific amount of countermeasures as it has calculated it with reference to FY 2006, but also the formula through which this amount is calculated, such that it could be applied to the "most recent fiscal year" elapsed at the time of taking countermeasures, in order to adjust on an annual basis the amount of countermeasures to be applied. The Arbitrator also notes that the United States does not dispute that it would be permissible for the level of appropriate countermeasures to be determined through a formula, provided that this formula was sufficiently well defined so as to make it applicable in a transparent and predictable manner. The Arbitrator will therefore take these considerations into account in its determinations.

B. MAIN ARGUMENTS OF THE PARTIES

4.6 Brazil's methodology for the calculation of appropriate countermeasures with respect to GSM 102 payments, as explained in its Methodology Paper, encompasses two elements: (i) the interest rate discounts secured by creditworthy and non-creditworthy foreign obligors on credits backed by GSM 102 guarantees and (ii) the estimated additional export sales obtained by US exporters as a result of these discounts.\textsuperscript{96} Brazil refers to the interest rate discounts as the "interest rate subsidy" and to the additional export sales obtained by creditworthy and non-creditworthy foreign obligors as "marginal additionality" and "full additionality" respectively.

4.7 Brazil applies this methodology to its estimate of GSM 102 export credit guarantees in FY 2006 and arrives at an annual countermeasure of US$1.155 billion. This amount can be subdivided into (i) interest rate subsidy amounting to US$237.4 million, (ii) marginal additionality amounting to US$62.3 million, and (iii) full additionality amounting to US$855 million.

4.8 Brazil explains that "the amount of the subsidy must be based on the legal standard that values the subsidy in full, which includes all "benefits" conferred thereby".\textsuperscript{97} Brazil indicated that the legal benefit standard was that provided for under Article 1.1(b) of the \textit{SCM Agreement}.\textsuperscript{98}

4.9 The United States observes that Article 4.10 of the \textit{SCM Agreement} provides for countermeasures that are "'appropriate' to the prohibited subsidy finding of the panel".\textsuperscript{99} In the view of the United States, "appropriate connotes the relationship between countermeasures and the particular circumstances of a given case".\textsuperscript{100} For the United States, "the appropriate countermeasures are those that have a concrete basis in the specific findings adopted by the DSB" and "in this case, the

\textsuperscript{94} US comments on Brazil's responses to questions from the United States, question 1, para. 2.
\textsuperscript{95} US comments on Brazil's responses to questions from the United States, question 1, para. 4.
\textsuperscript{96} Brazil's Methodology Paper, para. 5.
\textsuperscript{97} Brazil's written submission, para. 15.
\textsuperscript{98} Brazil's written submission, para. 130.
\textsuperscript{99} US written submission, para. 24.
\textsuperscript{100} US written submission, para. 24.
adopted findings support only Brazil's theory that there was a net cost to the US Government. Both the original panel and the compliance panel specifically refused to reach Brazil's alternative theory that there was a subsidy under Articles 1.1 and 3.1(a), namely a financial contribution that provided a benefit based on export performance. As such, the appropriate countermeasures are those that are based on the net cost to the US Government. Any other countermeasures do not have their foundation in the specific circumstances of this case.  

4.10 The United States further explains that previous arbitrations have determined that, in the case of prohibited export subsidies, the amount of the subsidy is a proper basis upon which appropriate countermeasures may be calculated, and that, in this particular case, the appropriate methodology is to use the amount of the subsidy as reflected in net cost to government.  

4.11 The United States thus considers that the amount of countermeasures must be equal to the net cost to the US Government of the GSM 102 guarantee programme, because the DSB's recommendations and rulings are based only on findings that the United States conferred export subsidies via GSM 102 because the programme operated at a net cost to the US Government. It offers to calculate the extent of any prohibited subsidy based on the net cost of the GSM 102 guarantees to the US Government. In addition, the United States considers that "a reduction must be made", as "Brazil may only take such countermeasures with respect to the impact of the alleged subsidy on itself. If Brazil were permitted to take countermeasures for the entire amount of the subsidy, it would create a conflict for other Members who may have an interest in the GSM 102 program". The United States also claims that Brazil's methodology is based on "numerous and incorrect assumptions" that result in a figure higher than is appropriate under Article 4.10 of the DSU.  

4.12 Brazil responds that the cost-to-government standard used by the compliance panel in the underlying proceedings represented the lowest common denominator that the parties agreed would establish the existence of a prohibited export subsidy. In contrast, Brazil argues, an assessment of "appropriate" countermeasures based on the amount of the subsidy may not be based on a legal standard that constitutes this lowest common denominator. Brazil states that in this arbitration, the Arbitrator must determine the amount of the US export subsidies, and although the existence of a subsidy may be established using any relevant legal standard, the amount of the subsidy must be based on the legal standard that values not the lowest common denominator, but the subsidy in full.  

4.13 Brazil further explains that the US position that "appropriate countermeasures" must be assessed by reference to a breakeven cost-to-government benchmark under item (j) is premised on partial implementation, through partial withdrawal of the export subsidies, and thus is based on an incorrect interpretation of the term "withdraw". In Brazil's view, the US position is also premised on an incorrect interpretation of the term "appropriate countermeasures". Brazil, with reference to the Appellate Body's rulings in the US – Continued Suspension and Canada – Continued Suspension cases, considers that countermeasures would not serve as an "appropriate" alternative to full implementation – nor encourage compliance – if they were based on a legal benchmark that involved less-than-full implementation. Brazil argues this because removal of the cost to the government of running the GSM 102 programme would not result in withdrawal of the subsidy constituted by the programme. 

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101 US written submission, para. 25.  
102 US written submission, para. 28.  
103 US written submission, para. 16.  
104 US written submission, para. 107.  
105 Brazil's written submission, para. 132.  
106 Brazil's written submission, para. 133.  
107 Brazil's written submission, para. 144.  
108 Brazil's written submission, para. 147.
C. MANDATE OF THE ARBITRATOR AND BURDEN OF PROOF

4.14 We recall that Article 4.10 of the SCM Agreement provides as follows:

"In the event the recommendation of the DSB is not followed within the time-period specified by the panel, which shall commence from the date of adoption of the panel's report or the Appellate Body's report, the DSB shall grant authorization to the complaining Member to take appropriate countermeasures, unless the DSB decides by consensus to reject the request."

(original footnote) This expression is not meant to allow countermeasures that are disproportionate in light of the fact that the subsidies dealt with under these provisions are prohibited.

4.15 In addition, Article 4.11 of the SCM Agreement defines our mandate 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."

(original footnote) This expression is not meant to allow countermeasures that are disproportionate in light of the fact that the subsidies dealt with under these provisions are prohibited.

4.16 As noted by the arbitrator on US – FSC (Article 22.6 – US), "these two provisions complement each other, and the arbitrator's mandate in relation to countermeasures concerning prohibited subsidies under Article 4 of the SCM Agreement is defined, quite logically, with reference to the notion embodied in the underlying provision in Article 4.10". Accordingly, "the expression "appropriate countermeasures" defines what measures can be authorized in case of non-compliance, and our mandate requires us to review whether, in proposing certain measures to take in application of that provision, the prevailing Member has respected the parameters of what is permissible under that provision".

4.17 In this case, we must therefore determine whether the countermeasures proposed by Brazil in respect of the GSM 102 payments are "appropriate" within the meaning of Articles 4.10 and 4.11 of the SCM Agreement. At this stage of our analysis, we consider this question exclusively from the perspective of the proposed level of countermeasures. We will consider the question of the form in which Brazil proposes to take these countermeasures in Section V below.

4.18 The United States considers that Brazil's proposed countermeasures are not "appropriate" because the terms "appropriate countermeasures" in Article 4.10 of the SCM Agreement require the countermeasures to be calculated, in the circumstances of this case, on the basis of the cost to government of the subsidies at issue, and not on the "benefits", as defined by Brazil in the context of these proceedings. Brazil considers that this US position rests on an improper interpretation of the terms "appropriate countermeasures". We must therefore in the first instance clarify the meaning of the terms "appropriate countermeasures" under Article 4.10 and 4.11 of the SCM Agreement, in order to assess whether the United States is correct in arguing that the approach proposed by Brazil in this case is inconsistent with the terms of these provisions. The United States has also challenged the details of the methodology and calculations through which Brazil arrives at its proposed countermeasures.

4.19 The United States agrees that, as the party challenging the proposed countermeasures, it bears the burden of demonstrating that the countermeasures proposed by Brazil are not "appropriate" within the meaning of Article 4.10 of the SCM Agreement.110

4.20 The United States observes, however, that Brazil is obligated to provide the evidence to support the facts it advances in support of its arguments and to provide the relevant facts for the Arbitrator to fulfil its mandate.111

4.21 We note that the arbitrator on Brazil – Aircraft (Article 22.6 – Brazil) found that the party objecting to the proposed countermeasure bears the burden to establish a prima facie case or presumption that the countermeasures are not "appropriate" within the meaning of Article 4.11 and that it is then up to the party proposing the countermeasures to rebut that case or presumption.112 This allocation of the burden of proof has been confirmed in subsequent proceedings under Article 22.6 of the DSU and Article 4.10 of the SCM Agreement.113

4.22 We therefore find that the United States bears the initial burden of establishing the countermeasures are not "appropriate". If that initial burden is discharged, Brazil will then have an opportunity of rebutting the conclusion that the countermeasures are not appropriate.

4.23 This allocation of burden of proof does not alleviate the burden on each party to establish the facts that it alleges during the proceedings. As observed by the Arbitrator in US – FSC (Article 22.6 – US), "it is generally for each party asserting a fact, whether complainant or respondent, to provide proof thereof".114 Accordingly, it is also for Brazil to provide evidence in support of the facts that it advances. The Arbitrator will consider all the evidence and arguments provided by both parties (United States and Brazil) to determine whether the proposed countermeasures are "appropriate", in line with the principles we have set out concerning burden, and the evidence.

4.24 The United States further considers that if it meets its burden of proof, and the countermeasures as proposed by Brazil are found not to be appropriate, the Arbitrator is then not limited to agreeing or disagreeing with an approach or a calculation that has been submitted by either of the parties. Rather, the Arbitrator's task is to determine, in the case of prohibited subsidies, "appropriate countermeasures".115 Brazil also observes that, if the United States succeeds in establishing that Brazil's formula does not meet the applicable legal standard, the Arbitrator can consider adjustments to Brazil's formula, or if none are possible, alternative formulae.116 Brazil further notes that, while the Arbitrator enjoys flexibility to make adjustments to Brazil's formula, Brazil expects that in the interest of due process, the Arbitrator would offer the parties the opportunity to comment on any material departures it wishes to explore.117

4.25 We agree that, in the event that we find that Brazil's proposed countermeasures are not "appropriate" within the meaning of Article 4.10 of the SCM Agreement, we would be required also to determine what would constitute "appropriate" countermeasures. This would enable the complaining party to seek an authorization consistent with our decision, as foreseen in Article 22.7 of the DSU. In

110 US responses to questions from the Arbitrator, question 41, para. 49.
111 US responses to questions from the Arbitrator, question 41, para. 50.
112 See Decision by the Arbitrators, Brazil – Aircraft (Article 22.6 – Brazil), paras. 2.8-2.9.
113 See Decisions by the Arbitrator, US – FSC (Article 22.6 – US), para. 2.8 and Canada – Aircraft Credits and Guarantees, para. 2.5.
114 Decision by the Arbitrator, US – FSC (Article 22.6 – US), para. 2.11.
115 US responses to questions from the Arbitrator, question 70, para. 3.
116 Brazil's responses to questions from the Arbitrator, question 70, para. 6.
117 Brazil's responses to questions from the Arbitrator, question 70, para. 8. See also the US comments to Brazil's response, para. 11.
order to fulfil this part of our mandate, we may be required to adopt an approach or methodology that
differs from those proposed by the parties.

4.26 We now turn to a consideration of the terms of the applicable legal standard for the review of
Brazil's countermeasures, before considering Brazil's proposed countermeasures in light of these
determinations.

D. THE NOTION OF "APPROPRIATE COUNTERMEASURES" UNDER ARTICLE 4.10 OF THE
SCM AGREEMENT

4.27 We first turn to the interpretation of the terms "appropriate countermeasures", as contained in
Articles 4.10 and 4.11 of the SCM Agreement. 118

4.28 As noted above, Article 4.10 of the SCM Agreement provides, with respect to prohibited
subsidies, that:

"[T]he DSB shall grant authorization to the complaining Member to take appropriate⁹
countermeasures ..."

(original footnote)⁹ This expression is not meant to allow countermeasures that are
disproportionate in light of the fact that the subsidies dealt with under these provisions are
prohibited.

4.29 The same terms are reflected in Article 4.11, which defines the mandate of the Arbitrator
under Article 22.6 of the DSU in relation to requests for countermeasures concerning prohibited
subsidies.

4.30 Article 4.10 of the SCM Agreement is a "special or additional rule" identified in Appendix 2
of the DSU. Article 1.2 of the DSU provides that "to the extent that there is a difference between the
rules and procedures of this Understanding and the special or additional rules and procedures set forth
in Appendix 2, the special or additional rules and procedures in Appendix 2 shall prevail".

4.31 The terms of Article 4.10 of the SCM Agreement, as a "special or additional rule and
procedure", should be interpreted on their own terms. It is clear that the terms may embody different
rules, which would prevail in case of conflict. Nonetheless, Article 22.6 of the DSU remains relevant,
as the general legal basis under which the proceedings are conducted. Indeed, Article 4.11 of the
SCM Agreement refers expressly to Article 22.6 of the DSU as the legal basis for arbitral proceedings
concerning countermeasures in relation to prohibited subsidies.

4.32 We note that the terms of Article 4.10 of the SCM Agreement have been interpreted in three
previous cases, and we will refer to these rulings as appropriate. Nonetheless, given the centrality of
this question to our analysis, and in light also of the fact that the parties' different views as to Brazil's
proposed countermeasures stem in part from diverging interpretations of the terms "appropriate
countermeasures", we find it necessary to clarify from the outset our interpretation of these terms.

4.33 The terms of Article 4.10 of the SCM Agreement, like other provisions of the WTO covered
agreements, should be interpreted in accordance with the customary rules of interpretation of public
international law. In particular, as reflected in Article 31.1 of the Vienna Convention on the Law of
Treaties (the "Vienna Convention"), "a treaty shall be interpreted in good faith in accordance with the
ordinary meaning to be given to the terms of the treaty in their context and in the light of its object

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118 Throughout this Section of the Decision, reference is made to the terms "appropriate
countermeasures" as contained in Article 4.10 of the SCM Agreement. It is understood that these terms are
assumed to have the same meaning also in Article 4.11 of the SCM Agreement.
and purpose". For the sake of clarity, it is useful to start the analysis with the terms of the provision first, and to then turn to its context, object and purpose.

1. The terms "appropriate countermeasures" and the terms of footnote 9

(a) "countermeasures"

4.34 We note at the outset that the term "countermeasures" is used to designate retaliatory measures in the WTO Agreement only in the SCM Agreement. This contrasts with the terms of Article 22 of the DSU, which refers to the "suspension of concessions or other obligations". However, it is not argued by either party in these proceedings that the term "countermeasures" would designate, in the SCM Agreement, anything other than a temporary suspension of certain obligations, and this is what we understand the term to refer to.

4.35 The prefix "counter-" can be defined as meaning "against, in return".119 The Oxford English Dictionary further cites the term "counter-measure" as an illustration of a situation in which this prefix is used to indicate something that is "[d]one, directed, or acting against, in opposition to, as a rejoinder or reply to another thing of the same kind already made or in existence". Another dictionary defines the term "countermeasure" as an "action or device designed to negate or offset another".120

4.36 Brazil draws attention to the fact that the term "countermeasures" refers to measures taken "against" something, to "counteract" something. In the context of Article 4.10 of the SCM Agreement, Brazil notes, the term refers to "retaliatory action that counters a respondent's failure to "withdraw" a "prohibited" subsidy".121 The United States appears to agree with this basic premise.122 In light of the definitions noted above, we also agree that "countermeasures" are, in essence, measures taken to "counteract" something, and specifically, in the context of Article 4.10 of the SCM Agreement, measures taken to act against, or in response to, a failure to withdraw a prohibited subsidy within the required time period.

4.37 In Brazil's view, the dictionary meanings of this term further indicate that it refers to retaliatory action that goes "beyond the mere rebalancing of trade interests".123 The United States, on the contrary, highlights that definitions of the term "counter" include notions of balance and of duplication, so that an appropriate countermeasure would be one that would "balance out the inconsistency or duplicate the loss of concessions resulting from the breach".124

4.38 We are not convinced that the use of the term "countermeasures" necessarily connotes, in and of itself, an intention to refer to retaliatory action that "goes beyond the mere rebalancing of trade interests" as Brazil suggests. As noted above, the term indicates that the action is taken in response to another, in order to "counter" it. This does not necessarily connote, in our view, an intention to "go beyond" a rebalancing of trade interests. Indeed, we are not convinced that the dictionary meanings of the term, in and of themselves, provide any compelling guidance as to the exact level of countermeasures that may be permissible under Article 4.10 of the SCM Agreement. We note that the term "countermeasures" is also used in Article 7.9 of the SCM Agreement, where the permissible level of countermeasures is defined with reference to the adverse effects of the violating measure.

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121 Brazil's written submission, para. 26.
122 See US responses to questions from the Arbitrator, question 43, para. 56: "the "countermeasures" are to "counter the inconsistency with the SCM Agreement."
123 Brazil's written submission, para. 26.
124 US responses to questions from the Arbitrator, question 43, para. 56.
125 Brazil's written submission, para. 26.
4.39 Brazil also refers to the use of the term "countermeasures" in public international law, as reflected in the Draft Articles on State Responsibility of the International Law Commission (ILC)\textsuperscript{126}, as an "additional interpretative consideration", to highlight that, "under the ILC Articles, countermeasures are taken with the goal of encouraging – 'inducing' – the responsible State to comply with its obligations, without making it impossible to comply, and without punishing the respondent".\textsuperscript{127}

4.40 We note that the term "countermeasures" is the general term used by the ILC in the context of its Draft Articles on State Responsibility, to designate temporary measures that injured States may take in response to breaches of obligations under international law.\textsuperscript{128}

4.41 We agree that this term, as understood in public international law, may usefully inform our understanding of the same term, as used in the SCM Agreement.\textsuperscript{129} Indeed, we find that the term "countermeasures", in the SCM Agreement, describes measures that are in the nature of countermeasures as defined in the ILC's Draft Articles on State Responsibility.

4.42 At this stage of our analysis, we therefore find that the term "countermeasures" essentially characterizes the \textit{nature} of the measures to be authorized, i.e. temporary measures that would otherwise be contrary to obligations under the WTO Agreement and that are taken in response to a breach of an obligation under the SCM Agreement. This is also consistent with the meaning of this term in public international law as reflected in the ILC Articles on State Responsibility.

4.43 As to the permissible \textit{level} of countermeasures that may be authorized under Article 4.10 of the SCM Agreement, this is, in our view, primarily defined through the term "appropriate" and the wording of footnote 9.

(b) "appropriate"

4.44 Article 4.10 of the SCM Agreement requires the countermeasures that may be authorized in response to the absence of timely withdrawal of a prohibited export subsidy to be "appropriate". This term is in turn informed by footnote 9, which clarifies that "this expression ['appropriate countermeasures'] is not intended to allow countermeasures that would be disproportionate in light of

\textsuperscript{126} The International Law Commission was established by the UN General Assembly for the promotion of the progressive development of international law and its codification. The Commission adopted in 2001 a set of draft articles on responsibility of States for internationally wrongful acts consisting of 59 articles as well as commentaries thereto. The General Assembly, in resolution 56/83 of 12 December 2001, as recommended by the Commission, took note of the articles on responsibility of States for internationally wrongful acts, the text of which was annexed to the resolution, commended them to the attention of Governments without prejudice to the question of their future adoption or other appropriate action. See http://www.un.org/law/ilc/.

\textsuperscript{127} Brazil’s written Submission, para. 43.


\textsuperscript{129} We also note however that, by their own terms, the Articles of the ILC on State Responsibility do not purport to prevail over any specific provisions relating to the areas it covers that would be contained in specific legal instruments. We note in particular the following Commentary of the ILC:

In common with other chapters of these articles, the provisions on countermeasures are residual and may be excluded or modified by a special rule to the contrary (see article 55). Thus, a treaty provision precluding the suspension of performance of an obligation under any circumstances will exclude countermeasures with respect to the performance of the obligation. Likewise, a regime for dispute resolution to which States must resort in the event of a dispute, especially if (as with the WTO dispute settlement system) it requires an authorization to take measures in the nature of countermeasures in response to a proven breach.
the fact that the subsidies at issue are prohibited". We will first consider the term "appropriate", before turning to how it is informed by the terms of footnote 9.

4.45 Dictionary definitions of the adjective "appropriate" include: "Specially fitted or suitable, proper" and "especially suitable or compatible: fitting". "Fitting", in turn, can be defined as "of a kind appropriate to the situation". The terms "fit, suitable, meet, proper, appropriate, fitting, apt, happy, felicitous" are further identified as synonyms that mean "right with respect to some end, need, use, or circumstance".

4.46 These definitions suggest that the adjective "appropriate" conveys the notion of something being "adapted" or "suited" to the particular situation at hand. This very general indication does not provide explicit guidance as to the exact parameters that legitimately may be taken into account in assessing the "appropriateness" of countermeasures in the context of Article 4.10 of the SCM Agreement. Rather, the term suggests that countermeasures should be "adapted" to the particular circumstances, and thus that there may be a degree of legitimate variability in what may be "appropriate", depending on the circumstances of the case. To that extent, we agree with the United States that the term "appropriate" "connotes the close relationship between countermeasures and the particular circumstances of a particular case".

4.47 Brazil, for its part, likens the term "appropriate" to the term "reasonable", in that it "similarly involves 'a degree of flexibility'", and that "the word requires the treaty interpreter to consider all of the circumstances of a particular case in assessing whether the respondent has demonstrated that proposed countermeasures are inappropriate". Leaving aside for now the question of the burden to be discharged by the responding Member in arbitral proceedings, we agree that the term "appropriate" suggests that "all of the circumstances of a particular case" should be taken into account in assessing the "appropriateness" of proposed countermeasures, and that it also suggests a degree of flexibility in what might be considered "appropriate" in a given case.

4.48 With these general considerations in mind, we must now determine what types of considerations may be relevant in assessing what might constitute "appropriate" countermeasures in the circumstances of a particular case, as inferred from the terms as used in Article 4.10 of the SCM Agreement.

4.49 The United States argues that the appropriate countermeasures are those that have "a concrete basis in the specific findings adopted by the DSB". In this case, in the United States' view, the appropriate countermeasures are those based on the net cost of government and "any other countermeasures do not have their foundation in the specific circumstances of this case". Brazil considers that "in the absence of a prescribed standard, what is "appropriate" must be defined with respect to the situation envisaged in Article 4 – namely the non-compliant Member's failure to withdraw a prohibited subsidy". For Brazil, "in assessing whether proposed countermeasures are "appropriate", the treaty interpreter must take into account that they involve retaliatory action against, and in opposition to, the responding Member's failure to withdraw an act expressly characterized as per se prohibited".

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133 US written submission, para. 24.
134 Brazil's written submission, para. 27.
135 US written submission, para. 25.
136 Brazil's written submission, para. 32.
138 Brazil's written submission, para. 36.
139 Brazil's written submission, para. 27.
4.50 Brazil further argues that the appropriateness of the countermeasures must also be considered in light of the particular characteristics of the subsidy to be withdrawn: its prohibited nature, its amount, its terms and conditions of grant, its beneficial impact on the respondent's exports, and whether it is still being granted despite the DSB's recommendations and rulings requiring withdrawal. Finally, Brazil considers that the circumstances of the dispute also include the respective situations of the prevailing and the non-compliant Member. "Countermeasures are economic measures taken by one Member in response to another Member's failure to implement the DSB's recommendations and rulings. The individual and the relative situations of the two Members are, therefore, pertinent in assessing whether countermeasures are fitting and suitable in the circumstances.

4.51 We agree that a number of the circumstances identified above may, a priori, be pertinent to an assessment of whether proposed countermeasures are "appropriate". However, we must consider further how the circumstances of a given case should be taken into account. For this purpose, we find it useful to consider the context in which countermeasures arise.

4.52 The imposition of countermeasures provides temporary redress to the successful complaining Member for the situation arising from the continued violation of the covered agreements, pending full implementation of recommendations and rulings of the DSB. As observed by the Appellate Body in US – Continued Suspension, "the suspension of concession[s] is the last resort available to a Member who has successfully challenged the consistency with the covered agreements of another Member's measure". This remedy is "contingent and limited in time".

4.53 The essence of the task of determining what might constitute "appropriate countermeasures" under Article 4.10 of the SCM Agreement is to seek to quantify the countermeasures that a complaining Member is entitled to take in response to the continued existence of a prohibited subsidy. This response will take the form of a suspension of concessions or other obligations otherwise owed to the violating Member under the covered agreements. In other words, the complaining Member will be authorized to take certain measures adversely affecting the trade opportunities of the violating Member, in response to an illegal measure taken by that Member, which has adversely affected its own trade opportunities.

4.54 These circumstances define importantly, in our view, the elements to be taken into account in determining what may constitute "appropriate countermeasures" in a given case. This question must necessarily be understood with reference to the particular dispute at issue. The question is what countermeasures will be "appropriate" for that complainant in the specific dispute at hand. This implies that it is appropriate to take into account not only the existence of the violation in itself, but also the specific circumstances that arise from the breach for the complaining party seeking to apply countermeasures. This is consistent with the ordinary meaning of the term "appropriate", which implies a degree of variability in the level of countermeasures according to the circumstances, rather than a fixed quantum.

4.55 As the arbitrator on US – FSC (Article 22.6 – US) noted, the existence of a prohibited export subsidy granted and maintained inconsistently with the SCM Agreement "has, in itself, the effect of

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138 Brazil's written submission, para. 37.
139 Brazil explained later in response to a question from the Arbitrator that it had not taken these specific aspects into account in its assessment of its proposed level of countermeasures, but rather in its determination of the form in which it would seek to retaliate. See Brazil's responses to Questions from the Arbitrator, Question 16(b), para. 165.
140 Brazil's written submission, para. 38.
upsetting the rights and obligations between the parties, irrespective of what might be, as a matter of fact, the actual trade effects on the complainant".143

4.56 In addition, the continued maintenance of a prohibited export subsidy is likely to have a trade-distorting impact. It is in the very nature of an export subsidy that it is likely to distort trade in favour of the exporters of the subsidizing Member. Although such trade-distorting effects need not be established in order to find a violation of the relevant provisions of the _SCM Agreement_, it is precisely the high likelihood of such trade-distorting effects arising from the granting of export subsidies that explains their prohibition under the _SCM Agreement_.

4.57 The actual economic consequences of the breach may vary significantly from case to case. In particular, the trade-distorting impact of a prohibited export subsidy may vary depending on the nature and design of the subsidy as well as various other economic factors. The trade of other WTO Members can be affected, and usually is affected, to varying degrees as a result of the granting and maintenance of illegal subsidies. The extent to which the complaining party is adversely affected by the trade-distorting impact arising from the illegal subsidy may accordingly vary from case to case.

4.58 The trade-distorting impact of the prohibited subsidy at issue on the complaining Member effectively reflects the manner in which the economic position of the complaining party to the dispute has been disrupted and harmed by the illegal measure. This provides a measure of the extent to which the balance of rights and obligations between the parties has been upset by the granting and maintenance of the prohibited subsidy at issue. This is necessarily, in our view, a central consideration in determining what may constitute "appropriate countermeasures" to be applied between such two parties.

4.59 We also note that this interpretation also takes into account the "particular characteristics of the prohibited subsidy that should have been withdrawn, including terms and conditions", which Brazil argues should be taken into account.144 The trade effects that arise from the subsidy directly reflect the manner in which the subsidy operates on the market, and therefore its particular characteristics.

4.60 We further note that an interpretation that would _not_ take due account of the extent to which the complaining Member has been affected by the illegal measure would lead to the result that countermeasures could in principle be identical, irrespective of whether the Member at issue has been significantly affected or not at all by the measure at issue. This would not be consistent, in our view, with the ordinary meaning of the term "appropriate", which implies a degree of variability according to the circumstances. In our view, this would not be respected, if a situation where the complaining Member suffers significant trade-distorting impact as a result of the measure were _a priori_ to be considered to be identical to a situation where it suffers no trade-distorting impact.

4.61 Brazil emphasizes the fact that the prohibition of export subsidies is a _per se_ prohibition that does not require a demonstration of adverse effects.145 It considers that it is the prohibited nature of the subsidy rather than the harm to the complainant that is the focus of "appropriate" countermeasures under Article 4.10 of the _SCM agreement_.146

4.62 In our view, the fact that it is not necessary to determine the extent to which the complaining Member is adversely affected by a subsidy in order to find that such subsidy is prohibited does not

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143 See Decision by the Arbitrator, _US – FSC (Article 22.6 – US)_ , para. 5.23.
144 Brazil's responses to questions from the Arbitrator, question 16(a), para. 164.
145 See Brazil's written submission, para. 40.
146 See Brazil's responses to questions from the Arbitrator, question 15, para. 158.
imply that this question is not relevant to a determination of the level of countermeasures that would be "appropriate" for that complaining Member to apply in the circumstances of the case.

4.63 The initiation of dispute settlement proceedings in relation to a prohibited subsidy is not conditioned on the demonstration, by the complaining Member, of adverse trade effects (on itself or on other Members). Under the terms of Article 4 of the SCM Agreement, "whenever a Member has reason to believe that a prohibited subsidy is being granted or maintained by another Member, such Member may request consultations with such other Member". This does not imply, however, that the manner in which the complaining party is affected by the breach is not relevant to dispute settlement proceedings, or that it should not be an important consideration in determining the level of countermeasures that may be applied by the complaining Member, if the dispute reaches the stage of authorizing such countermeasures.

4.64 In fact, this distinction is found in dispute settlement proceedings under the DSU generally. The notion of "nullification or impairment of benefits" accruing to Members under the covered agreements underlies the initiation and conduct of dispute settlement proceedings throughout the DSU, but a quantification of the level of nullification or impairment arising from a measure determined to be inconsistent with a covered agreement (in other words, the adverse impact arising from the inconsistent measure) only becomes necessary at the stage of authorizing a suspension of concessions or other obligations in case of non-compliance.

4.65 Under the terms of Article 3.3 of the DSU:

"The prompt settlement of situations in which a Member considers that any benefits accruing to it directly or indirectly under the covered agreements are being impaired by measures taken by another Member is essential to the effective functioning of the WTO and the maintenance of a proper balance between the rights and obligations of Members."

4.66 Article 3.8 of the DSU further provides that when a violation has been determined to exist, this is considered prima facie to constitute a case of nullification or impairment, so that "there is normally a presumption that a breach of the rules has an adverse impact on other Members parties to that covered agreement".147

4.67 A demonstration of the level of nullification or impairment arising from the inconsistent measure for the complainant is therefore not a separate requirement to establish the existence of a violation. This question only becomes relevant in the context of determination of the level of countermeasures to be authorized in case of non-compliance, as such countermeasures are required not to exceed the level of nullification or impairment, under Article 22.4 of the DSU.

4.68 Under the terms of Article 30 of the SCM Agreement, both Article XXIII (which contains the initial reference to nullification or impairment of benefits accruing to a Member as the basis for the initiation of dispute settlement proceedings) and the DSU are applicable to dispute settlement proceedings under the SCM Agreement, except as otherwise specifically provided in that Agreement.

4.69 We note in this respect the determination of the original panel in this case that:

"Under Article 3.8 of the DSU, in cases where there is an infringement of the obligations assumed under a covered agreement, the action is considered prima facie to constitute a case of nullification or impairment. We conclude that, to the extent

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147 Article 3.8 of the DSU.
that the United States has acted inconsistently with the covered agreements, it has
nullified or impaired benefits accruing to Brazil under these agreements.\textsuperscript{148}

4.70 This makes it clear that the findings of violation in this dispute gave rise to a presumption that
benefits accruing to Brazil under the SCM Agreement have been nullified or impaired by the breach.
The question of the manner in which Brazil's interests have been adversely affected by the
inconsistent measure is therefore not absent from the initial stages of the proceedings, but the
existence of the breach is a sufficient consideration, at that stage, to conclude that Brazil's benefits
under the agreements have been nullified or impaired. In other words, it is assumed from the very
existence of the breach that Brazil's interests are adversely affected, but it is not necessary to quantify
this for the purposes of determining that a violation exists and recommending that the Member
concerned withdraw the inconsistent measure.

4.71 However, when the dispute reaches the stage of authorizing countermeasures and of
quantifying the level at which the complaining party should be entitled to suspend concessions or
other obligations otherwise owed to the responding Member, the question of the extent to which the
interests of the complaining Member have been affected becomes directly pertinent. As observed
above, the extent to which the complaining Member has been adversely affected by the inconsistent
measure provides a measure of the extent to which the balance of rights and obligations between the
two parties has been upset by the offending measure.

4.72 There is therefore no inconsistency between the fact that a prohibited subsidy is "per se"
prohibited and our determination that the trade-distorting impact of that measure on the complaining
party provides a basis from which to assess the appropriateness of proposed countermeasures in a
given case. On the contrary, it seems to us that it follows logically from the sequence of procedural
steps leading to the authorization to suspend concessions or other obligations that a consideration of
the manner in which the complaining Member is adversely affected by the illegal measure, which
does not need to play a central role in establishing the existence of a violation, would become a
central consideration in assessing the level of countermeasures that such complaining Member would
be entitled to take in the absence of timely implementation.

4.73 At this stage of the proceedings, it is the very essence of the assessment to determine a level
at which it would be "appropriate" for the complaining party to adversely affect the trade
opportunities of the violating Member through the suspension of certain obligations under the covered
agreements. A consideration of the extent to which that complaining party has itself been adversely
affected by the measure against which the countermeasures will be applied is manifestly pertinent to
this question.

4.74 We fully recognize that Article 4.10 of the SCM Agreement is a special or additional rule that
sets out a specific legal standard for the level of permissible countermeasures in cases relating to
export subsidies. We are therefore not limited by the terms of Article 22.4 of the DSU to a level of
countermeasures that would be "equivalent to the level of nullification or impairment". Rather, we
must consider the level of proposed countermeasures on the basis of the legal standard contained in
Article 4.10 of the SCM Agreement, in terms of whether the proposed countermeasures are
"appropriate" within the meaning of this provision.

4.75 As we have observed above, it is the ordinary meaning of the term "appropriate" itself which
calls for attention to be given to the circumstances of the case and directs us to consider the trade-
distorting impact of the prohibited subsidy on the complaining Member as a central aspect of these
circumstances. This does not mean, however, that the legal standard contained in Article 4.10 of the

\textsuperscript{148} Panel Report, para. 8.2.
SCM Agreement is identical to that contained in Article 22.4 of the DSU. We recognize that there are significant differences between the two standards, which we will address in the next section.

4.76 We find further confirmation for our interpretation in the fact that, under GATT 1947, the terms "appropriate in the circumstances", which are used in Article XXIII of GATT to define the permissible suspension of concessions or other obligations, were interpreted having regard to "the equivalence to the impairment suffered" by the complaining party as a result of the measures at issue:

"2. The Working Party was instructed by the CONTRACTING PARTIES to investigate the appropriateness of the measure which the Netherlands Government proposed to take, having regard to the equivalence to the impairment suffered by the Netherlands as a result of the United States restrictions.

3. The Working Party felt that the appropriateness of the measure envisaged by the Netherlands Government should be considered from two points of view: in the first place, whether in the circumstances, the measure proposed was appropriate in character, and secondly, whether the extent of the quantitative restriction proposed by the Netherlands Government was reasonable, having regard to the impairment suffered."\(^{149}\) (emphases added).

4.77 In our view, this confirms that the term "appropriate", in the context of a provision defining the level of permissible countermeasures to be applied by one Member against another in response to a situation of continued violation, invites a consideration of the level of impairment or injury suffered by the complaining Member as a result of the inconsistent measure.

4.78 We further note the following observations of the arbitrator on EC – Bananas III (US) (Article 22.6 – EC):

"In our view, in light of the explicit reference in paragraphs 4 and 7 of Article 22 of the DSU to the need to ensure the equivalence between the level of proposed suspension and the level of the nullification or impairment suffered, the standard of appropriateness applied by the 1952 working party has lost its significance as a benchmark for the authorization of the suspension of concessions under the DSU.

However, we note that the ordinary meaning of 'appropriate', connoting 'specially suitable, proper, fitting, attached or belonging to'\(^{150}\), suggests a certain degree of relation between the level of the proposed suspension and the level of nullification or impairment, where as we stated above, the ordinary meaning of 'equivalent' implies a higher degree of correspondence, identity or stricter balance between the level of the proposed suspension and the level of nullification or impairment. Therefore, we conclude that the benchmark of equivalence reflects a stricter standard of review for Arbitrators acting pursuant to Article 22.7 of the WTO's DSU than the degree of scrutiny that the standard of appropriateness, as applied under the GATT of 1947 would have suggested."\(^{151}\) (emphasis added)

4.79 We agree with the arbitrator in that dispute that "the ordinary meaning of "appropriate", connoting "specially suitable, proper, fitting, attached or belonging to"\(^{152}\), suggests a certain degree of


\(^{151}\) Decision of the Arbitrator, EC – Bananas III (US) (Article 22.6 – EC), paras. 6.4 and 6.5.

relation between the level of the proposed suspension and the level of nullification or impairment". We also agree that, by contrast with the terms of Article 22.4 of the DSU, the term appropriate suggests "a certain degree of relation" rather than exact identity between the two.

4.80 With these determinations in mind, we must now consider what further guidance is provided by the terms of footnote 9 of the SCM Agreement, in order properly to understand the meaning of the expression "appropriate countermeasures".

(c) Footnote 9

4.81 Footnote 9 of the SCM Agreement provides that:

"This expression is not meant to allow countermeasures that are disproportionate in light of the fact that the subsidies dealt with under these provisions are prohibited."

4.82 In Brazil's view, "footnote 9 explains that the unlawful nature of the measure itself, irrespective of the effects that measure may have on a prevailing Member, informs the interpretation of the terms "appropriate" and not "disproportionate"; "appropriate countermeasures" counter a subsidy that is unlawful in and of itself under the SCM Agreement and are not confined to countering only the impact of that unlawful act on a prevailing Member". Brazil considers that an assessment of proportionality under footnote 9 needs to take into account "at the very least, all of the commercial and economic advantages that are conferred by a subsidy".

4.83 The United States "does not argue that a countermeasure is punitive every time it is even slightly greater than the adverse effects suffered by the complainant". However, it considers, at the same time, that the requirement that the countermeasures not be "disproportionate" "links this provision to trade effects because the nullification or impairment caused by the measures (the metric used under Article 22 of the DSU) provides the basis against which to judge whether the proposed countermeasures are disproportionate." The United States indicates that it "has serious concerns with those awards that would enable a Member to impose countermeasures in excess of the effect of the subsidy on that Member".

4.84 The terms "not ... disproportionate in light of the fact that the subsidies dealt with in these provisions are prohibited" either inform the meaning of the expression "appropriate countermeasures" in Article 4.10, or qualify that meaning. Whether it "informs" or "qualifies" is ultimately a difference in perception which will not, in our view, affect our consideration of the expression.

4.85 The very formulation of the footnote, i.e. "this expression is not meant to allow countermeasures that are disproportionate" (emphasis added) indicates, in our view, that it serves to guard against an interpretation of the terms "appropriate countermeasures" that would allow measures that are "disproportionate". We therefore understand this proportionality requirement to be a protection against excessive countermeasures. In other words, while the expression "appropriate countermeasures" allows a degree of flexibility in assessing what may be "appropriate" in the circumstances of a given case, this flexibility is not unbounded. As observed by the arbitrator on US – FSC (Article 22.6 – US), "footnote 9 further confirms that, while the notion of "appropriate

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153 Brazil's responses to questions from the Arbitrator, question 75, para. 36.
154 Brazil's responses to questions from the Arbitrator, question 80, para. 53.
155 US responses to questions from the Arbitrator, question 82, para. 24.
156 US responses to questions from the Arbitrator, paras. 26 and 32.
157 US responses to questions from the Arbitrator, question 90, para. 34.
countermeasures" is intended to ensure sufficient flexibility of response to a particular case, it is a flexibility that is distinctly bounded.

4.86 As noted earlier, countermeasures are an exceptional, "last resort", remedy within the WTO dispute settlement system. Footnote 9, in our view, invites us to exercise caution and to ensure that the response is "measured" and that the countermeasures to be authorized do not result in a greater disruption in the trade relations among Members and in the application of the WTO agreements than is warranted by the circumstances of the case at hand.

4.87 This requirement confirms us in our view that countermeasures, in order to be "appropriate", should bear some relationship to the extent to which the complaining Member has suffered from the trade-distorting impact of the illegal subsidy. Countermeasures are in essence trade-restrictive measures to be taken in response to a Member's application of a trade-distorting measure that has been determined to nullify or impair the benefits accruing to another Member. Countermeasures that would ensure a relationship of proportionality between the extent to which the trade opportunities of the Member applying the countermeasures has been affected and the extent to which the trade opportunities of the violating Member will in turn be adversely affected would notionally restore the balance of rights and obligations arising from the covered agreements that has been upset between the parties. This would ensure a proper relationship between the level of the countermeasures and the circumstances out of which the dispute arises.

4.88 At the same time, we note that the terms "not ... disproportionate", like the term "appropriate", do not require exact identity between the trade-distorting impact of the measure and the level of countermeasures to be authorized. The term "appropriate" suggests a degree of flexibility, according to the circumstances, and the negative requirement that countermeasures "not" be "disproportionate" similarly suggests that a less than exact correspondence is sufficient.

4.89 Although footnote 9 does not expressly state in relation to what the countermeasures should not be "disproportionate", it indicates that the countermeasures should not be disproportionate "in light of the fact the subsidies dealt with under these provisions are prohibited".

4.90 As we have noted above, the existence of a prohibited subsidy which has not been withdrawn by the responding Member is the very reason for the authorization of countermeasures. The question we must consider is the relevance of the unlawful character of the subsidy, as such, to our assessment of the appropriateness of countermeasures under Article 4.10 of the SCM Agreement, in light of the terms of footnote 9. In this respect, we agree with the arbitrator on US – FSC (Article 22.6 – US) that:

"[T]his emphasis on the unlawful character of export subsidies invites ... a consideration of the impact which this unlawful character may have, in itself. We note in this respect that the maintenance of the unlawful measure by the Member concerned – in violation of its obligations – has, in itself, the effect of upsetting the balance of rights and obligations between the parties, irrespective of what might be, as a matter of fact, the actual trade effects on the complainant. We recall, in this regard, that the prohibition on export subsidies is a per se obligation, not itself conditioned on a trade effects test. Members are entitled to trade without other Members resorting to export subsidies. In our view, the second part of the footnote directs that this is in itself a required consideration when it comes to assessing whether countermeasures are not disproportionate within the meaning of Article 4.10."159

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159 Decision by the Arbitrator, US – FSC (Article 22.6 – US), para. 5.23.
4.91 We agree with this characterization of the second part of the footnote, which suggests that the prohibited nature of the subsidy at issue, in other words the existence of a breach of an obligation not to provide such subsidies, is a consideration to be taken into account in assessing the "proportionality" or lack of "disproportion" in the proposed countermeasures.

4.92 In light of these determinations, we consider that countermeasures would be "disproportionate" if they were excessive, having regard to the extent to which the trade between the parties in dispute has been affected. In other words, countermeasures that do not have a proper relationship to the extent to which the interests of the complaining Member have been adversely affected by the measure would be "disproportionate".

4.93 At the same time, we bear in mind also that the footnote highlights "the fact that the subsidies dealt with in these provisions are prohibited", and in so doing asks us to take that factor into consideration. This reminds us of the determination that the maintenance of the violating measure has had the effect of upsetting the balance of rights and obligations between the parties.160

4.94 In light of these considerations, we find that, in considering whether proposed countermeasures are "appropriate" and "not ... disproportionate" within the meaning of Article 4.10, it is legitimate to give consideration also to the prohibited nature of the subsidy, in itself. In this context, it is permissible that the assessment of the overall trade impact on the complaining Member not be precise, nor that the countermeasure should be directly equivalent to that impact. The amount of the countermeasure must at least be within a range of permissibly "appropriate" amounts, and its assessment can take into account a variety of factors which flow from the failure to withdraw the subsidy and are relevant to the trade impact on the complaining Member. Such a consideration would therefore legitimately be an integral part of an assessment of whether proposed countermeasures are "appropriate" within the meaning of Article 4.10 of the SCM Agreement.

2. The terms of Article 4.10 of the SCM Agreement in their context

4.95 Article 4.10 of the SCM Agreement contains the legal standard for the level of countermeasures in cases concerning prohibited subsidies, while Article 7.9 of the SCM Agreement contains the standard in relation to actionable subsidies, and Article 22.4 of the DSU contains the legal standard for the level of suspension of concessions or other obligations in relation to other WTO-inconsistent measures. These latter two provisions therefore provide the Arbitrator with useful context for understanding the terms of Article 4.10 of the SCM Agreement.

4.96 Brazil notes that Article 4.10 and 4.11 of the SCM Agreement must be contrasted with Article 22.4 of the DSU, which requires that action in response to non-compliance be "equivalent to the level of nullification or impairment".161 Brazil highlights that "unlike the phrase 'equivalent to the level of nullification or impairment' in Article 22.4 of the DSU, the drafters did not prescribe a precise quantitative or qualitative benchmark for designing 'countermeasures' under Articles 4.10 and Article 4.11".162

4.97 We agree that the term "appropriate", by contrast to the terms "equivalent to the level of nullification or impairment", does not require us to engage in an exact exercise to work out the correspondence between the level of countermeasures to be authorized and a specific benchmark such as the level of nullification or impairment of benefits suffered by the complainant. We agree that this difference in wording must be given meaning. The term "appropriate" in Article 4.10 of the

160 See para. 4.55 above.
161 Brazil's written submission, para. 29.
162 Brazil's written submission, para. 29.
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cm Agreement suggests a degree of flexibility and adaptation to the circumstances of the case that is not found in Article 22.4 of the DSU.

4.98 Similarly, within the context of the SCM Agreement, the terms of Article 4.10 contrast with those of Article 7.9, which foresees, in relation to actionable subsidies, countermeasures "commensurate with the degree and nature of the adverse effects determined to exist". Here too, the terms of Article 7.9, through this reference to the "degree and nature of the adverse effects determined to exist", point to a single specific benchmark as reference, and require the countermeasures to be "commensurate" with this benchmark, which is carefully defined in relation to the specific adverse effects that form the basis of the underlying findings. These elements distinguish the terms of Article 7.9 from the terms of Article 4.10. This difference can be understood in the broader context of the SCM Agreement, where actionable subsidies may only be challenged to the extent that they result in certain enumerated adverse effects for other WTO Members. By contrast, prohibited subsidies are prohibited independently of any demonstration of adverse effects. In such cases, no specific "adverse effects" will have been "determined to exist" prior to the request for authorization to apply countermeasures, and therefore there are none that could be referred to.

4.99 The contrast between the formulations of Article 4.10 of the SCM Agreement and Article 22.4 of the DSU and Article 7.9 of the SCM Agreement respectively is informative for the purposes of further clarifying the meaning of the terms "appropriate countermeasures" in their context.

4.100 First, the different choice of terms, including within the SCM Agreement itself, highlights that the lack of reference to a specific benchmark by which the level of countermeasures must be measured, and the flexibility that this affords, are specific to Article 4.10 of the SCM Agreement. A conscious decision has been made, in drafting the SCM Agreement and the DSU, to treat countermeasures in relation to prohibited subsidies in a way that differs from other countermeasures.

4.101 Secondly, we also note that the two specific benchmarks reflected in Article 22.4 of the DSU and Article 7.9 of the SCM Agreement both define the level of permissible countermeasures with express reference to the trade effects of the measure at issue, while Article 4.10 of the SCM Agreement does not. We see no reason to assume that the drafters, in choosing the more flexible terms "appropriate countermeasures", would have intended to endorse a more restrictive standard than those reflected in the other two provisions embodying other standards within the WTO Agreement fulfilling a comparable function. In particular, in light of the fact that, as highlighted by footnote 9, "the subsidies dealt with under these provisions are prohibited", it may be expected that the remedy foreseen with respect to such subsidies would be at least as encompassing as that foreseen with respect to actionable subsidies that are not prohibited but that have demonstrated adverse effects on other WTO Members.

4.102 The notion of "appropriate countermeasures" must therefore, in our view, be understood to permit countermeasures that would at least reflect the level of any adverse effects incurred by the complaining Member as a result of the granting and maintenance of the prohibited subsidy at issue. Countermeasures under Article 4.10 of the SCM Agreement would be "appropriate", and could not be considered to be "disproportionate" within the meaning of that provision, if they were proportionate, or at least not disproportionate, to the adverse effects suffered by the complaining Member as a result of the prohibited subsidy at issue.

4.103 Brazil highlights the specificities and the "more stringent" character of the dispute settlement provisions under the SCM Agreement for prohibited subsidies.\footnote{See Brazil's written submission, para. 40.} In Brazil's view, "adopting a benchmark tied to the "economic disadvantage" suffered by a prevailing Member, or in other words, the "impact" or "effect" of a prohibited subsidy on that Member, would be fundamentally inconsistent
with a proper interpretation of Articles 4.10 and 4.11 of the *SCM Agreement*. In Brazil's view, these provisions, unlike Article 22.4 of the DSU, do not limit countermeasures to the "economic disadvantage" suffered by a complaining Member. Instead, the countermeasures must be "appropriate" and not "disproportionate" in light of, for example, the nature of the prohibited subsidy.165

4.104 We agree that "appropriate countermeasures" would entitle a complaining Member to countermeasures that do not *exactly* reflect the adverse effects of the inconsistent measure on itself. It is clear also that the terms "appropriate countermeasures" and footnote 9 contain no requirement of exact equivalence or "commensurateness" between such adverse effects and the level of countermeasures. Furthermore, as we have determined above, the terms of the footnote to Article 4.10 of the *SCM Agreement* make it clear that it would be legitimate to specifically take into account the prohibited nature of the subsidy, as such, in an assessment of the permissible level of countermeasures. At the same time, as we have determined above, we are not persuaded that this implies that countermeasures under Article 4.10 of the *SCM Agreement* should bear no relationship to such effects, or could be "disproportionate" to them, taking into account also the prohibited nature of the subsidy.

4.105 Both parties highlight the fact that Article 4.10, by contrast with Article 7.9 of the *SCM Agreement*, is concerned with subsidies that are prohibited in themselves, so that it is that subsidy itself, and not only its adverse effects, that are of concern. Thus, Brazil argues that "in determining whether proposed countermeasures are "appropriate", the prohibited nature of the subsidy is an important factor".166 Brazil emphasizes the fact that footnote 9 clarifies that the assessment of "appropriate countermeasures" and "proportionality" is to be made "in light of" the nature and legal status of the measure at issue.167 Drawing also on footnote 9, the United States observes that "appropriate countermeasures' cannot be 'disproportionate' in light of the fact that the subsidies dealt with are prohibited – in other words, it is not just the adverse effects caused by the subsidies that are of concern, as it is under Article 7. Rather, the subsidies themselves are of concern".168

4.106 In our view, the use of the term "appropriate" rather than a strict quantitative benchmark, the reference in footnote 9 to the prohibited status of the subsidy at issue, as well as the contrast between the terms of Article 4.10 of the *SCM Agreement* and other comparable provisions, confirm that "appropriate countermeasures" are not limited to a strict quantification of the adverse trade effects on the complainant, and can take into account the entirety of the situation at hand, including the gravity of the breach.169 At the same time, we are not convinced that the absence of express reference in Article 4.10 of the *SCM Agreement* to the level of nullification or impairment or to the adverse effects arising from the prohibited subsidy necessarily implies that considerations relating to the trade effects of the subsidy cease to be relevant in a determination of the level of countermeasures to be authorized under Article 4.10 of the *SCM Agreement*. Rather, as we have determined above, we would expect these considerations to be a central element of what is pertinent in an assessment of "appropriateness".

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164 Brazil's responses to questions from the Arbitrator, question 75, para. 34.
165 Brazil's responses to questions from the Arbitrator, question 75, para. 35.
166 Brazil's written submission, para. 36.
167 Brazil's responses to additional questions from the Arbitrator, question 75, para. 36.
168 US responses to questions from the Arbitrator, question 43, para. 55.
169 *Exactly* calculating such effects is difficult, if not impossible, and is not what Article 4.10 calls for. A range of factors can be presented to an arbitrator, together with a number of calculation methods. The arbitrator need not calculate direct equivalence, but instead may accept what the arbitrator feels to be within the bounds of what is appropriate in the circumstances of the case. However, the legal approach must emanate from the terms of the *SCM Agreement*, the economic principles applied must be logical and unified, and the claims concerning the trade effects must be relevant and reasonable.
4.107 We therefore read the difference in wording between Articles 4.10 of the SCM Agreement and Article 22.4 of the DSU and Article 7.9 of the SCM Agreement respectively, and the use of the term "appropriate" in Article 4.10 of the SCM Agreement, to imply that an appropriate countermeasure is not limited to exact equivalence with the level of its adverse trade effects on the complaining Member. Nonetheless, the considerations that are at the heart of determinations under these other provisions are not irrelevant under Article 4.10 of the SCM Agreement. Rather, we read the terms of Article 4.10 of the SCM Agreement as allowing greater flexibility in the context of countermeasures involving prohibited subsidies to take into account the specificities of the situation at hand, but always having regard to the impact of the illegal measure on the complaining Member.

3. Object and purpose

4.108 Brazil emphasizes that a purpose of countermeasures under Article 4.10 of the SCM Agreement is to induce compliance. In Brazil's view, "countermeasures are 'appropriate' and not 'disproportionate' to the extent they provide [an] incentive [to reconsider its refusal to withdraw the subsidy]." The United States, for its part, considers that the objective of countermeasures is to "rebalance rights and obligations" and concludes that the proportionality of countermeasures must be assessed having regard to the adverse effects of the measure on the complainant.

4.109 We note that the objective of "inducing compliance" in relation to retaliatory measures was first recognized in the context of proceedings under Article 22.4 of the DSU. The arbitrator on EC – Bananas III (US) (Article 22.6 – EC) thus found that:

"[T]he overall objective of compensation or the suspension of concessions or other obligations as described in Article 22.1:

'Compensation and the suspension of concession or other obligations are temporary measures available in the event that the recommendations or rulings are not implemented within a reasonable period of time. However, neither compensation nor the suspension of concessions or other obligations is preferred to full implementation of a recommendation to bring a measure into conformity with the covered agreements. Compensation is voluntary and, if granted, shall be consistent with the covered agreements.'

Accordingly, the authorization to suspend concessions or other obligations is a temporary measure pending full implementation by the Member concerned. We agree with the United States that this temporary nature indicates that it is the purpose of countermeasures to induce compliance. But this purpose does not mean that the DSB should grant authorization to suspend concessions beyond what is equivalent to the level of nullification or impairment. In our view, there is nothing in Article 22.1 of the DSU, let alone in paragraphs 4 and 7 of Article 22, that could be read as a justification for counter-measures of a punitive nature."171

4.110 As the cited passage makes clear, the arbitrator in that dispute did not consider that the objective of "inducing compliance" implied that this constituted the benchmark by which retaliatory measures may be quantified. Rather, the objective of inducing compliance defined the purpose of suspension of concessions or other obligations, while the benchmark (in that case, Article 22.4 of the DSU) required that the level of suspension of concessions or other obligations should be in line with the trade effects of the illegal measure on the complainant.

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170 Brazil's responses to questions from the Arbitrator, question 76, para. 41.
171 Decision by the Arbitrators, EC – Bananas III (US) (Article 22.6 – EC), para. 6.3.
4.111 This objective of suspension of concessions or other obligations under Article 22.4 of the DSU has been recently confirmed by the Appellate Body in *US – Continued Suspension*. Prior arbitrators have also found that the objective of countermeasures under Article 4.10 of the *SCM Agreement* is to "induce compliance".

4.112 We agree that countermeasures under Article 4.10 of the *SCM Agreement* serve to "induce compliance". However, it seems abundantly clear that this purpose does not, in and of itself, distinguish Article 4.10 from the other comparable provisions in the WTO Agreement. "Inducing compliance" appears rather to be the common purpose of retaliation measures in the WTO dispute settlement system, including in the context of Article 22.4 of the DSU. The fact that countermeasures under Article 4.10 of the *SCM Agreement* serve to induce compliance does not in and of itself provide specific indications as to the level of countermeasures that may be permissible under this provision.

4.113 This distinction is also found under general rules of international law, as reflected in the ILC's Articles on State Responsibility, which have been referred to by Brazil in these proceedings. Article 49 of these Draft Articles defines "inducing compliance" as the only legitimate object of countermeasures, while a separate provision, Article 51, addresses the question of the permissible level of countermeasures, which is defined in relation to proportionality to the injury suffered, taking into account the gravity of the breach.

4. Conclusion

4.114 In conclusion, we have found that the terms "appropriate countermeasures", as informed by footnote 9 of the *SCM Agreement*, entitle the complaining party to countermeasures that are suited to the circumstances of the case. This can lead to a countermeasure being authorized at a level that is within the range of the trade-distorting impact that can fairly be said to arise for the complaining Member from the failure to withdraw the illegal measure. We have also determined that footnote 9 further invites us to ensure that the countermeasures to be authorized are not excessive, having regard to the extent to which the trade of the complaining party has been affected, and taking into account also the prohibited nature of the subsidy.

4.115 Our interpretation, in our view, takes due account of the circumstances arising from the dispute at hand, including not only the prohibited nature of the subsidy at issue as such, but also the manner in which that illegal measure adversely affects the interests of the complaining Member. We wish to emphasize that this in no way modifies the fact that the Member concerned is required by the recommendations and rulings of the DSB to withdraw fully the subsidy at issue, which has been determined to be prohibited.

4.116 It might be suggested that our Member-specific measurement of the trade-distorting impact of prohibited subsidies when assessing a countermeasure under Article 4.10 of the *SCM Agreement* limits the extent of countermeasures which can be imposed and dulls the effectiveness of such measures thereby making them less powerful for the purpose of inducing compliance. However we are in no doubt that this is the correct interpretation of Article 4.10, for all of the reasons we have mentioned. Whilst an authorized countermeasure addressing only the impacts on a complaining Member will always be of a lesser quantum than the one which would address the impacts on all Members, this does not mean that authorized countermeasures will not be effective or will not induce compliance. The degree of the impact on the complaining Member might be quite significant, and the

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173 See Decision by the Arbitrator, *US – FSC (Article 22.6 – US)*, para. 5.57; Decision by the Arbitrator, *Canada – Aircraft Credits and Guarantees (Article 22.6 – Canada)*, paras. 3.11 and 3.47.
countermeasure itself might be quite powerful depending on the trade relationship of the parties concerned.

4.117 We also note that it is open to all Members who consider that their interests are affected by the violating measure to initiate dispute settlement proceedings and ultimately, if the dispute should reach that stage, to seek "appropriate" countermeasures that would take due account of the circumstances in that dispute. We note in this respect the terms of Article 4.11 of the DSU, which provides that a Member whose request to be joined in consultations initiated by another Member has been declined, and who considers that benefits accruing to it are being nullified or impaired, may initiate its own consultations. We also note the possibility of several Members presenting multiple complaints about the same factual situation as foreseen in Article 9 of the DSU. In the event of multiple complaints, the levels of "appropriate" countermeasures that could be attained would accordingly increase, thereby increasing the contribution that the countermeasures can make to "inducing compliance".

E. ASSESSMENT OF BRAZIL'S PROPOSED COUNTERMEASURES

4.118 Having clarified the meaning of Article 4.10 of the SCM Agreement and what constitutes "appropriate countermeasures" under this provision, we now turn to an examination of the countermeasures proposed by Brazil in relation to the GSM 102 programme.

4.119 In approaching this determination, we recall our finding in paragraph 4.22 above that the burden rests on the United States to demonstrate that the countermeasures proposed by Brazil are not appropriate. We also recall our findings in paragraph 4.107 above that the terms of Article 4.10 of the SCM Agreement allow a degree of flexibility in the appreciation of what may constitute "appropriate countermeasures" within the meaning of Article 4.10. We have also determined that the terms "appropriate countermeasures", as informed by footnote 9 of the SCM Agreement, entitle the complaining party to countermeasures that are suited to the circumstances of the case, and that this may at least counter the level of trade of the complaining Member that is being adversely affected by the illegal measure. We have also determined that the footnote further invites us to ensure that the countermeasures to be authorized are not excessive, having regard to the extent to which the trade of the complaining party has been affected, and taking into account also the prohibited nature of the subsidy.

4.120 With these determinations in mind, we now turn to a consideration of Brazil's proposed countermeasures in relation to the GSM 102 programme.

1. Main arguments of the parties

4.121 Brazil describes its methodology for the calculation of its proposed countermeasures in relation to the GSM 102 programme as a methodology to "calculate countermeasures proportionate to the annual amount of prohibited GSM 102 export credit guarantees issued for export transactions involving unscheduled products, rice, pig meat and poultry meat". Brazil's methodology encompasses two elements: (i) the interest rate discounts secured by creditworthy and non-creditworthy foreign obligors on credits backed by GSM 102 guarantees ("interest rate subsidy" or IRS); and (ii) estimating the additional export sales obtained by US exporters as a result of these discounts175 ("additionality").

4.122 Brazil has described this methodology as basing the amount of appropriate countermeasures on the quantum of certain "benefits" flowing from prohibited GSM 102 subsidies.176 In Brazil's

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175 Brazil's written submission, para. 74 and Brazil's Methodology Paper, para. 5.
176 Brazil's responses to questions from the Arbitrator, question 13, para. 145.
words, its methodology "captures two distinct benefits conferred by GSM 102 ECGs – the preferential interest rates granted to foreign purchasers of US goods and the additional exports generated by US exporters as a result of the preferential financing enabled by the US Government guarantee".177

4.123 Brazil applies this methodology to its estimate of GSM 102 export credit guarantees in FY 2006 and arrives at annual countermeasures equal to US$1.155 billion. This amount can be subdivided into: (i) interest rate subsidy amounting to US$237.4 million, (ii) marginal additionality amounting to US$62.3 million, and (iii) full additionality amounting to US$855 million.

4.124 In the United States' view, Brazil's methodology cumulates, without sufficient evidence, "multiple alleged "benefits" (supposed interest rate subsidy and additional trade resulting from the purported interest rate subsidy)". The United States argues that "this collection of benefits is speculative, and (particularly in light of the lack of evidence on additionality and pass through) it is not at all clear these are results of the "wrongful act" of the United States in providing the subsidy".178

4.125 The United States considers that the only basis for calculating appropriate countermeasures in the circumstances of this case is the "net cost to Government". At the same time, the United States also considers that this amount must then be adjusted to reflect the impact of the measure on Brazil.179 In the United States' view:

"The amount of the subsidy may be used as a proxy for trade effects of the subsidy, in the context of applying the special and additional rule of Article 4.11. However, both methods to the amount of the subsidy put forward in this proceeding – the cost to government approach previously used by the DSB and detailed by the United States and the erroneous benefits-plus-additionality approach by Brazil – estimate the total subsidy amount for the guarantees at issue for the entire program for the particular products at issue. Thus, both approaches result in an amount that serve as proxy for the program's effects on the entire world, without regard for whether Brazil is affected by the subsidy.

Accordingly, and consistent with the notion that a breach of WTO rules results in nullification or impairment of benefits accruing to a Member, a method of reducing the total subsidy amount to only the portion affecting Brazil is necessary."180

4.126 In effect, the United States asks the Arbitrator to use the amount of the subsidy as the principle that should be applied to working out the quantum of the countermeasure; that the quantum is the net-cost to government; and that the net-cost then needs to be broken down further still so that the only part of the net cost that is measured for the purposes of the quantum is that which affects Brazil. The United States therefore proposed a two-stage approach, first based on the "amount of the subsidy" and then its "trade effects".

2. Analysis by the Arbitrator

4.127 Brazil has presented a methodology that it describes as intending to reflect the "amount of the subsidy". The United States does not disagree with the choice of the "amount of the subsidy" as a starting point for the calculations. However, it effectively considers that Brazil's approach to calculating the amount of the subsidy is flawed. Specifically, it considers that Brazil's approach, which proceeds on the basis that the amount of the subsidy should be based on the calculation of

177 Brazil's written submission, para. 78.
178 US responses to questions from the Arbitrator, question 43, para. 61.
179 See US written submission, para. 107.
180 US responses to questions from the Arbitrator, question 104, paras. 86-87.
certain "benefits" arising from the GSM 102 programme, in fact cumulates various "benefits" in a speculative manner. The United States also argues that amounts claimed by Brazil are not, indeed, "benefits" under Article 1.1(b) of the SCM Agreement, contrary to Brazil's claim that they can be so considered. In the United States' view, the proper approach to a calculation of the "amount of the subsidy" should be, instead, the "net cost" to the US Government of granting the GSM 102 subsidies, because that is the legal basis on which the underlying findings in this case were made. Furthermore, the United States considers that this amount should then be adjusted, in order to reflect only that part of the net cost which impacted on Brazil.

4.128 We recall our earlier determination that our mandate requires us to consider whether the countermeasures proposed by Brazil are "appropriate" within the meaning of Article 4.10 of the SCM Agreement. We also recall that the United States, as the party challenging these proposed countermeasures, bears the burden of demonstrating that they are not appropriate. The starting point for our analysis will be to explain the countermeasures as proposed by Brazil. Having done that, we will then consider the United States' argument that Brazil's proposed "benefits" approach in fact does not accurately reflect the "amount of the subsidy" as Brazil argues.

4.129 Should we determine that the United States has established that Brazil's proposed countermeasures as presented (or any element of them) would not be "appropriate", then we would need to determine whether the United States proposal was itself "appropriate", or whether a different methodology for that purpose is required to work out what would constitute "appropriate countermeasures" in the circumstances of this case.

(a) Brazil's proposed "benefits" approach

4.130 Brazil has described its methodology for calculating its proposed countermeasures as being based on a calculation of the "amount of the subsidy". The United States does not disagree with this approach as a starting point for the calculation of proposed countermeasures, although it considers that this amount should be subsequently adjusted for the impact of the subsidy on Brazil alone. However, the United States also considers that Brazil's methodology for the calculation of the "amount of the subsidy" does not correctly reflect this amount.

4.131 In addressing this issue, we find it useful to clarify first the notion of "amount of subsidy" upon which both parties rely in their arguments as a basis for the calculation of "appropriate countermeasures" under Article 4.10 of the SCM Agreement. We will then consider the US challenge to Brazil's proposed approach to the determination of the "amount of the subsidy".

(i) The "amount of the subsidy" as a basis for the calculation of appropriate countermeasures

4.132 In the three prior cases in which countermeasures under Article 4.10 of the SCM Agreement have been considered, the arbitrators had recourse to the "amount of the subsidy" as the basis for the calculation of "appropriate countermeasures". This is also the principle on which Brazil purports to calculate the level of "appropriate countermeasures" in these proceedings. The United States, as already noted above, does not disagree, as a matter of principle, with the use of the amount of the subsidy as a starting point for the Arbitrator's analysis in this case.

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181 In Brazil – Aircraft (Article 22.6 – Brazil), the full payments made under the programme were used a basis for the calculation. In US – FSC (Article 22.6 – US), the calculation was based on the annual expenditure by the US Government. Finally, in the Canada – Aircraft Credits and Guarantees (Article 22.6 – Canada) case, the amount of the subsidy was calculated on the basis of the benefit conferred by the loan, which was found to correspond to "the difference between the amount Air Wisconsin pays on the loan from EDC and the amount Air Wisconsin would pay on a comparable commercial loan which that company could actually obtain on the market" (Decision by the Arbitrator, Canada – Aircraft Credits and Guarantees (Article 22.6 – Canada), para. 3.60).
4.133 The use of the "amount of the subsidy" in prior cases does not imply, however, that the arbitrators in these earlier cases necessarily considered that the "amount of the subsidy" was the only basis on which "appropriate countermeasures" might have been calculated. In fact, as we understand it, the arbitrators in these cases took into account the fact that the legal standard embodied in Article 4.10 of the SCM Agreement allows greater flexibility than those under Article 22.4 of the DSU or Article 7.9 of the SCM Agreement to tailor the countermeasures to the specific circumstances of the case at hand, but did not exclude trade effects as a relevant consideration. In fact, in these decisions, some form of consideration was given to the trade effects of the measure on the complaining Member.\footnote{In Brazil – Aircraft (Article 22.6 – Brazil), both parties suggested that the calculation could be based on the amount of the subsidy. The arbitrator considered that this was "appropriate". The arbitrator however also noted that it was of the view that "a calculation based on the level of nullification or impairment would, as suggested by the calculation of Canada based on the harm caused to its industry, produce higher figures than one based exclusively on the amount of the subsidy" (Decision by the Arbitrators, Brazil – Aircraft (Article 22.6 – Brazil), para. 3.54.)

In US – FSC (Article 22.6 – US), the requesting Member sought an authorization to take countermeasures based on the amount expended by the subsidizing Member (the United States) in granting the subsidy. The arbitrator, having previously determined that the terms of Article 4.10 of the SCM Agreement did not constrain countermeasures to trade effects, first considered the proposed countermeasures in relation to the prohibited subsidy, and considered that the countermeasures proposed by the European Communities could be considered "appropriate" within the meaning of Article 4.10 of the SCM Agreement, "on the basis of their relation to the initial violating measure". The arbitrator nonetheless then continued its analysis and considered the proposed countermeasures on the basis of their relation to the trade effects of the subsidy on the European Communities, recalling its earlier findings that it had not interpreted Article 4.10 "to preclude a Member from taking countermeasures that are tailored to counter the adverse effects it has suffered as a result of the illegal measure" and that "the expression 'appropriate countermeasures', in [its] view, would entitle the complaining Member to countermeasures which would at least counter the injurious effect of the persisting illegal measure on it."

In Canada – Aircraft Credits and Guarantees (Article 22.6 – Canada), the Arbitrator first considered the approach proposed by the requesting Member (Brazil), based on the adverse trade effects of the subsidy on Brazil on the basis of lost sales/competitive harm. It was only after determining that the assumptions underlying the methodology proposed by the requesting Member were not valid and that this proposed methodology did not justify the level of countermeasures, that the arbitrator turned to a calculation of the "appropriate" countermeasures based on the amount of the subsidy. As we understand the ruling of the arbitrator in that case, it did not exclude, a priori, that a calculation based on the trade effects could be the basis for "appropriate countermeasures". Rather, it is only because it was not persuaded that the actual calculation of trade effects proposed by the requesting Member accurately reflected these trade effects, that it discarded the approach based on trade effects as proposed by the requesting Member.} 182

4.134 Subsidies may operate in a variety of ways, and, depending on the design of the subsidy, as well as its actual operation on the market, the trade effects of the subsidy may be complex to establish. This is well illustrated by the Canada – Aircraft Credits and Guarantees (Article 22.6 – Canada) and the US – FSC (Article 22.6 – US) cases. As we have observed above, the terms of Article 4.10 of the SCM Agreement allow some flexibility in the manner in which "appropriate countermeasures" might be calculated.

4.135 This Arbitrator is not convinced, however, that an "amount of subsidy" approach, of itself and without adjustment, will always be consistent with the legal standard embodied in Article 4.10 of the SCM Agreement. Actually, we think that in most cases such an approach will not be "appropriate", notwithstanding its convenience, from a calculation perspective, and its literal attraction, from a "withdraw the subsidy" perspective. As we have determined above, a consideration of the

\footnote{US responses to questions from the Arbitrator, question 71, para. 5.}
"appropriateness" of countermeasures, and in particular the requirement for the countermeasures not to be "disproportionate", suggests that there should be a degree of relationship between the level of countermeasures and the trade-distorting impact of the measure on the complaining Member.

4.136 As noted above, we do not exclude that, in particular circumstances, the complaining Member could perhaps rightly claim that a countermeasure in the amount of the subsidy would be "appropriate". However, in most cases, the trade-distorting impact of the subsidy on one or several other Members would not necessarily bear any particular relationship to the amount of the subsidy. As observed by previous arbitrators, the amount of the subsidy may in fact be lower than its trade effects, and apportioning it would ordinarily exacerbate that likelihood. This amount therefore does not seem to us to be a priori appropriate, nor is it necessarily proportionate to the extent to which the trade of the Member concerned is adversely affected. In these circumstances, it cannot be assumed that the total amount of the subsidy is an appropriate measure of its trade effects, or even that it is necessarily a relevant "proxy" for those effects.

4.137 Complaining Members do have choices with respect to the amount of countermeasures they seek to impose, and it is the task of an arbitrator to determine whether the choice leads to an appropriate outcome which is consistent with the rights and obligations spelt out in the covered Agreements, the nature of the subsidy concerned and the remedy which is offered, and the balance struck between the rights of all Members. We recall in this context our interpretation of "appropriateness" in the case of countermeasures against prohibited subsidies, in particular its less precise quantitative constraints. In particular, we note our previous observation that a range of factors can be presented to an arbitrator, together with a number of calculation methods. The arbitrator need not calculate direct equivalence, but instead may accept what the arbitrator feels to be within the bounds of what is appropriate in the circumstances of the case. The legal approach must emanate from the terms of the SCM Agreement, the economic principles applied must be logical and unified, and the claims concerning the trade effects must be relevant and reasonable.

4.138 Notwithstanding these observations, in light of the fact that Brazil has proposed basing its countermeasures on the principle that the amount of the subsidy is an "appropriate" benchmark, and that the United States does not challenge this as a starting point for the calculation, we now examine Brazil's proposed methodology for the actual calculation of the amount of the GSM 102 subsidy.

(ii) Brazil's "benefits" approach to the calculation of the "amount of the subsidy"

4.139 Brazil purports to apply countermeasures on the basis of the amount of the subsidy. According to Brazil, that amount comprises two subsidy "benefits" within the meaning of Article 1.1(b) of the SCM Agreement: (i) the interest rate subsidies ("IRS") and (ii) the additional sales resulting from the GSM 102 payments.

4.140 In response to a question from the Arbitrator, Brazil has explained that "the amount of a subsidy is the monetary value of the benefits, or in the Appellate Body's words, 'advantages', conferred by a financial contribution" and that it "proposes a formula that calculates the 'amount of the subsidy', based on two distinct 'benefits' or 'advantages', from 'financial contributions' in the form of GSM 102 guarantees". Thus, "in these proceedings, Brazil's use of the term 'amount of the subsidy'..."
is intended to be interchangeable with the cumulative amount of these two advantages or 'benefits ... conferred' by GSM 102 guarantees.\footnote{186}

4.141 According to Brazil, "using the terms of this provision", the "amount of the subsidy" can be calculated for the purposes of this case on the basis of the two "benefits" it identifies.\footnote{187} Brazil relies on the interpretation of the notion of "benefit" under Article 1 of the SCM Agreement by the Appellate Body, and highlights in particular the fact that the Appellate Body has defined the term "benefit" as an "advantage" and that, in the words of the Appellate Body, "there can be no "benefit" to the recipient unless the "financial contribution" makes the recipient "better off" than it would otherwise have been, absent any contribution."\footnote{188} Brazil concludes that the relevant question therefore is "to what extent is the recipient "better off" than it would have been absent the financial contribution?\footnote{189}

4.142 Brazil considers that the two "benefits" that it identifies in relation to GSM 102 guarantees reflect advantages that the beneficiaries would not have secured in the marketplace in the absence of the US Government's financial contribution. With respect to the "IRS" component of its calculations, Brazil explains that "through GSM 102 guarantees, discounted financing is provided, on terms that are better than could otherwise have been obtained. Indeed, in some cases, no financing could have been obtained in the marketplace, because the foreign obligor is not creditworthy. These are valuable and measurable commercial and economic advantages that constitute a 'benefit'.\footnote{190} Brazil further explains how the "additionality" component of its proposed countermeasures also constitutes a "benefit": "through GSM 102 guarantees, US exporters are able to export greater ('additional') quantities of agricultural commodities than they would have exported in the absence of those guarantees. Again, these are valuable and measurable commercial and economic advantages that constitute a 'benefit'.\footnote{191}

4.143 The United States argues that Brazil's "collection of benefits" is "speculative" and that it is not at all clear these are the results of the "wrongful act" of the United States in providing the subsidy.\footnote{192} The United States notes that Brazil's arguments suggest that any "benefit" that results from a subsidy can be called a benefit. In the United States' view, "for the purposes of this proceeding, it is necessary to be more precise because of the importance of these concepts in identifying a principle for an award of countermeasures. "Benefits" are those conferred by the governmental financial contribution. Other results, such as trade effects, may occur. But these are not "benefits" within the meaning provided by the SCM Agreement.\footnote{193}

4.144 The United States considers that what Brazil has described as "benefits" does not actually represent such "benefits" within the meaning of the SCM Agreement. We therefore consider whether the two "benefits" described by Brazil in its methodology for the calculation of the amount of the subsidy do in fact constitute such "benefits" within the meaning of the SCM Agreement, as Brazil argues.

4.145 Article 1.1 of the SCM Agreement defines the term "subsidy".\footnote{194} Under this provision, a subsidy exists if there is a "financial contribution by a government" and "a benefit is thereby conferred" within the meaning of Article 1.1(b). The Appellate Body has clarified that benefit is

\footnote{186} Brazil's responses to questions from the Arbitrator, question 85, para. 74.
\footnote{187} Brazil's responses to questions from the Arbitrator, question 88, para. 97.
\footnote{188} Brazil's responses to questions from the Arbitrator, question 86, para. 76.
\footnote{189} Brazil's responses to questions from the Arbitrator, question 86, para. 77.
\footnote{190} Brazil's responses to questions from the Arbitrator, question 86, para. 78.
\footnote{191} Brazil's responses to questions from the Arbitrator, question 86, para. 79.
\footnote{192} US responses to questions from the Arbitrator, question 43, para. 61.
\footnote{193} US comments on Brazil's responses to questions from the Arbitrator, question 90, para. 68.
\footnote{194} Brazil's responses to questions from the Arbitrator, question 88, para. 97.
"identified by determining whether the recipient has received a 'financial contribution' on terms more favourable than those available to the recipient in the market".195

4.146 The parties disagree on the precise nature of the subsidization at issue in this proceeding. Brazil invites us to adopt a specific understanding of the term "amount of the subsidy" for the purposes of these proceedings, based on the notion of "benefits" contained in Article 1.1(b) of the SCM Agreement, and encompassing two distinct "benefits" in the form of the IRS and of "additionality". According to the United States, there is no basis for finding that any additional sales made by US exporters constitute "benefit" within the meaning of Article 1.1(b) of the SCM Agreement.

4.147 The basic premise behind Brazil's argument is that IRS and additionality are separate benefits conferred by the same financial contribution, i.e. the GSM 102 guarantee.196 Benefit is established in the first instance197 by reference to the terms on which a financial contribution is provided to the recipient. This is consistent with the contextual guidance afforded by Article 14 of the SCM Agreement, which provides guidelines for calculating the amount of a subsidy in terms of the benefit to the recipient. The relevant financial contribution in the present instance is the GSM 102 loan guarantee. Consistent with the contextual guidance afforded by Article 14(c) of the SCM Agreement, which deals specifically with loan guarantees, Brazil says that the amount of benefit conferred by the GSM 102 loan guarantee is the "difference between the amount that the firm receiving the guarantee [i.e. the recipient] pays ... and the amount that the firm [i.e. the recipient] would pay on a comparable commercial loan absent the government guarantee." We note that Brazil determined the amount of IRS by reference to "the present value of the spread between (i) the interest rate at which those obligors would have been able to borrow in the absence of GSM 102 ECGs, and (ii) the subsidized interest rate enabled by those ECGs."198 In our view, this is broadly consistent with the approach outlined in Article 14(c) of the SCM Agreement, in the sense that it calculates the amount of interest rate subsidy to the recipient of the GSM 102 guarantee (noting that the recipient in the first instance is a foreign obligor, and not a party in the United States itself).

4.148 Having calculated the amount of benefit conferred by the GSM 102 guarantees consistently with Article 14(c) of the SCM Agreement, we do not see any other basis on which Brazil might calculate some additional benefit conferred by those guarantees, as this term is defined for the purposes of Article 1.1 of the SCM Agreement. Since benefit is established in the first instance by reference to the recipient of a financial contribution, it is with regard to the recipient of the GSM 102 guarantees, i.e. the foreign obligors, that the existence of any benefit conferred by the GSM 102 guarantees must be established. Thus, having calculated the benefit conferred on the foreign obligors, Brazil has effectively exhausted the potential for establishing benefit conferred by those financial contributions.199

196 See, for example, para. 10 of Brazil's responses to questions ("IRS and additionality are ... both "benefit[s]... conferred" by a "financial contribution" in the form of a GSM 102 guarantee").
197 As discussed below, benefit may also be established, in the second instance, by virtue of the concept of "pass-through".
198 Brazil's Methodology Paper, para. 8.
199 Brazil has referred to the findings of the panel in Brazil – Aircraft (Article 21.5 – Canada II) in support of its argument that GSM 102 guarantees confer an additional benefit on US exporters. That was a case in which the Brazilian Government provided export credits through interest rate equalisation payments to entities financing exports of regional aircraft. Such payments enabled the lenders to offer better export credit terms than would otherwise have been able to make available. Brazil relies in particular on the following extract from that panel's report:

"We note that PROEX III payments are made in support of export credits extended to the purchaser, and not to the producer, of Brazilian regional aircraft. In our view, however, to the
Accordingly, we reject Brazil’s argument that the additional sales resulting from the GSM 102 payments constitute "benefit" within the meaning of Article 1.1(b) of the SCM Agreement that should be included within the amount of the GSM 102 guarantee subsidies in addition to the IRS benefit. Although such additional sales may ultimately be generated by GSM 102 guarantees, they are properly viewed as trade effects that fall outside the definition of subsidy set forth in Article 1.1 of the SCM Agreement, and are not part of the "amount of the subsidy" for our purposes.

In support of that proposition, we also note that both Article 1.1(a) and (b) cumulatively define what a "subsidy" is for the purposes of the SCM Agreement. It is not possible to determine that a subsidy exists unless a financial contribution is made, being the criteria referred to in Article 1.1(a). Thus it is not enough for Brazil to argue that additionality is a "benefit" in order for it to be taken up in the calculation of the amount of the subsidy constituted by the GSM 102 guarantee. The Arbitrator notes that the income from additional sales is not a financial contribution from a government (i.e. the US Government), nor are foreign importers entrusted or directed to make those payments (i.e. payments in respect of their purchases of products exported from the United States).

Having determined that the basis upon which Brazil’s methodology relies for the calculation of its countermeasures is more than the amount of the subsidy, because it considers "benefits" which extend outside the meaning of Article 1.1 of the SCM Agreement, we find that the United States has met its burden of proof. The principle advanced by Brazil for the calculation of its proposed countermeasures is flawed. Although advanced on an "amount of subsidy" basis, it also includes elements that do not constitute "benefits" within the meaning of Article 1.1(b) and instead reflects...
certain trade effects of the measure as well. Thus, even if we were convinced that the "amount of the subsidy" approach was an appropriate benchmark for adjudging the appropriateness of the countermeasure sought by Brazil, we could not agree that Brazil's approach actually does measure that amount, as a matter of legal principle.

4.152 We also note that Brazil's principle does not admit of the need for the amount of the subsidy to be apportioned such that it only captures that part of the subsidy which is responsible for the nullification or impairment felt by Brazil. If Brazil's "benefits"-based approach had been an appropriate starting point, we still would have had to determine whether the entirety of the "amount of the subsidy" could be the amount of the countermeasure in circumstances where the impacts of the subsidy were felt by more Members than only Brazil. Nonetheless we do not reach such a determination, either in considering whether the United States has met its burden or in our own assessment of what can be "appropriate" in the circumstances of this case, and the point is moot.

4.153 Accordingly, we find that the United States has discharged its burden of proving that the countermeasure proposed by Brazil was inappropriate, in the way it was advanced to the Arbitrator. Accordingly we must now turn to the question of determining what would constitute a proper basis for the calculation of "appropriate countermeasures" in this case. We consider first whether the alternative approach proposed by the United States is "appropriate".

(b) The United States' proposed alternative "net cost to government" approach

4.154 In this case, in the United States' view, the appropriate countermeasures are those based on the net cost to government and "any other countermeasures do not have their foundation in the specific circumstances of this case". At the same time, the United States considers that this amount should then be adjusted to reflect the impact of the subsidy on Brazil only.

4.155 The United States asserts that, because the original and compliance panel findings were based in relevant part on item (j) of the Illustrative List, that provision constitutes the only appropriate basis for determining the amount of countermeasures to be authorized. The United States contends that it would not be appropriate to authorize countermeasures on the basis of the "benefit" standard proposed by Brazil.

4.156 In the United States' view, this approach is consistent with that of the Appellate Body, because the underlying findings in this case were based on item (j) of the Illustrative List of Export Subsidies under the SCM Agreement, and the Appellate Body has explained that "the measure of value under item (j) is the overall cost to government, as the service provider, of providing the service." The United States proposes to determine the "cost to the Government" of the GSM 102 programme on the basis of the net present value approach followed by US Government agencies for all credit guarantee and direct loan programs.

4.157 The United States refers to previous arbitrations in support of its proposition that the amount of the subsidy as reflected in its net cost to government is "the" appropriate methodology for the determination of the quantum of "appropriate countermeasures" in this case. The United States explains that previous arbitrations, several of which have also involved export financing or export credits, have determined that, in the case of prohibited export subsidies the amount of the subsidy is a proper basis upon which "appropriate countermeasures" may be calculated. In this particular case, the

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200 US written submission, para. 25.
appropriate methodology is to use the amount of the subsidy as reflected in net cost to
government.\footnote{US written submission, para. 28.}

4.158 For the reasons set forth below, we are unable to accept the United States' position.

4.159 First, we note that, although the relevant findings of the original and compliance panels were based on item (j), the United States was actually found to be in violation of Article 3.1(a) of the SCM Agreement. Article 3.1(a) prohibits "subsidies" that are contingent on export performance. It is the failure of the United States to withdraw such subsidies that has given rise to Brazil's right to impose countermeasures. Furthermore, the compliance panel agreed with the United States that the cost-to-government standard in item (j), and the benefit standard in Article 1.1(b), were merely "alternative arguments" that could be examined in assessing whether the revised GSM 102 programme constituted an export subsidy.\footnote{Panel Report, US – Upland Cotton (Article 21.5 – Brazil), para. 14.51.}

4.160 Secondly, item (j) was relied on in the original and compliance proceedings to determine the existence of prohibited subsidies. It was not used to calculate the amount of those subsidies. In the present case, the United States proposes item (j) as the only appropriate means of calculating the amount of the GSM 102 subsidies. In our view, item (j) is not the only appropriate, or necessarily the most appropriate, basis for doing so.

4.161 Thirdly, we do not consider that there is any legitimate basis for us to accept the a contrario interpretation of item (j) proposed by the United States. Item (j) is illustrative of a situation in which the provision by governments of export credit guarantee programmes constitutes an export subsidy. In particular, item (j) specifies that export credit guarantee programmes constitute export subsidies when premium rates are inadequate to cover the long-term operating costs and losses of the programme. It does not necessarily follow, though, that an export credit guarantee programme may never constitute a (prohibited export) subsidy if the premium rates are adequate to cover long-term operating costs and losses. As a matter of law, it is possible that an item (j)-consistent export credit guarantee programme might still be found to confer a "benefit", on the basis of the standard set forth in Article 14(c) of the SCM Agreement.

4.162 Finally, a related point is that amending the relevant premium rates to make GSM 102 subsidies consistent with item (j) will not necessarily ensure full withdrawal\footnote{In US – FSC (Article 21.5 – EC II), the Appellate Body confirmed full withdrawal of the subsidy is required.: 
"[T]he recommendation under Article 4.7 remains in effect until the Member concerned has fulfilled its obligation by fully withdrawing the prohibited subsidy. Where a Member withdraws a prohibited subsidy only in part, it has failed to comply fully with its WTO obligation and the Article 4.7 recommendation continues to be in effect with respect to the part of the subsidy that has not been withdrawn."
(Appellate Body Report, US – FSC (Article 21.5 – EC II), para. 83 (original emphasis)).} of the prohibited export subsidy. As noted above, the mere fact that the GSM 102 is rendered consistent with item (j) does not exclude that the programme might nevertheless continue to confer a "benefit" on the basis of the standard set forth in Article 14(c). Since Brazil would be entitled to continue to apply countermeasures until the full benefit of the GSM 102 programme has been withdrawn, we do not consider it appropriate to exclude consideration of the full amount of benefit when considering the initial matter of the quantitative scope of such countermeasures.

4.163 We therefore do not consider that the "net cost to government" approach proposed by the United States would provide a sound basis for the calculation of the "amount of the subsidy".
4.164 In summary, at this stage of our analysis, we have determined that Brazil's methodology, which it describes as representing the "amount of the subsidy" in the form of "benefits" within the meaning of Article 1.1.(b) of the SCM Agreement, does not in fact represent such "benefits". We have also determined that the United States proposed alternative calculation based on "cost to government" would not constitute an appropriate basis for the calculation of the "amount of the subsidy" in the circumstances of this case. We do not reach the second stage of the approach advocated by the United States, which is to adjust the "amount of the subsidy", so as to reflect the effects of the subsidy only on Brazil, and make no determination in that respect.

4.165 Having thus determined that neither of the parties' proposed approaches is satisfactory, we must consider further what would constitute "appropriate countermeasures" in the circumstances of this case. In approaching this determination, we consider that we are not bound by the approaches presented by the parties and are entitled, as necessary, to develop our own assessment and methodology for the purposes of determining what would constitute "appropriate countermeasures".

4.166 Before we proceed with this assessment, however, we wish to make some general observations on the approaches proposed by the parties in this case.

4.167 Both parties have described their proposed approaches to the calculation of "appropriate" countermeasures as being based on the "amount of the subsidy". Brazil considers that this amount is properly reflected in the "benefits" of the IRS and "additionality", while the United States proposes to base the countermeasures on the cost to the government of the subsidy, and to then "adjust" it to reflect only the effects of the subsidy on Brazil.

4.168 However, we are not persuaded that either party's approach was in fact purely based on the "amount of the subsidy". As we have determined above, Brazil's calculation of "benefits" includes not only an amount that can be properly characterized as the "benefit" under Article 1.1 of the SCM Agreement (the IRS), but also an amount that may be more accurately described as reflecting the "trade effects" of the GSM 102 payments (additional sales having accrued to US exporters as a result of the GSM 102 payments). In fact, Brazil itself also describes the two elements of its calculation as reflecting "economic consequences" of the GSM 102 payments. This is not the same, in our view, as the "amount of the subsidy".

4.169 The United States, for its part, proposes to use the amount of the subsidy as a starting point, but considers that this should then be adjusted to reflect only the effects on Brazil. In response to a request for clarification from the Arbitrator, the United States has explained that its approach is based both on the "amount of the subsidy" and on the "trade effects" approach. The United States has also explained that it uses the amount of the subsidy as a "proxy" for its trade effects. However, as we have explained above, we see no particular reason to assume that the amount of the subsidy would constitute a relevant proxy for the total trade effects of the subsidy. As was noted by the arbitrator on US – FSC (Article 22.6 – US), "the proxy approach proposed by the United States is based on no particular economic rationale. It simply assumes a one-to-one correspondence of dollar of subsidy to dollar of trade impact. This is manifestly arbitrary.

4.170 In short, it seems to us that, while purporting to apply an approach based primarily on the "amount of the subsidy", both parties have in fact incorporated in their analysis elements that aim to capture the trade effects of the measure, rather than its "amount". Brazil addresses these effects in terms of quantifying the "additional sales" accruing to the United States as a result of the subsidy,

205 See paras. 4.24 and 4.25 above.
206 See US responses to questions from the Arbitrator, questions 104 and 105.
while the United States invites us to adjust the amount of the subsidy to capture only the impact of the subsidy on Brazil.

4.171 Both parties have therefore notionally relied on the notion of "amount of the subsidy" as a starting point, but have de facto then proceeded to include a consideration of other elements. This confirms us in our view that there is no particular basis for assuming, a priori, that the amount of the subsidy alone adequately reflects the relevant circumstances, for the purposes of calculating "appropriate" countermeasures. The reference to the "amount of the subsidy" as the basis of an award in these conditions seems somewhat artificial to us, in the absence of a specific reason to approach the question in these terms in the dispute at hand. This also further comforts us in our view that a consideration of the trade-distorting impact of the subsidy, which both parties have de facto relied on in their respective approaches (albeit in different forms), constitutes the most pertinent expression of the consequences arising from the violation, for the purposes of quantifying "appropriate" countermeasures.

4.172 With these observations in mind, we now proceed with our own assessment of what may constitute "appropriate countermeasures" consistent with the requirements of Article 4.10 of the SCM Agreement, as we have interpreted it in Section IV.D above.

(c) Approach of the Arbitrator

4.173 In the event that we find that they are not cumulatively "benefits" within the meaning of Article 1.1 of the SCM Agreement, Brazil considers that the IRS and "additionality" could nonetheless be used together as the basis for the calculation, as "distinctly measurable and valuable consequences of GSM 102 guarantees". In Brazil's view, this would be appropriate "in light of the nature and legal status of those guarantees". Brazil suggests that, as well as being tailored to the specific characteristics of the GSM 102 programme, this approach may encourage the United States to reconsider its refusal to "withdraw the subsidy."208

4.174 The United States considers that Brazil's suggestion "that an award could include both amounts corresponding to the alleged amount of the subsidy and trade effects finds no support in previous arbitrations. Arbitrators have relied on the principle of "trade effects" or, in the case of prohibited subsidies, "amount of the subsidy" as the basis for calculations. They have not added two sets of results of calculations as Brazil would do. Where arbitrators have considered two approaches, it has clearly been "an 'either/or' choice".209

4.175 The United States argues that there would be no basis for adding the two elements of Brazil's calculations as it suggests, i.e. the "amount of the subsidy" and its "trade effects". The United States observes that "Brazil's approach would permit both components to be included in an award because they both may exist and be measured as a matter of economic theory." The United States observes that "the fact that different components may exist is not a principle upon which the Arbitrator may award countermeasures. If that were the case, a party might accumulate multiple features of a subsidy (e.g. cost to government, benefit to the recipient, effects on exports) and include them all in the calculation of countermeasures, without regard to whether they are 'appropriate' according to a principle such as 'amount of the subsidy' or 'trade effects'."210

208 Brazil's responses to questions from the Arbitrator, question 71, para. 13.
209 US comments on Brazil's responses to questions from the Arbitrator, question 71, para. 15.
210 US comments on Brazil's responses to questions from the Arbitrator, question 72, para. 17.
4.176 The United States also considers that to set an amount of countermeasures based on both components would not be "appropriate" because that amount would be "disproportionate" to the level of nullification or impairment suffered by Brazil.\(^{211}\)

4.177 We agree that the amount of "appropriate countermeasures" may not be based simply on an addition of various economic values representing different aspects of the situation that would not have any particular underlying logic. Article 4.10 of the *SCM Agreement* both requires and allows countermeasures to be appropriate to the circumstances at hand, and this may legitimately involve a consideration of various aspects of these circumstances. Nonetheless, there must be some principled and justifiable reason for basing the countermeasures on a particular approach, in light of these circumstances.

4.178 We have determined in our interpretation of Article 4.10 of the *SCM Agreement* above that the requirement that countermeasures not be "disproportionate" cannot be equated to a requirement that these countermeasures be exactly equivalent to the level of nullification or impairment suffered by the complaining Member, and that the standard of "appropriate countermeasures" entails some additional flexibility. Nonetheless, we are mindful that we are required, under Article 4.10 of the *SCM Agreement*, to ensure that the countermeasures are not "disproportionate" within the meaning of footnote 9, and that this assessment should take into account the adverse effects of the subsidy on the trade of the complaining Member, having regard also to the prohibited nature of the subsidy.

4.179 In light of these considerations, we must determine whether, in the circumstances of this case, there would be any particular rationale to using the IRS and "additionality" components of Brazil's approach as the basis for a determination of "appropriate countermeasures" as Brazil suggests.

4.180 Brazil describes its calculations as representing "distinctly measurable and valuable consequences of GSM guarantees", that could be the basis for an award of countermeasures. We do not agree that "valuable" consequences of the guarantees is a proper concept to apply, from Brazil's perspective, when attempting to work out the trade distorting impacts of the guarantees. However the advantages accruing to a subsidising Member may have a relationship to the trade distorting impacts on other Members, and therefore in economic terms it is useful to analyse them more closely.

4.181 We therefore consider whether the two elements of Brazil's calculation, i.e. the IRS and "additionality", may provide an appropriate starting point for measuring the trade-distorting impact of the GSM 102 programme, and thus provide a basis for the calculation of "appropriate countermeasures" consistent with the terms of Article 4.10 of the *SCM Agreement*, as we have interpreted them in Section IV.D above.

\(i\) *The trade effects of the GSM 102 programme*

4.182 We recall our determinations above that the IRS can be properly characterized as the amount of the GSM 102 subsidy, while "additionality" reflects rather its trade effects. Brazil divides additionality, in turn, into full additionality (sales to non-creditworthy foreign obligors that simply otherwise would not have been possible) and marginal additionality (sales to creditworthy borrowers where the IRS acts like a sales discount to foreign obligors).

4.183 To elucidate the trade effects of the GSM 102 programme, we note that it operates as an export subsidy albeit a targeted one: it is not a generalized subsidy on all US exports. Nonetheless, like any export subsidy, it can be expected to affect both the volume of trade and the price at which

\(^{211}\) US comments on Brazil's responses to questions from the Arbitrator, question 71, para. 16.
trade takes place.\textsuperscript{212} The GSM 102 programme can potentially stimulate additional US exports and influence the price of those exports in the target markets. This illegally subsidized competition has adverse effects on producers and exporters in the rest of the world. The question before us is how to measure these adverse effects and whether the IRS and additionality concepts proposed by Brazil are helpful in this respect. We first assess this question in abstract terms before turning to the specific circumstances of this case.

**Trade-distorting impact of GSM 102 on the volume of trade**

4.184巴西 has defined additionality to mean "additional economic activity for US exporters that would not otherwise have occurred."\textsuperscript{213} Brazil allows that some US exports made with the support of a prohibited GSM 102 export subsidy would have occurred in the absence of the GSM 102 guarantee. In response to a question from the Arbitrator, Brazil states that: "Indeed for creditworthy foreign obligors, Brazil's additionality approach recognizes that some US exports made with the support of a prohibited GSM 102 export subsidy would have occurred in the absence of the GSM 102 guarantee."\textsuperscript{214}

4.185 But this also implies that some of the exports would not have occurred in the absence of the export credit guarantees. With respect to these other exports, there will be trade-distorting impacts on Brazil since the same economic forces would operate. A subsidy is conferred, which passes through to a lower effective sourcing price for US agricultural goods, resulting in trade-distorting impacts on producers in the importing country or rest of the world exporters selling to the importing country. In Brazil's view, the only difference is that, for the same amount of GSM 102 transactions, the trade-distorting impact of the transaction will be smaller if the obligor is creditworthy because some of it would have occurred in the absence of the subsidies.

4.186 In fact, using its 'marginal additionality model', Brazil argues that all GSM-backed sales even to creditworthy foreign obligors are attributable to the IRS.\textsuperscript{215} The economic intuition behind this is Brazil's assumption that the demand curve facing US exporters with a small market share is essentially horizontal. Without the subsidy "if the United States were to withdraw its GSM 102 subsidies ..., US exporters would forfeit their price edge and, consequently, lose all GSM-backed transactions to their worldwide competitors" (emphasis added).\textsuperscript{216} We review later whether we find this a credible conclusion or not.

4.187 We have considered the United States' argument that additionality means the net addition to world demand as a result of the export credit guarantee subsidy.\textsuperscript{217} In our view, a key problem with the United States' definition is that it ignores increased US sales in the target markets due to trade diversion.\textsuperscript{218} Therefore, for the purposes of our analysis, Brazil's definition of additionality as

\textsuperscript{212} We judge it appropriate to assess the economic damage to a complainant by the potential amount and value of trade which might be affected by the policy intervention that is the subject of the complaint. We recognize that economists also evaluate the impact of a policy measure in welfare terms, i.e. in terms of how much better or worse off the policy makes the country under investigation. Trade effects arise in response to the reallocation of resources between alternative uses in response to a policy intervention. Since the countermeasures to be authorized will be in terms of the suspension of a particular amount of trade, we believe we are justified in trying to calculate the allocation effects of the GSM 102 subsidies and not their welfare effects in assessing the appropriate level of countermeasures.

\textsuperscript{213} Brazil's Methodology Paper, para. 39.

\textsuperscript{214} Brazil's responses to questions from the Arbitrator, question 26, para. 311.

\textsuperscript{215} Annex I to Brazil's written submission ("Sumner-Sundaram Statement"), paras. 1-2.

\textsuperscript{216} Annex I to Brazil's written submission ("Sumner-Sundaram Statement"), para. 3.

\textsuperscript{217} See especially Section II of Exhibit US-93.

\textsuperscript{218} "Any attempt to use additionality as a justification for export credits in a multilateral context must limit the definition to only those cases where the expansion in demand is global, with no reallocation in favour of domestic production."
additional US sales that would not otherwise have occurred is a more appropriate measure of the adverse consequences of the GSM programme. We concur with Brazil that GSM 102 subsidies enable transactions that simply would not otherwise have been possible.219

4.188 Nonetheless, there are three issues in using Brazil's concept of additionality as a measure of the trade-distorting impact of the GSM 102 programme on other countries which merit further consideration. The first is the possibility that GSM-supported sales to a target market simply displace commercial US exports to that market, implying that these sales do not result in additional economic activity for US exporters. Where "net" additional US sales are less than the gross value of GSM-backed transactions, then the adverse trade effects on other countries are reduced. The United States points out that the theoretical absence of the GSM 102 programme would not necessarily mean that the export transaction itself would not have occurred. It recalls that it is the foreign bank, not the importer, that is the recipient of the GSM 102 financing, and that in the absence of the programme importers could still shop around and obtain financing from a different bank, or indeed the same bank, to facilitate the transaction.220 Brazil responds to this criticism by considering creditworthy and non-creditworthy borrowers separately. In the case of creditworthy borrowers, Brazil accepts that, in principle, some displacement of commercial US exports could occur and proposes its "marginal additionality model" to calculate this. We evaluate its use of this model below. In the case of the non-creditworthy borrowers, it emphasizes the targeted nature of the GSM programme. It provides extensive documentation of the statements by USDA and FAS and of regulations governing the GSM 102 programme. Under the rules of the scheme, export credit guarantees are only made available to finance exports that would not otherwise occur. Brazil says it is relevant that the GSM regulations provide that "the programs are operated in a manner intended not to interfere with markets for cash sales".221 Because of these segmented markets, there is thus no inconsistency in observing US commercial and GSM exports to the same country. Where markets are segmented, the Arbitrator accepts that it is reasonable to assume that it is not commercial US exports that are displaced by GSM exports but rather third country exports and domestic production.

4.189 Even if the GSM-supported sales to a particular market are indeed additional (i.e. they would not have taken place in the absence of the programme), a second criticism is that they may not represent additional US export sales if these sales are simply diverted from commercial US sales to another market. We note that Brazil accepts this possibility. It states: "... it is reasonable to attempt to gain some insight about the magnitude of the offset caused by the indirect impact of GSM 102 on the US exports destined for non-eligible market segments".222 Brazil goes on to provide a methodology for doing this, but concludes "that the offsetting displacement of commercial exports is likely to be small".223 However, the calculation depends crucially on the figure assumed for the domestic price increase in the United States as a result of GSM guarantees, and we have no firm evidence on the appropriate value for this.

219 Joint statement by Professor Daniel Sumner and Rangarajan Sundaram regarding the United States' critique of Brazil's approach to "marginal additionality", para. 9.
220 US comments on Brazil's responses to questions from the Arbitrator, question 93, paras. 76-82. 
221 Brazil's written submission, para. 208.
222 Brazil's responses to questions from the Arbitrator, question 92, para. 123.
223 Brazil's responses to questions from the Arbitrator, question 92, para. 132. Using quite a high value for the price effect of GSM export credit guarantees on US producer prices (0.5 per cent), it calculates a possible value for net additional US exports, it calculates that additional US exports for the ten commodities might amount to US$870 million (if the price effect were smaller, this value would also be smaller). As the value of GSM transactions in 2006 was about US$1 billion, this would indeed suggest rather limited reshuffling of US exports.
4.190 In our view, however, it is not necessary to take account of this effect when assessing the trade-distorting effects of the prohibited subsidy. It may be true that, in some other markets, there is less competition from US commercial exports because these have been reallocated to supply the GSM markets. However, Brazil makes a strong rebuttal that it is not legitimate or consistent with WTO practice to offset trade-distorting impacts which are found by some possible positive effects in other markets. The Arbitrator finds it useful to quote Brazil in full on this point in its response to one of the questions from the Arbitrator:

"One benefit that Brazil measures is the additional US trade flows generated by GSM 102. Other arbitrators have also measured trade flows, in particular in assessing the value of the complainant's lost exports in quantifying nullification and impairment. In these arbitrations, arbitrators have never taken into account the fact that goods not exported to the respondent's market could have been diverted to alternative markets .... Thus, in previous arbitrations, the valuation of trade flows affected by WTO-inconsistent measures was not diminished by potentially mitigating factors, such as opportunity costs. Brazil considers that this approach is correct."

4.191 The third issue concerns the treatment of additional demand in the target countries as a result of GSM-supported sales. Additional demand arises because of the price effect of the subsidized exports as discussed in the next section. The subsidized exports lower domestic prices in the target markets and may lead to increased consumption as consumers move down the demand curve. It might be argued that because this increased consumption is truly additional, the additional quantity does not contribute to adverse effects on either domestic producers or third country exporters. In general, we believe that this additional consumption (which will be a function of the size of the price effect and the elasticity of demand) will be relatively small relative to the overall size of GSM 102 transactions in these markets, but to the extent that it occurs, Brazil's measure of additionality will overstate the displacement of domestic production and exports due to the programme.

4.192 Despite this caveat, if we focus on the trade-distorting effects of the subsidy, we find that in the target markets, there is displacement of both domestic production and third country exports by US GSM-supported exports, and that this is broadly what is captured by Brazil's calculation of additionality. Bearing in mind the latitude we have as the Arbitrator to determine an "appropriate" level of countermeasures, and the fact that we are dealing with a prohibited subsidy, we have decided that it is appropriate to use Brazil's measure of additionality as a measure of the market volume loss to other producers and exporters, while recognizing that it may be an overestimate of the actual loss.

The price effects of the GSM 102 programme

4.193 In addition to these volume effects, there will also be price effects in the target markets. We note that, from the point of view of the United States, the increase in import demand as a result of the GSM export credit guarantee subsidy is represented by a shift in the import demand curve that it faces, because it represents increased demand at the same world price. Here, it is useful to distinguish between the cost of the commodity to the importer (the world price, ignoring freight and handling charges) and the total cost of importing, which includes the cost of financing. Because of the interest rate subsidy, for creditworthy borrowers the total cost of importing may be lower as a result of the guarantee ('sales discount'), even though there is no change to the world price of the commodity. For uncreditworthy borrowers, the guarantee can lead to a relaxation of a credit or liquidity constraint.

224 Brazil's responses to questions from the Arbitrator, question 28, para. 366.
225 This distinction is drawn in the US written submission, para. 212. Brazil agrees with this and calls the total cost of importing the "effective sourcing price" (Brazil's written submission, para. 217).
which enables transactions that would not otherwise occur. Both situations are appropriately represented as a shift in the import demand curve facing US exports.

4.194 In the target market, however, there is a drop in price. The reason for this is that the subsidy does not alter the purchasing power nor relax any liquidity constraint among domestic consumers, nor does it affect the production costs of domestic producers, so there is no shift in either domestic supply or demand curves as a result of the GSM guarantee. Therefore, in order to absorb the additional sales, there will be greater competition on the domestic market, domestic prices will drop, some third country exports will be squeezed out and domestic producers will be adversely affected even while domestic consumers increase their quantity demanded.

4.195 We recall that the design and operation of the GSM 102 subsidy is such that the recipient of the IRS, i.e. the obligor, is a service provider, whose services serve to guarantee an export sales transaction relating to certain goods. Ultimately, it is the export of those goods that is being facilitated through the granting of the subsidy, and it is the trade in these goods that is affected by the granting of the subsidy.

4.196 The effect of the IRS is to lower the financing cost, and therefore the effective sourcing price, of US imports in the target markets. We note that the GSM programme provides subsidized credit to foreign obligors who are in all cases banks. These banks pass on these favourable credit terms to the ultimate purchasers of the US exports. If there is no change in the credit conditions facing the ultimate purchasers, there can be no additional US sales (nor additionality in the US sense of additional demand). The United States points out, correctly, that Brazil assumes 100 per cent pass-through of the interest rate subsidy in its calculations. However, while it raises a doubt about the validity of this assumption, it does not demonstrate conclusively that it is an unreasonable assumption to make.

4.197 Under particular circumstances, the revenue loss due to the price effect will be exactly equal to the IRS as defined by Brazil. The first requirement is that the export guarantee programme has no effect on the world market price. Both Brazil and the United States agree that the GSM programme does not affect the world market price. The other requirements are that the GSM-supported sales substitute on a one-to-one basis for either domestic production or unsubsidized imports and that the supply curve of other supplies and the demand curve are perfectly inelastic and not responsive to price. In general, the price effect in the target market will be a function of the quantity of additional GSM-supported sales and of the elasticities of other supplies and domestic demand. In particular, as the sum of the other supply and demand elasticities approaches infinity, the price effect approaches zero.

4.198 To accurately assess the price effect for each GSM-supported commodity in each target market would therefore require information on all the relevant domestic supply and demand elasticities as well as the share of GSM sales in total supplies on each market. As we have seen in other aspects of this dispute, these can be highly contested parameters. Bearing in mind the latitude we have as the Arbitrator to determine an "appropriate" level of countermeasures, and the fact that we are dealing with a prohibited subsidy, we have decided that it is appropriate to use the IRS as a measure of the global revenue loss to non-US producers and exporters due to the price effect, while recognizing that it may be an overestimate of the actual loss.

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226 Brazil notes that "the GSM program operates solely in circumstances in which credit would not otherwise be available to finance the export of US agricultural goods" (Brazil's written submission, para. 208).
227 It discusses the reasonableness of this assumption in Section IV of Exhibit US-92.
228 Brazil provides a rebuttal of the US argument in Annex 1 to its written submission ("Summer-Sundaram Statement"), footnote 10.
229 See paras. 4.259 and 4.263 of this Decision.
Apportionment

4.199 In light of the above, the Arbitrator believes that it is appropriate to use Brazil's methodology to calculate the trade-distorting impact of GSM 102 exports. However, given that we have also determined that countermeasures should be linked to, if not necessarily equivalent to, the trade-distorting impact of the measure on Brazil, the amount of additionality and the IRS must be apportioned to Brazil's share of the market.

4.200 In apportioning the amount of additionality to Brazil's share of the market, we have to distinguish between the trade-distorting impact that occurs in Brazil's domestic market as a result of the GSM 102 transactions involving Brazilian obligors, and the trade-distorting impact that occurs in non-Brazilian markets. Apportionment will be necessary for those trade-distorting impacts that occur in non-Brazilian markets since the damage to Brazil's interest is linked to how large a share Brazil has of those markets. In this apportionment, the Arbitrator has used Brazil's share of world exports of the GSM 102 products, which is on average 11.7 per cent (see Table 1).\textsuperscript{230} We have used Brazil's share of the world export market of GSM 102 products rather than its share of imports plus domestic production in the target countries. We use the world market rather than the target market share of GSM 102 products because of our belief that the observed share of non-US imports in these countries has been depressed by the existence of the GSM 102 subsidized competition and is thus not an appropriate coefficient to apply. We are also aware that some of the adverse effects in the target markets would be absorbed by domestic producers rather than by non-US exporters such as Brazil. Nonetheless, it is more likely that it is non-US imports that bear the brunt of the subsidised competition because they will be more sensitive to the price effects of the subsidy (since trade elasticities are typically larger in magnitude than demand and supply elasticities), and thus Brazil's share of world exports is an appropriate indicator to use for the apportionment.

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|c|}
\hline
GSM 102 Product & Brazil Exports\textsuperscript{2} & World Exports\textsuperscript{3} & Brazil Share \\
\hline
Cotton & 341,275,226 & 9,280,297,827 & 3.7\% \\
Oilseeds & 5,689,902,478 & 21,519,800,311 & 26.4\% \\
Protein meals & 2,440,792,339 & 16,945,389,808 & 14.4\% \\
Feed Grains & 481,894,034 & 12,987,102,389 & 3.7\% \\
Corn Products (Starch) & 8,781,310 & 406,633,699 & 2.2\% \\
Hides/ Skins & 2,693,441 & 4,257,484,051 & 0.1\% \\
Tallow & 19,710,974 & 3,606,485,104 & 0.5\% \\
Rice & 59,872,132 & 10,158,656,158 & 0.6\% \\
\hline
\end{tabular}
\caption{Brazil's Share of World Trade in GSM 102 Products\textsuperscript{1}, 2006}
\end{table}

\textsuperscript{230} The share is based on data submitted by Brazil from UN Comtrade, which is contained in Exhibit Bra-815, and additional data on world exports of GSM 102 products from the same source. The additional data were extracted from UN Comtrade on 16 June 2009. The definition of GSM 102 products, in the Harmonised System (HS), is taken from Exhibit Bra-814.
<table>
<thead>
<tr>
<th>GSM 102 Product</th>
<th>Brazil Exports</th>
<th>World Exports</th>
<th>Brazil Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poultry Meat</td>
<td>3,038,988,127</td>
<td>12,121,810,169</td>
<td>25.1%</td>
</tr>
<tr>
<td>Pig Meat</td>
<td>1,010,288,388</td>
<td>20,653,942,499</td>
<td>4.9%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>13,094,198,449</td>
<td>111,937,602,015</td>
<td>11.7%</td>
</tr>
</tbody>
</table>

Notes:
1. Definition of GSM 102 products, in the Harmonised System (HS), is from Exhibit Bra-814.
2. Data sourced by Brazil from UN Comtrade and found in Exhibit Bra-815.
3. Data sourced from UN Comtrade (extracted on 16 June 2009).

4.201 However, no apportionment will be necessary for the trade-distorting impact which occurs in Brazil's domestic market since the effect is felt in its entirety by its domestic producers or third country exporters. We accept that to the extent that some of the trade-distorting impacts are borne by third country exporters, this procedure may overstate the damage suffered by Brazil alone but we believe that the importance of third country exports to Brazil is small relative to the value of domestic production, and thus this is a reasonable latitude to take in defining "appropriate countermeasures".

4.202 Similar to the case of full additionality and marginal additionality, the IRS provided to non-Brazilian obligors must also be apportioned while the IRS that flows to Brazilian obligors will not be so apportioned.

3. Calculations

(a) Brazil's methodology

4.203 Brazil's methodology involves determining the interest rate discounts secured by creditworthy and uncreditworthy foreign obligors on credits backed by GSM 102 guarantees and estimating the additional export sales obtained by US exporters as a result of these discounts. Brazil refers to the interest rate discounts as the "interest rate subsidy" and to the additional export sales generated by the interest rate subsidy as "additionality". It distinguishes between the additional export sales that come about through guarantees to creditworthy and uncreditworthy foreign obligors, referring to the former as "marginal additionality" and to the latter as "full additionality".

4.204 Using its methodology, Brazil arrives at estimated annual countermeasures equal to US$1.122 billion. This amount can be subdivided into: (i) interest rate subsidy amounting to US$211 million, (ii) marginal additionality amounting to US$94 million, and (iii) full additionality amounting to US$817 million.231

4.205 The United States claims that Brazil's methodology is based on "numerous and incorrect assumptions" that result in a figure higher than is appropriate under Article 4.10 of the SCM Agreement. The particular problems, including general critiques and specific examples, that the United States finds with Brazil's methodology for calculating the interest rate subsidy, full additionality, and marginal additionality are taken up in the succeeding sections.

4.206 Prior to doing so, we note that Brazil had initially applied the methodology to its estimates of the value of transactions supported by GSM 102 export credit guarantees on a foreign obligor-specific basis, based on publicly available data. This was because it did not have access to the internal USDA data. Subsequently, however, and in response to a request from the Arbitrator, the United States

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231 Brazil's oral statement, para. 100 and Exhibit Bra-794.
agreed to provide its data on GSM 102 export credit guarantees in FY 2006. Brazil consequently applied its methodology for calculating the IRS and additionality to this data.  

4.207 Secondly, Brazil's initial calculations did not consider whether the volumes and budgetary outlays of scheduled products exceeded their WTO export subsidy commitments. The United States correctly notes that circumvention of the US export subsidy commitments occurs for these scheduled products only to the extent that the export subsidies exceed the volumes and budgetary outlays set out in the US reduction commitments. The United States argues that "the finding that the GSM 102 programme conferred an export subsidy extended to the programme as a whole, but any calculation of an amount of prohibited subsidy in this case must necessarily make allowance for permitted export subsidies pertaining to scheduled products". Brazil has accepted this argument and adjusted its calculations accordingly.

(i) Interest rate subsidy

4.208 Brazil defines the interest rate subsidy as the present value of the spread between the interest rate at which foreign obligors would have been able to borrow in the absence of GSM 102 export credit guarantees and the subsidized interest rate enabled by those guarantees. Specifically, Brazil calculates the subsidy by measuring, over the tenor of the guaranteed loan, the difference between a specific borrower's discounted payment stream under the conditions secured with a GSM 102 export-credit guarantee, and the counterfactual discounted payment stream that could have been secured without the GSM 102 export credit guarantee, net of programme fees.

4.209 Brazil applies the "Ohlin formula" to calculate the subsidy rate for each foreign obligor. The Ohlin formula computes a borrower's present value of the interest rate difference owing to the terms of the GSM 102 loan guarantee, net of guarantee fees, using a counterfactual market interest rate as the discount factor. Brazil claims that the Ohlin formula is widely used for present value calculations in agricultural economics. This is computed as follows:

\[
S = 100 \times (1 - \frac{a}{r}) \times \left\{ 1 - \frac{1}{(1 + \frac{r}{d})^{aG}} - \frac{1}{(1 + \frac{r}{d})^{aT}} \right\} - f
\]

where:

- \( S \) = subsidy rate, \( i.e., \) present value of the interest rate spread between guaranteed and market conditions;
- \( T \) = term of guarantee (in years), \( i.e., \) tenor or maturity;
- \( G \) = grace period (in years);

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232 US responses to questions from the Arbitrator, question 50, para. 100. See also Exhibit US-78.
233 Brazil's oral statement, para. 100. See also Exhibit Bra-794.
234 US written submission, para. 20.
235 US written submissions, para. 86.
236 Brazil written submission, para. 118. See also Exhibit Bra-794.
237 Brazil's Methodology Paper, para. 8.
238 Brazil's Methodology Paper, para. 9.
\[ f = \text{exporter fee (in \% of the GSM 102 export credit guarantee)}; \]
\[ a = \text{installments (in payments per year)}; \]
\[ g = \text{interest rate (in \% with a GSM 102 export credit guarantee)}; \]
\[ r = \text{annual discount rate (market interest rate, \textit{i.e.}, importers' risk-adjusted rate)}. \]

4.210 As can be seen from the formula, this requires Brazil to estimate the counterfactual market interest rate that would have been demanded by commercial lenders from foreign obligors in the absence of a GSM 102 export credit guarantee.

4.211 In Brazil's methodology, the market interest rate is comprised of a risk-based premium and the risk-free baseline interest rate which is based on the London Interbank Offered Rate ("LIBOR"). It describes four intermediate steps to determining the market interest rate: (i) identify a methodology for deriving market interest rates; (ii) separate creditworthy from non-creditworthy obligors, (iii) identify credit risk ratings for rated foreign obligors and use a methodology to assign credit risk ratings to unrated foreign obligors; and (iv) calculate the market interest rate to credit classes of borrowers.

4.212 According to Brazil, the methodology that it uses to calculate the market interest rate is one used by the United States Department of Commerce ("USDOC") in countervailing duty proceedings. It states that the USDOC approach proceeds from the premise that a lender's expected return on all loans should be equal. This means that the market interest rate will be greater the higher the risk of the borrower. In addition, Brazil states that the approach requires distinguishing between two risk groups: creditworthy borrowers and uncreditworthy borrowers.

4.213 Wherever a foreign obligor has received a credit rating, Brazil simply uses that rating to assign the obligor to the corresponding credit risk group. However, not every foreign obligor has a rating from the credit-rating institutions. For unrated foreign obligors from countries in which at least one CCC-approved obligor has been rated, Brazil treats unrated foreign obligors as being, on average, one notch below the worst-rated obligor in that country. For foreign obligors from those countries in which not a single CCC-approved foreign obligor has received a credit rating, Brazil imputes credit ratings.

4.214 The imputation proceeds first by determining country-specific credit-risk averages for those countries that host at least one rated foreign obligor. Brazil compiles the average probability of default in each country by (i) adding up the default probability of each rated and unrated foreign obligor and (ii) dividing the result by the total number of CCC-approved obligors for that country. This average default probability is matched back to the relevant credit risk group on the numerical credit scale of 1-18 to arrive at a country-specific average obligor credit risk.

4.215 In a second step, Brazil estimates the default probability of foreign commercial banks in unrated-obligor countries, using information of specific commercial risk in countries that host at least one rated foreign obligor. Brazil determines the credit risk differential between average rated-bank risks and country risk for each country that has at least one rated obligor. Brazil claims that the data shows that a rated bank is, on average, three credit-risk "notches" below the sovereign risk of the country in which it is domiciled. Consistent with its previous approach that, if evaluated, non-rated

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240 Brazil's Methodology Paper, para. 11.
241 Brazil's Methodology Paper, para. 18.
242 Brazil's Methodology Paper, para. 19.
243 Brazil's Methodology Paper, para. 21.
foreign obligors would on average receive a credit rating that is one notch below the worst-rated obligor in a country. Brazil treats unrated obligors in unrated countries as having a credit rating that is four notches below sovereign risk.

4.216 To separate uncreditworthy borrowers from creditworthy borrowers, Brazil uses credit rating information from Fitch, Moody's and S&P found in Bankscope. Brazil explains that Bankscope is not itself a ratings agency, but combines data from different ratings agencies. It uses this ratings information to rank companies and sovereign States along a scale of 18 steps, with a numeric ranking of one for the lowest credit risk and 18 for the highest credit risk. It uses as a threshold between creditworthiness and uncreditworthiness a credit-rating of "10" on the 18-point numerical rating scale. Brazil classifies borrowers with a rating of 11 (corresponding to credit ratings of BB+ or Ba1 on the scales of S&P and Moody's, respectively) or worse as uncreditworthy.

4.217 Brazil justifies the use of this threshold by stating that borrowers with a rating of 11 or worse are usually referred to as "below investment grade". It states that the conventional threshold between creditworthiness and uncreditworthiness is a credit-rating of ten on the 18-point numerical rating scale. It claims that Moody's distinguishes between "investment grade" and "non-investment" ("junk", or "speculative") grade and uses a numerical rating of ten as the threshold.

4.218 Brazil uses this information to calculate the market interest rate that will be assigned to the different credit classes of borrowers. This market interest rate is made up of a risk-free interest rate and a risk premium. For FY 2006, Brazil uses a risk-free interest rate of 5.18 per cent. In Brazil's methodology, the risk premium depends on the probabilities of default of the foreign obligors. Brazil takes the cumulative default probabilities from a Moody's study of corporate historical default rates of corporate bond issuers in the period 1983-2005. Brazil subdivides the group of creditworthy obligors to reflect the credit risk of each individual creditworthy borrower. Instead of imputing the same market interest rate for all creditworthy borrowers, Brazil breaks down creditworthy obligors into ten separate groups to reflect the actual credit risk of each individual creditworthy borrower. However, for those obligors that it classifies as uncreditworthy, Brazil applies a single default probability corresponding to the group with a rating of 18.

4.219 The result of applying Brazil's methodology is an estimate of the interest rate subsidy of US$211 million for FY 2006. The estimated subsidy rate by obligor ranges from a low of 0 per cent (for the Korean banks) to a high of 29.24 per cent for a Mexican obligor, with a weighted average (with the share by each obligor of the total value of GSM 102 transactions as weights) of 21.2 per cent for all obligors.

Arguments of the parties

4.220 The United States claims that Brazil's methodology for imputing risk to foreign obligors omits a reasonable inquiry into the obligors and results in exaggerated estimates of risk. The United States objects to the reliance solely on ratings from credit rating agencies as the basis for classifying the riskiness of various foreign obligors. It also calls into question Brazil's method for assigning ratings to unrated foreign obligors. As a result of these incorrect imputations of risk, it claims that this makes the interest rate subsidy estimate, and calculations of marginal and full additionality, far too high. The United States goes on to cite examples of foreign banks, which were classified as uncreditworthy by Brazil's methodology (a numerical rating worse than 10), but which were able to secure credit in ordinary credit markets.
4.221 The United States disputes Brazil's claim that it was following the USDOC methodology to calculate the interest rate subsidy. Instead, the United States alleges that Brazil had misconstrued and misapplied the USDOC approach. According to the United States, the Department of Commerce applies the expected return formula to construct a counterfactual market interest rate only if the particular firm under examination is first determined to be "uncreditworthy" after a detailed analysis of financial statements. The Department of Commerce's definition of "uncreditworthy borrower" is not all borrowers with less than an investment-grade credit rating but is a borrower that the Department determines, after a detailed analysis of the borrower's financial health and ability to service debt obligations, cannot secure financing from conventional commercial sources. The Department's creditworthiness determination is based on a number of factors, including the receipt of any commercial long-term loans, the present and past financial health of the firm, the firm's ability to meet its costs and fixed financial obligations, and evidence of the firm's future financial position.

4.222 In contrast, the United States says that Brazil has made no attempt to discern any comparable commercial loans taken out by any of the obligors during the relevant time period, nor has it attempted to consider national average interest rates in its assertion that obligors are uncreditworthy. Instead, Brazil assumes that any borrower with a numeric rating of ten or worse is uncreditworthy. But, according to the United States, the set of borrowers who cannot secure financing from conventional commercial sources is fundamentally different from the set of borrowers who can secure financing from conventional commercial sources, but just not at investment-grade rates. The borrowers in the latter set are creditworthy by definition; they are just not investment-grade creditworthy. It states that Brazil's own written submission recognizes that "non-investment grade" or "speculative grade" is not synonymous with "uncreditworthy" and that capital markets therefore do not ascribe the same meaning of absolute uncreditworthiness as Brazil to a credit rating worse than ten.

4.223 Finally, the United States claims that its review of the academic literature on export credit guarantees show that Brazil's methodology is not supportable. While Brazil's methodology relies on an interest rate subsidy of more than 20 per cent, the range of possible interest rate subsidies in the literature described in Exhibit US-92 starts at nearly zero and has a maximum of less than eleven per cent.

4.224 Brazil defends its method for imputing risks to the foreign obligors who made use of GSM 102 export credit guarantees in FY 2006. It notes that the United States offers no criticism of the Ohlin equation and has itself employed the formula. It justifies its use of information from credit rating agencies – Fitch, Moody's and S&P – to determine the credit quality of individual foreign obligors. These are rating agencies which are recognized by the US Securities and Exchange Commission as Nationally Recognized Statistical Rating Organizations. In forming their opinions of the credit quality of a particular obligor, the credit rating agencies employ analysts and models to assess the obligor's financial condition, operating performance, funding sources, asset quality, risk management strategies, and policies.

4.225 Brazil maintains that the assumptions informing its assignment of ratings (i) to unrated obligors in "rated-obligor countries" and (ii) to unrated obligors in "unrated-obligor countries" are

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247 US written submission, para. 157.
248 US responses to questions from the Arbitrators, question 53, para. 128.
249 US responses to questions from the Arbitrators, question 53, para. 128.
250 US responses to questions from the Arbitrators, question 51, para. 107.
251 Exhibit US-92.
252 Brazil's written submission, para. 201.
253 Brazil's written submission, fn 126.
254 Brazil's responses to questions from the Arbitrator, question 25, para. 271.
justified. Brazil argues that ratings are solicited by the banks themselves. A strong bank would like its financial strength to be made public or signalled to the investor and creditor populations at large. If a bank chooses not to use a credible quality-signalling device when one is available, a prudent creditor, in gauging credit risk, will treat that bank as less creditworthy than a bank that has chosen to so signal. Since it will not know why the unrated bank has decided not to secure a rating, the prudent creditor will assume the worst: that the unrated bank fears it would receive a disadvantageous credit-rating vis-à-vis its competitors. Under these circumstances, its use of a single notch differential between unrated banks and the worst-rated CCC-approved bank in a country does not lead to countermeasures that are inappropriate or disproportionate.\footnote{Brazil's written submission, para. 178.} It also defends its approach to the situation in which an unrated obligor is from a country in which there are no rated CCC-approved foreign obligors. In this case, the obligor is rated four "notches" below the sovereign but this arises from taking what Brazil describes as "objective steps".\footnote{Brazil's written submission, para. 179.}

4.226 Brazil explains its choice of the numerical rating of ten to distinguish between creditworthy and uncreditworthy obligors as a practice that is widely applied in the capital markets.\footnote{Brazil's written submission, para. 184.} Brazil cites literature provided by the ratings agencies, Fitch, Moody's and S&P, which purport to show how the agencies distinguish between "investment grade" from "speculative grade" bonds and other debt securities.\footnote{Brazil's written submission, fn 152.} Brazil explains that the term "investment grade" historically referred to bonds and other debt securities that bank regulators and market participants viewed as suitable investments for financial institutions. Now the term is broadly used to describe issuers and issues with relatively high levels of creditworthiness and credit quality. In contrast, the term "non-investment grade," or "speculative grade," generally refers to debt securities where the issuer currently has the ability to repay but faces significant uncertainties, such as adverse business or financial circumstances that could affect credit risk.\footnote{Brazil's written submission, fn 152.} Based on these references, Brazil determines that "investment grade" would refer to numerical ratings of ten or better and that "speculative grade" would correspond to numerical ratings of 11 and worse.

4.227 Brazil rejects the charge that it is misapplying the USDOC methodology. First, it argues that the fact that the USDOC applies its methodology for calculating a counterfactual market interest rate only for uncreditworthy foreign obligors does not establish that using the methodology for creditworthy obligors leads to inappropriate and disproportionate countermeasures.\footnote{Brazil's written submission, para. 193.}

4.228 Second, it objects to the United States' argument that Brazil should have used some element of the USDOC methodology to make assessments of creditworthiness of foreign obligors based on a detailed analysis of financial statements and on whether the obligor could have secured loans without government guarantees. It provides several reasons for this. First, employing financial information from the balance sheets of the borrowing financial institution will not reveal whether that borrower has been able to secure credit that is comparable to GSM 102.\footnote{Statement by Professor Rangarajan K. Sundaram concerning GSM 102, Exhibit Bra-793, para. 43.} Brazil describes credit under the GSM 102 programme as US-dollar denominated, unsecured, and long-term with maturities of 3 years.\footnote{Statement by Professor Rangarajan K. Sundaram concerning GSM 102, Exhibit Bra-793, para. 42.} It claimed to have analysed 24 examples given by the United States and showed that for none of the applicable examples could a truly comparable loan be found.\footnote{Statement by Professor Rangarajan K. Sundaram concerning GSM 102, Exhibit Bra-793, para. 58.} Second, Brazil argues that the ability to secure a single loan does not make an uncreditworthy obligor creditworthy. It cites the USDOC itself as stating that the fact that a respondent has taken out a single commercial loan is
not dispositive evidence that the firm was creditworthy. 264 Finally, unlike an investigating authority in a US countervailing duty proceeding which may have the power to demand information from respondents to enable a review of their individual borrowings (as well as the power to adopt adverse inferences if its requests are not complied with), Brazil says it does not have the ability to secure the relevant information from foreign obligors in preparing its methodology. 265

4.229 At the same time Brazil claims that its approach is flexible and that the Arbitrator can make appropriate adjustments to the calculation of the interest rate subsidy. 266 The method by which market interest rates facing creditworthy borrowers are determined can be adjusted if reliable interest-rate information is available from a different source. The threshold for distinguishing between creditworthy and uncreditworthy obligors can be adjusted, for example, choosing a threshold of 14 instead of ten. Unrated borrowers can be rated on par with the worst-rated CCC-approved bank in the country. Finally, the method could be adjusted, if necessary, to include a "scaling" of the full additionality calculation, so as to adjust the impact of the creditworthiness assessment for unrated obligors assigned a credit rating at or inferior to 11. 267

4.230 Finally, Brazil disputes the conclusions reached by the United States regarding the empirical literature on interest rate subsidy. First, it suggests that the United States is comparing "apples and oranges". Brazil's interest rate subsidy analysis concerns data from a single and recent year (FY 2006), while the studies cited by the United States use very different time periods, most terminating by the mid-1990s. 268 It claims that using a different time period fundamentally drives the results, because the risk-free interest rate varied considerably over the last three decades. Moreover, Brazil's interest rate subsidy calculations are made at an obligor-specific level, whereas all of the studies cited by the United States use sovereign-level information. Brazil's application of its interest rate methodology to FY 2006 data concerns obligors in 17 countries, while two studies reviewed by the United States deal with only five and six import markets, respectively. Second, Brazil claims that the United States is mistaken in its assertion that no previous study has found subsidy rates of the magnitude of Brazil's. As counterexamples, it cites five studies that find interest rate subsidy estimates comparable to or greater than what it calculates. 269

Analysis by the Arbitrator

4.231 We begin our analysis by reiterating that the interest rate subsidy is an approximation of the price effects of the GSM 102 export credit guarantees. Our purpose in establishing, with some precision, the magnitude of the IRS is to allow us to ascertain the size of the price effects of the export credit guarantees in Brazilian and non-Brazilian markets for GSM 102 products.

4.232 Under Brazil's methodology, the interest rate subsidy is calculated as the difference between the CCC rate and a counterfactual market interest, taking into account the different tenor of the loans and the fees charged. The loans guaranteed by GSM 102 vary in maturity. For the 91 obligors in Brazil's sample, 55 have loan maturities of three years; 25 obligors have average loan maturities of two years; and 11 have average loan maturities of one year. This means that the different payment streams have to be made comparable, i.e., discounted to their present value, and for this Brazil uses the Ohlin formula. The Arbitrator notes that while the United States objects to many aspects of Brazil's methodology for calculating the interest rate subsidy, it does not criticize the Ohlin formula.
4.233 Brazil's methodology requires calculating the counterfactual market interest rate that the borrower would have had to pay a private lender in the absence of GSM 102. This requires Brazil to find a method for determining the credit risk of various foreign obligors since the counterfactual market interest will vary with the riskiness of the borrower. This feature of the credit market follows from rational behaviour by lenders who will need to charge higher risk borrowers a higher interest rate to compensate for the risk that the lender has to bear. More precisely, the risk-neutral lender will price credit to each borrower so that the expected return made on each borrower or loan is equal. This pricing rule is a necessary requirement for the lender to maximize his expected profits. This rule also underlies the USDOC method for determining the counterfactual market interest rate, although it is applied only to those obligors that the USDOC determines to be uncreditworthy. The United States has in fact taken Brazil to task for applying the USDOC method also to creditworthy obligors. But the pricing rule has a far general application than that since it will be followed by expected profit maximizing lenders. The Arbitrator therefore agrees with Brazil that there is no reason why the USDOC method for determining the counterfactual market interest rate cannot be applied to creditworthy obligors.

4.234 For the Arbitrator, the key question in relation to Brazil's methodology for calculating the interest rate subsidy is whether its imputation of risk to foreign obligors is accurate and therefore leads to the correct estimate of the interest rate subsidy.

4.235 To a large extent, Brazil's methodology for imputing risk relies on the credit ratings available from international credit ratings agencies – Fitch, Moody's and S&P. Out of the 91 obligors included in Brazil's calculations, 56 have ratings from international credit rating agencies. The Arbitrator notes that Fitch, Moody's and S&P are established credit ratings firms that are relied upon by credit markets for assessing the riskiness of debtors. Issuers of debt pay for the services of these agencies to rate their creditworthiness. The Arbitrator finds a great advantage in this approach since the assignment of risks to foreign obligors relies on the decisions made by third-party specialists who are in the business of determining the riskiness of debt issuers.

4.236 The United States has argued for an approach that determines the riskiness of foreign obligors based on a detailed analysis of financial statements and on whether the obligor could have secured loans without government guarantees. This argument appears to be directed at the issue of how to distinguish uncreditworthy from creditworthy obligors, an issue to which the Arbitrator turns to later. But the argument could as well be applied to the more general question of how to determine the counterfactual market interest rate. Brazil's expert has testified to the difficulty of obtaining the information needed to conduct this assessment from balance sheet or financial statements of financial institutions.270 The Arbitrator concurs with this evaluation. The loans taken out by the financial institution need to be comparable to that available under GSM 102, namely, dollar-denominated, unsecured and long-term. Only then can the interest rate on those loans serve as a market benchmark for the loans obtained with a GSM 102 guarantee. But there does not appear to be a way in which this could be done systematically for all the obligors in Brazil's sample based on publicly available financial information.

4.237 Not all the assignment of the credit risk of foreign obligors is taken from the ratings agencies. Out of the 91 obligors included in Brazil's calculations, only 56 have ratings from international credit rating agencies while 36 are unrated. But in order for Brazil to undertake the interest rate subsidy calculation, ratings for these obligors must be imputed. The approach outlined by Brazil requires judgements to be made. As described earlier, for countries where at least one CCC-approved obligor was rated (rated-obligor countries), Brazil adopts a decision rule which assigns unrated obligors a ranking equal to one notch below the worst rated obligors in the country. This affects 35 of the

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270 Statement by Professor Rangarajan K. Sundaram concerning GSM 102, Exhibit Bra-793, paras. 41-44 and Appendix to the Exhibit.
36 unrated obligors. For obligors in countries in which no CCC-approved foreign obligor was rated (unrated-obligor countries), Brazil's decision rule assigns a rating that is four notches below the sovereign rating. This affects only one unrated obligor from Peru.

4.238 The Arbitrator concurs with Brazil's explanation for these decision rules. In the Arbitrator's view, a credit rating is a "signalling" device for the obligor to credibly signal its credit quality to the market. If the obligor chooses not to do so, when the signalling device is available, it would be prudent to treat that obligor as less creditworthy than other obligors serving the same marketplace that have chosen to obtain a rating. Thus, the decision rule adopted by Brazil for "rated-obligor countries" of assigning a credit rating that is one notch below the worst rated obligors in that country is both reasonable and prudent. With respect to obligors in unrated-obligor countries, the Arbitrator views this step as an extension of the approach taken by Brazil with respect to obligors in rated-obligor countries. Brazil asks: what is the average difference in credit rating between the sovereign and the worst rated obligor in rated-obligor countries? The answer turns out to be equal to three credit ratings. Since unrated foreign obligors would on average receive a credit rating that is one notch below the worst-rated obligor in a country, Brazil treats unrated obligors in unrated countries as having a credit rating that is four notches below sovereign risk.

4.239 The second major issue arising from the imputation of risk is the classification of the obligors into creditworthy and uncreditworthy borrowers. The Arbitrator notes that this differentiation of the borrowers is also made in the USDOC methodology. What concerns the Arbitrator is whether the credit rating threshold chosen by Brazil to differentiate creditworthy from uncreditworthy obligors is the right one. Brazil defends this threshold level of creditworthiness by claiming that international credit rating agencies distinguish between "investment grade" and "non-investment" grade. This would imply a numerical rating of ten as the threshold between creditworthy and uncreditworthy borrowers.

4.240 But based on the description provided by Brazil, and as the United States has also pointed out, non-investment grade refers to "debt securities where the issuer currently has the ability to repay but faces significant uncertainties, such as adverse business or financial circumstances that could affect credit risk." The description certainly does not appear to be synonymous with Brazil's characterization of uncreditworthy obligors as "those borrowers that could not otherwise have secured credit at market at all" or as "those foreign obligors that would not have been able to secure comparable credit – that is, a 24-36 month, non-collateralized loan in foreign currency – in the absence of a GSM 102 guarantee." Another way of reflecting on the appropriateness of this threshold is to consider the default probabilities calculated by Moody's for borrowers with different credit risk ratings (see Table 2). These default probabilities are an important component of Brazil's method for calculating the counterfactual market interest rate. For borrowers with a numerical rating of 11 (who will be classified as uncreditworthy if Brazil's threshold of ten is adopted), the three-year default probability is 3.567 per cent. (The analysis could be applied to the two-year and one-year default probabilities as well but loans with three-year maturities are the most common.) This means that over the three-year life of the loan, there is a one in 28 chances that the borrower will default. In contrast, the default probability for the worst rated borrowers (those with a numerical rating of 18) is 43.498 per cent. This implies that over the three-year life of a loan taken out by these borrowers, there is a one in two chances that they will default. In the Arbitrator's view, this is a significant difference in default probabilities. Adopting a threshold of ten will likely lead to too high an estimate of the interest rate subsidy since Brazil's methodology requires obligors with ratings of 11 and worse to be assigned default probabilities equal to the worst rated obligor.

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271 US responses to questions from the Arbitrators, question 96, para. 41.
272 Brazil's written submission, fn. 152.
273 Brazil's Methodology Paper, para. 40.
274 Brazil's comments on US responses to questions from the Arbitrator, question 96, para. 120.
Table 2: Cumulative Default probabilities (Moody's)\textsuperscript{275}

<table>
<thead>
<tr>
<th>Rating</th>
<th>Numerical</th>
<th>Cumulative Default Probabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1-Year</td>
</tr>
<tr>
<td>AAA</td>
<td>1</td>
<td>0.000</td>
</tr>
<tr>
<td>AA+</td>
<td>2</td>
<td>0.000</td>
</tr>
<tr>
<td>AA</td>
<td>3</td>
<td>0.000</td>
</tr>
<tr>
<td>AA-</td>
<td>4</td>
<td>0.019</td>
</tr>
<tr>
<td>A+</td>
<td>5</td>
<td>0.003</td>
</tr>
<tr>
<td>A</td>
<td>6</td>
<td>0.026</td>
</tr>
<tr>
<td>A-</td>
<td>7</td>
<td>0.037</td>
</tr>
<tr>
<td>BBB+</td>
<td>8</td>
<td>0.166</td>
</tr>
<tr>
<td>BBB</td>
<td>9</td>
<td>0.161</td>
</tr>
<tr>
<td>BBB-</td>
<td>10</td>
<td>0.335</td>
</tr>
<tr>
<td>BB+</td>
<td>11</td>
<td>0.753</td>
</tr>
<tr>
<td>BB</td>
<td>12</td>
<td>0.780</td>
</tr>
<tr>
<td>BB-</td>
<td>13</td>
<td>2.069</td>
</tr>
<tr>
<td>B+</td>
<td>14</td>
<td>3.223</td>
</tr>
<tr>
<td>B</td>
<td>15</td>
<td>5.457</td>
</tr>
<tr>
<td>B-</td>
<td>16</td>
<td>10.460</td>
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<tr>
<td>CCC+</td>
<td>17</td>
<td>20.982</td>
</tr>
<tr>
<td>CCC-C</td>
<td>18</td>
<td>20.982</td>
</tr>
</tbody>
</table>


4.241 To ensure that the imputation of risk does not lead to an inflated estimate of the interest rate subsidy, the Arbitrator has decided to change the threshold to 14. The Arbitrator notes that a borrower rated one notch lower than this threshold has a three-year default probability of 18.535 per cent. This translates into about a 1 in 5 chances of a default over a period of three years, which is appreciably closer to that of the worst rated borrowers. In making this change, the Arbitrator notes that Brazil has in several instances emphasized the flexibility of its methodology, which would allow the Arbitrator to modify certain of the assumptions to values that the Arbitrator considers more appropriate.\textsuperscript{276} This change results in 52 of the 91 foreign obligors being deemed creditworthy, compared to just ten of the 91 foreign obligors when the threshold was ten.

4.242 Finally, the Arbitrator turns to the economic literature on estimates of the interest rate subsidy cited by Brazil and the United States. The United States claims that this literature does not support the calculation of the interest rate subsidy by Brazil since its survey of the literature suggests that the interest rate subsidy ranges between 0 and 11 per cent. Brazil has disputed the relevance of these studies to its estimates arguing that they cover different periods in time, different credit guarantee programmes and are not calculated at the obligor level. For its part, Brazil cites five studies that it claims arrive at estimates of the interest rate subsidy equal to or greater than what it estimates for GSM 102.\textsuperscript{277} However, the United States also disputes the relevance of these studies since they cover

\textsuperscript{275} Table 2 is taken from Exhibit Bra-794.
\textsuperscript{276} Statement by Professor Rangarajan K. Sundaram concerning GSM 102, Exhibit Bra-793, para. 57.
\textsuperscript{277} Brazil's responses to questions from the Arbitrator, question 94, para. 164.
different periods in time, some of the programmes evaluated are not credit guarantee programmes and some do not employ the Ohlin formula.\textsuperscript{278}

4.243 In the Arbitrator's assessment, the review of the literature conducted by the parties while informative is not determinative of the specific question before the Arbitrator, which is whether Brazil's methodology for calculating the interest rate subsidy results in an inflated estimate of the interest rate subsidy. The main difficulty of drawing any firm conclusion from the literature review is the "apples and oranges" comparison, which both parties have in fact highlighted. The studies cited by the parties use different methods for calculating the interest rate subsidy; they have been conducted at different periods of time; they cover different countries, different product sectors, and different guarantee programmes.

4.244 Given that the price effect (as reflected, for the purposes of our calculations, in the interest rate subsidy) is part of the trade-distorting impact on Brazil, based on the principles set out in paragraphs 4.193 to 4.198 above, and based on our analysis of the arguments and evidence provided by the parties regarding Brazil's methodology for calculating the interest rate subsidy, we determine that the trade-distorting impact to Brazilian producers and exporters as reflected in the IRS amounts to \textbf{US$25.27 million}. It is comprised of two parts. The first part, equalling US$12.64 million, represents those impacts in the Brazilian domestic market. In addition, we determine that there are trade-distorting impacts in non-Brazilian markets, worth US$108 million, as a result of the export credit guarantees received by non-Brazilian obligors. However, only a certain share of that amount represents trade-distorting impacts on Brazil. Consequently, this second amount must be apportioned using Brazil's share of world trade in GSM 102 products, which was 11.7 per cent in year 2006. This leads to an additional estimate of trade-distorting impact on Brazil of US$12.63 million. The detailed calculations are shown in \textbf{Annex 1}.

(ii) \textit{Full additionality}

4.245 Brazil claims that GSM 102 export credit guarantees confer a particular advantage on US exporters in that it generates additional exports for the United States that would not otherwise have occurred.\textsuperscript{279} Brazil clarifies that this could result from new demand or come from diversion from sellers in other markets. The sales that Brazil's method does not account for are those US exports that would have occurred even without the GSM 102 export credit guarantees.\textsuperscript{280}

4.246 This additionality is of two forms: full additionality accruing to uncreditworthy obligors and marginal additionality which accrues to creditworthy obligors.\textsuperscript{281} With respect to those foreign obligors that it has classified as uncreditworthy, Brazil claims that credit could not have been obtained without GSM 102 at any viable price; thus, export transactions would not have occurred in the absence of GSM 102. For uncreditworthy borrowers, economic activity occurs due solely to GSM 102. So, whenever a GSM 102 export credit guarantees is extended to uncreditworthy borrowers, the entire volume of the exports constitutes the advantage conferred on US exporters. Full additionality is hence calculated as the entire value of GSM 102-backed transactions involving uncreditworthy foreign obligors.\textsuperscript{282} Brazil estimates the amount of full additionality in FY 2006 at US$817 million based on its numerical threshold of 10.

4.247 Brazil agrees that the relevant additionality benefit to be considered is that of "net additionality". A calculation of net additionality accounts for the negative revenue effect that

\begin{footnotes}
\item[278] US comments on Brazil's responses to questions from the Arbitrator, question 94, paras. 89-91.
\item[279] Brazil's Methodology Paper, para. 39.
\item[280] Statement by Professor Daniel Sumner concerning GSM 102, Exhibit Bra-797, para. 3.
\item[281] Brazil's Methodology Paper, para. 40.
\item[282] Brazil's Methodology Paper, para. 43.
\end{footnotes}
GSM 102 subsidies have on those US commercial exports that are not eligible for GSM 102.283 Because the rate of the IRS is relatively large and the market share of the GSM 102-backed exports is very small as compared to other exports, Brazil's methodology finds that, if the GSM 102 subsidy were withdrawn, the United States, for most products and in most foreign obligor markets, would lose all the exports that had formerly been made under GSM 102.284

Arguments of the parties

4.248 The United States contends that the notion of full additionality as presented by Brazil is "entirely speculative". In its view, it would account for an additional, indirect element to the interest rate subsidy that Brazil asserts is the first component for countermeasures.285

4.249 Furthermore, full additionality hinges entirely on Brazil's determination of uncreditworthiness which the United States has argued relies on a "fatally flawed" calculation of interest rate subsidy, particularly with respect to treatment of uncreditworthy obligors.286

4.250 Based on its view of the economic literature, the United States argues that there is no support for the claim that exports would not occur in the absence of GSM 102 guarantees. It argues that a useful perspective for thinking about additionality is whether the export credit guarantee is able to expand global demand for the product that is the subject of the subsidy.287

4.251 Brazil defends full additionality by referring to the design and application of the GSM 102 programme. It refers to statements by USDA and FAS, which operates GSM 102 in cooperation with the CCC, that it alleges confirms that GSM 102 is used to facilitate credit for the purchase of US exports, in instances where a foreign obligor, without a GSM 102 export credit guarantee, could not secure financing at all.288 It claims that US regulations expressly provide that the GSM 102 programme operates solely in circumstances in which credit would not otherwise be available to finance the export of US agricultural goods.289 Specifically, it claims that the regulations provide that GSM 102 operates "in cases where credit is necessary to increase or maintain US exports to a foreign market and where US financial institutions would be unwilling to provide financing without CCC's guarantee."290 Hence, in its view calculating full additionality for GSM 102-supported exports involving uncreditworthy foreign obligors is wholly consistent with the way in which USDA and FAS have characterized the programme in their regulations and elsewhere.291

4.252 With respect to the empirical studies cited by the United States, Brazil claims that these studies have empirical flaws and provide limited guidance about the precise magnitude of impacts of GSM 102 subsidies on US exports. Further, Brazil professes that some of the econometric analysis presented actually supports Brazil's positions.292 For example, Brazil quotes an extract from one of these studies cited by the United States to the effect "that a 1 per cent increase in the interest rate subsidy from a GSM 102 guarantee results in a 3 per cent increase in US export value".293

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283 Brazil's responses to questions from the Arbitrator, question 92, para. 121.
284 Brazil's responses to questions from the Arbitrator, question 92, para. 120.
285 US written submission, para. 197.
286 US written submission, para. 196.
288 Brazil's written submission, para. 207.
289 Brazil's written submission, para. 208.
290 Brazil's responses to questions from the Arbitrator, question 25, para. 275.
291 Brazil's written submission, para. 211.
292 Statement by Professor Daniel Sumner concerning GSM 102, Exhibit Bra-797, para. 17.
293 Statement by Professor Daniel Sumner concerning GSM 102, Exhibit Bra-797, para. 20.
Analysis by the Arbitrator

4.253 In the Arbitrator's judgement, part of the trade-distorting impact of GSM 102 supported exports is its displacement of Brazilian production in its home market and Brazilian exports in third country markets. While full additionality is not an equivalent measure of this displacement effect arising from export credit guarantees issued to uncreditworthy obligors, it is not an inappropriate basis for calculating this effect. Again, to the extent that we can make the calculation of full additionality more precise, the closer we can arrive at the amount of Brazilian production and exports that are displaced by the export credit guarantees.

4.254 The Arbitrator has determined that the threshold level for uncreditworthy obligors is 14 so that those obligors with ratings worse than 14 are deemed uncreditworthy. Out of the 91 obligors with GSM 102 transactions in FY 2006, 39 will be classified as uncreditworthy based on this threshold. This group represents 43 per cent of the total number of obligors. Collectively, this group accounts for a similar percentage of all GSM 102 transactions in FY 2006. The interest rate subsidy for uncreditworthy obligors is 24.3 per cent. This means that absent the GSM 102 export credit guarantees, uncreditworthy foreign obligors would have been charged an average of 24.3 per cent more by the market.

4.255 The Arbitrator therefore determines that the displacement effect on Brazilian production and exports of export credit guarantees issued to uncreditworthy obligors, and for which we use full additionality as an approximation, amounts to **US$80.8 million**. This is comprised of two parts. The first is the displacement effect in Brazil's domestic market which amounts to US$36.3 million. The second part is the trade-distorting impacts in non-Brazilian markets worth US$380.6 million. But only a share of that amount represents displacement of Brazilian exports and so must be apportioned to Brazil's share of world trade in GSM 102 products, which was 11.7 per cent in 2006. This apportioned amount is equal to US$44.5 million. The detailed calculations are shown in Annex 2.

(iii) Marginal additionality

4.256 With respect to creditworthy obligors, Brazil estimates the additionality from GSM 102-subsidized transactions by applying a "but-for" counterfactual that calculates the reduction in sales volume in a given fiscal year that US exporters would have incurred if the United States had withdrawn the GSM 102 programme.\(^\text{294}\)

4.257 Brazil relies on a formal model to calculate the amount of marginal additionality. It uses a partial equilibrium linear displacement model of import demand and export supply, specified in linear difference form, to simulate the relative effects of the withdrawal of the GSM 102-induced interest rate subsidy on US exports, relative to a situation in which GSM 102-related interest rate subsidies are in place. This actual situation is then compared with the counterfactual in which GSM 102 for all relevant commodities are permanently withdrawn. The methodology considers three markets, the United States, an import market which benefits from the GSM 102 interest subsidies and the rest of the world. Brazil's calculation of marginal additionality results in estimated benefits of US$93.8 million to US exporters.

\(^{294}\) Brazil's Methodology Paper, para. 46.
Arguments of the parties

4.258 The United States brings two arguments to bear on the marginal additionality calculations by Brazil.

4.259 First, it argues that the methodology assumes that the subsidy from the export credit guarantee will pass through completely to the world price.\textsuperscript{295} It questions the justification for the assumption that as a result of GSM 102 guarantees, importers will be able to purchase these products at the world price minus the full subsidy. It argues that the proposition that the price of the relevant commodity export under a GSM 102 programme is affected at all by the export credit guarantee is not supported by economic research.\textsuperscript{296}

4.260 It notes that the total cost of an import can be seen as a sum of the price of the commodity plus the financing cost. It acknowledges that the financing cost may be reduced by the export credit guarantee because the guarantee is assumed to provide for an interest rate that is lower than what the importer could have received in the market without the guarantee. The total cost of importing may then be lower as a result of the guarantee, but that is due entirely to the interest rate subsidy, not to a change in the price of the commodity.\textsuperscript{297}

4.261 Second, the United States criticizes the formal model used by Brazil to calculate marginal additionally. It questions what it implies is an ad hoc step employed by Brazil to adjust the results of its formal model. The United States points to a part of Brazil's model (Equation E now modified by Brazil to Equation E') which calculates additional US exports as a result of GSM 102 export credit guarantees. Brazil assumes that additional US exports can range between 0-100 per cent of the amount of GSM 102 transactions. But Brazil's simulations are such that the results are always greater than 100 per cent.\textsuperscript{298} In the view of the United States, this outcome means that the model overstates the effects of GSM 102 on US exports. It claims that eventually Brazil ignores the simulation result and caps the elasticity to one (100 per cent).\textsuperscript{299}

4.262 Also related to its criticism of the formal model, the United States questions the value of the cotton elasticities used by Brazil in the marginal additionality analysis. It points out that these are different from the elasticities used in the cotton model\textsuperscript{300} to analyse the adverse effects of marketing loans and countercyclical payments.\textsuperscript{301} It argues that the elasticities employed may be appropriate in the context of basic supply and demand responses to small changes in volumes and prices but not in scenarios where Brazil is assuming the full pass-through of the GSM 102 interest rate subsidy to the US export price with sometimes large price swings.\textsuperscript{302}

4.263 Brazil has advanced a defence of its methods against the criticism of the United States. It rejects the first criticism of the United States that it assumes a 100 per cent pass through of the interest rate subsidy to world prices. Brazil clarifies that in fact it assumes that world markets for the agricultural commodities at issue are highly competitive, and the demand curve facing US exporters is horizontal.\textsuperscript{303} In its view, exporters worldwide, including US exporters, are, "price takers" so that there is no substantial pass through.

\textsuperscript{295} US written submission, para. 211.
\textsuperscript{296} US written submission, para. 212.
\textsuperscript{297} US written submission, para. 212.
\textsuperscript{298} US written submission, para. 215.
\textsuperscript{299} US written submission, para. 217.
\textsuperscript{300} Brazil's Methodology Paper, paras. 72-139 and Exhibit Bra-704.
\textsuperscript{301} US written submission, paras. 222-223.
\textsuperscript{302} US written submission, para. 221.
\textsuperscript{303} Brazil's written submission, para. 216.
4.264 It argues that the basis for US exports of the subsidized commodities in the target markets lies in the effective price rebate afforded to foreign obligors in the form of GSM 102 interest rate subsidies. Brazil distinguishes between what it terms "effective sourcing prices" and "world prices". It defines the effective sourcing price as the "cost of the commodity plus the interest costs in financing the purchase". It claims that the interest rate subsidy from GSM 102 export credit guarantees effectively lowers effective sourcing prices but the world prices of the commodities in question are not substantially affected by GSM 102 subsidies.

4.265 Brazil claims that it is not ignoring its own simulation results when it places a cap on the additional US exports that arise from GSM 102 guarantees. Brazil explains that it formulates equation (E'), as a "but-for" methodology that effectively asks: "What is the fraction of each GSM 102-backed transaction to a specific foreign obligor that the US exporter would forego if the United States were to withdraw its prohibited GSM 102 export subsidies in a given fiscal year? To yield relevant results, it contends that the factor must lie between zero and 100 per cent of the GSM 102-backed transaction value, which explains the cap of 100 per cent. Brazil explains that it then applies a standard partial-equilibrium displacement model, specified in linear difference form, to find reliable estimates for the adjustment factor that is to be used as input into equation (E'). It argues that the results of that approximation, if left uncapped, answers an entirely different counterfactual than that posed in its equation E'. Brazil claims it is not asking how a specific obligor generally reacts to changes in effective sourcing prices offered by the United States, but rather how it does so for the limited transactions made under GSM 102. Since, logically, not more than the entire fraction (100 per cent) of each GSM 102-subsidized US sale can be foregone due to an elimination of the sales discount facilitated by the interest rate subsidy, Brazil maintains that a 100 per cent cap is necessary to answer meaningfully the question before the Arbitrator.

4.266 Finally, Brazil defends its choice of the elasticity values by arguing that they must be calibrated to suit the policy scenario at issue. It claims that in its marginal additionality analysis, withdrawal of GSM 102 subsidies affects a small fraction of total US export transactions for a range of crops. In its view, this scenario requires a set of supply and demand responses that are tailored to policy shocks which are not significant enough to shift US domestic or world prices, and thus too small to cause large-scale supply or demand responses in the United States and elsewhere. In contrast, it considers the relevant counterfactual underlying the cotton simulation model in the actionable subsidies case to require supply and demand elasticities that reflect a large, permanent withdrawal of US marketing loans and countercyclical payments for upland cotton, while other programme crops remained eligible for subsidies.

**Analysis by the Arbitrator**

4.267 In our analysis of full additionality, we made clear that we saw it as an approximation of the displacement of Brazilian production and exports because of export credit guarantees issued to

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304 Brazil's written submission, Annex I (Joint Statement by Professor Daniel Sumner and Rangarajan Sundaram), para. 2.
305 Brazil's written submission, Annex I (Joint Statement by Professor Daniel Sumner and Rangarajan Sundaram), para. 28.
306 Brazil's written submission, para. 217.
307 Brazil's written submission, Annex I (Joint Statement by Professor Daniel Sumner and Rangarajan Sundaram), para. 39.
308 Brazil's written submission, para. 221.
309 Brazil's written submission, para. 222.
310 Brazil's written submission, para. 222.
311 Brazil's written submission, para. 226.
312 Brazil's written submission, para. 227.
313 Brazil's written submission, para. 226.
uncreditworthy obligors. Similarly, we note that while marginal additionality is not an equivalent measure of the displacement effect on Brazilian production and exports from export credit guarantees issued this time to creditworthy obligors, it is not an inappropriate basis for calculating this effect. Furthermore, to the extent that we can make the calculation of marginal additionality more precise, the nearer we shall be to determining the amount of Brazilian production and exports that are displaced by the export credit guarantees.

4.268 On the issue of the pass through, we reiterate our concurrence with Brazil's position that the interest rate subsidy obtained by obligors reduces the combined purchase price of US agricultural exports. We have explained our reasoning in the previous sub-section (see paragraph 4.193).

4.269 The United States' criticism of the elasticities used in Brazil's marginal additionality model is basically a claim that Brazil is "cherry picking" the elasticities. Brazil's argument that different policy simulations call for different elasticities could lend itself easily to the United States' interpretation. But even if one accepts Brazil's argument that different policy simulations call for different elasticities, the introduction of a cap in Brazil's marginal additionality model raises a significant concern about its internal consistency. To consider this matter more carefully, the Arbitrator has conducted a set of exercises using the model.

4.270 For the first exercise, the Arbitrator requested Brazil to use its marginal additionality model without the cap to calculate the amount of additional US exports arising from interest rate subsidies received by obligors deemed creditworthy by Brazil.314 The Arbitrator recalls that based on the threshold of ten adopted by Brazil for distinguishing between creditworthy and uncreditworthy obligors, Brazil's methodology finds only ten obligors creditworthy. Of these only three obligors (two from Panama and one from Trinidad and Tobago) have positive interest rate subsidies. The other seven Korean obligors have been found not to enjoy any interest rate subsidies from GSM 102. For the three obligors, Brazil confirms that without the cap, its marginal additionality calculations yield large multiples of the GSM 102 transaction value and the obligor-specific IRS.315 In other words, even if the obligors had been classified by Brazil's methodology as creditworthy, the application of the marginal additionality model without the cap generated additionality that exceeded the amount that would have been calculated if they had been classified as uncreditworthy.

4.271 Another way of looking at this is simply to take summary statistics of the uncapped elasticities calculated by Brazil's marginal additionality model.316 Excluding the seven Korean obligors, the uncapped elasticities range from a minimum of 6.17 to a maximum of 107 million. The simple (weighted) average of the uncapped elasticities is 3.4 million.

4.272 For the second exercise, the Arbitrator considered the other seven obligors (all of whom are Korean banks) deemed creditworthy by Brazil's methodology. Brazil had further determined that the receipt of GSM 102 export credit guarantees by these seven obligors involved no interest rate subsidy. That is, Brazil's methodology concluded that these seven obligors could have obtained financing at the risk-free market rate even without the GSM 102 guarantees. Because no interest rate subsidy was involved, the methodology showed that there was no marginal additionality for these obligors. Imports of US agricultural goods into the Republic of Korea would have taken place even in the absence of GSM 102 export credit guarantees.

4.273 The second exercise conducted by the Arbitrator involved ascertaining how much of an interest rate subsidy would be needed in the case of these Korean obligors for Brazil's methodology to generate additionality. This exercise allows Brazil's cap to be maintained. If the introduction of a

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314 Questions from the Arbitrator, question 30.
315 Brazil's responses to questions from the Arbitrator, question 30, para. 389.
316 See Worksheet "Marg add. rate 2006" of Exhibit Bra-794.
small interest rate subsidy results in a sudden change in the results so that full additionality ensues, then it calls Brazil's marginal additionality model into further question. Furthermore, the smaller the interest rate subsidy required to generate additionality, the more suspect the model becomes. This second exercise showed that even a very small interest rate subsidy equal to $1/10^{305}$ basis points produced full additionality for the Korean obligors. The quantity $10^{305}$ is one followed by 306 zeros. Its reciprocal, $1/10^{305}$, is therefore an "infinitesimally" small number.

Brazil's marginal additionality model appears to generate inflated results, with large multiples resulting from the first exercise with the cap removed, and with infinitesimally small interest rate subsidies required to generate additionality in the second exercise with the cap maintained. Nevertheless, the Arbitrator is of the view that, even in the case of creditworthy obligors, the interest rate subsidy they receive lead to trade-distorting impacts on Brazilian producers and exporters that must be accounted for. While they are not necessarily equal to the value of GSM 102 transactions, they are also not zero.

To determine this amount, we begin by noting that the riskiness of even creditworthy obligors will have a bearing on the magnitude of the marginal additionality from GSM 102 transactions entered into by creditworthy obligors. In the absence of the GSM 102 programme, the more risky an obligor is (the closer its rating is to the threshold of 14) the smaller the amount of trade financing of US agricultural goods that it would have been involved in, all things being equal. The less risky the obligor, the greater the likelihood that it would have been financing the same amount of US agricultural exports even in the absence of the programme.

Building on this notion, we employ the data on cumulative default probabilities that have been provided by Brazil. Recall that we have determined that obligors rated 15 and worse are uncreditworthy, which implies additionality equal to the entire value of the GSM 102 transactions they enter into. We shall assume that the only a fraction of the GSM 102 transaction that is entered into by a creditworthy obligor, which receives an interest rate subsidy, represents additionality. More specifically, we shall assume that this fraction, for a creditworthy obligor with a numerical rating of i and an average loan maturity of n, is equal to the ratio of default probabilities of a creditworthy obligor and of an obligor rated 15. More formally:

\[
(1) \quad t_i^n = \frac{d_i^n}{D^n}, \quad i = 1, \ldots, 14 \text{ and } n = 1, 2, 3
\]

where:

- $t_i^n$ is the proportion of the GSM 102 transaction involving a creditworthy obligor with a numerical rating of i and an average loan of maturity n that results in additionality;
- $d_i^n$ is the cumulative default probability of a creditworthy obligor with a rating of i and an average loan maturity of n; and
- $D^n$ is the cumulative default probability of an obligor with a rating of 15 for an average loan maturity n.

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317 One basis point is equal to 0.01 per cent (one hundredth of a per cent).
318 It should be noted that, based on Brazil's IRS methodology, seven of the creditworthy obligors do not receive any interest rate subsidy. Thus, equation (1) does not apply to them.
Based on this, we determine that the displacement effect on Brazilian production and exports of export credit guarantees issued to creditworthy obligors, and for which we use marginal additionality as an approximation, amounts to US$41.3 million. Again, this can be decomposed into the trade-distorting impact in Brazil's domestic market and in non-Brazilian markets. The displacement of Brazilian production because of GSM 102 transactions involving creditworthy Brazilian obligors amounts to US$18.7 million. The trade-distorting impact in non-Brazilian markets as a result of the transactions of creditworthy, non-Brazilian obligors amounts to US$193 million. However, only a certain share of that represents displacement of Brazilian exports. In keeping with our framework of analysis, the second amount must be apportioned to Brazil's share of world trade in GSM 102 products, which was 11.7 per cent in 2006. The trade-distorting impact to Brazil in non-Brazilian markets therefore equals US$22.6 million. The detailed calculations are shown in Annex 3.

(iv) Conclusion

The Arbitrator determines that the amount of US$1.122 billion proposed by Brazil will not result in appropriate countermeasures. The Arbitrator has consequently made modifications to the calculation of the interest rate subsidy and additionality in order to more accurately calculate the trade-distorting impact of the GSM 102 programme on Brazil. Based on these modifications and in the light of other determinations above, we find that the amount of countermeasures which can be authorized as being appropriate, based on the amount of GSM 102 transactions in FY 2006, is US$147.4 million.

The Arbitrator has taken note of Brazil's request for an amount of countermeasures authorization that would be variable on an annual basis, depending on "the total of exporter applications received under GSM 102 ... for the most recent concluded fiscal year". The Arbitrator has also noted that the United States does not dispute that it would be permissible for the level of appropriate countermeasures to be determined through a formula, provided that this formula was sufficiently well defined so as to make it applicable in a transparent and predictable manner. We have therefore decided to authorize an amount of countermeasures that would be variable on an annual basis and that would depend on, among other things, the total amount of GSM 102 transactions in the most recent concluded fiscal year. The terms of this variable amount of countermeasures are contained in Annex 4.

V. BRAZIL'S REQUEST TO APPLY COUNTERMEASURES UNDER THE TRIPS AGREEMENT AND THE GATS

In its request to the DSB, Brazil requests authorization to suspend concessions or other obligations in the annual amount of approximately US$3 billion with respect to the prohibited subsidies at issue in this dispute. In its view, given the amount, it is neither practicable nor effective for Brazil to suspend concessions only on imports of US goods and the circumstances are serious enough to justify the suspension of concession or obligations under other covered agreements. Brazil therefore proposed to suspend obligations under GATT 1994, and also under the GATS and TRIPS Agreement under Article 22.3(c) of the DSU.319

The United States challenges this request, arguing that Brazil had not followed the procedures and principles of Article 22.3 of the DSU. The United States argues that given the size and diversity of the Brazilian economy, Brazil cannot justify and demonstrate its claim that applying countermeasures with respect to goods is not practicable or effective.320 In these proceedings, however, Brazil argued that the provisions of Article 22.3 of the DSU do not apply, and that its request must be considered on the basis of Article 4.10 of the SCM Agreement only.

319 WT/DS267/21.
320 US written submission, paras. 318-319.
5.3 In light of the parties' disagreement as to the applicable legal standard for this part of our assessment, we must first consider whether the principles and procedures of Article 22.3 of the DSU apply, before we can proceed with an assessment of Brazil's request on the basis of the applicable legal standard.

A. **DO THE PRINCIPLES AND PROCEDURES OF ARTICLE 22.3 OF THE DSU APPLY TO BRAZIL'S REQUEST?**

1. **Arguments of the parties**

5.4 Brazil argues in its Methodology Paper that the countermeasures proposed by Brazil, which include the suspension of concessions or other obligations not only with respect to trade in goods but also under TRIPS and GATS, are "appropriate" and "commensurate with the degree and nature of the adverse effects determined to exist", within the meaning of Articles 4.10 and 7.9 of the *SCM Agreement*. Brazil argues that the countermeasures it proposes, both in their quantitative and in their qualitative aspects, must be assessed solely against the requirements of Articles 4.10 and 7.9 of the *SCM Agreement*. Brazil considers that these are the only standards against which the countermeasures must be assessed.

5.5 Brazil also argues that the United States, as the party objecting to the proposed requests for countermeasures bears the burden of proving that the type of the countermeasures proposed by Brazil is such as to render them not "appropriate" in the meaning of Article 4.10 of the *SCM Agreement*. Likewise, with respect to the actionable subsidies, Brazil argues that the United States has the burden of proving that the type of the countermeasures proposed by Brazil is such as to render them not "commensurate with the degree and nature of the adverse effects determined to exist" as required by Article 7.9 of the *SCM Agreement*. Brazil argues that the United States failed to discharge its burden since it merely asserts that DSU Article 22.3 applies to the *SCM Agreement*. In Brazil's view, Articles 4.10 and 7.9 of the *SCM Agreement* provide for countermeasures that are different from those available under the DSU.

5.6 Brazil argues that Articles 4.10 and 7.9 of the *SCM Agreement* provide for "countermeasures" and such countermeasures can well encompass the suspension of concessions or obligations under sectors or agreements other that in which a violation was found. Citing Article 49 of the *Draft Articles on Responsibility of States for Internationally Wrongful Acts*, Brazil argues that the purpose of a "countermeasure" as stated in that article is to induce the offending state to comply with its obligations. Therefore, Brazil advocates that there is nothing in public international law to support the notion that a countermeasure has to be taken in the same area or under the same agreement in which a violation is found. Brazil is of the view that Articles 4.10 and 7.9 are "special or additional rules" within the meaning of Article 1.2 of the DSU, and that they address both the level and the type of countermeasures that may be imposed by the original complaining Member in sharp contrast to Article 22.4 and 22.3 of the DSU. Brazil contends that the Arbitrator should apply the standards

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321 In this section, the arguments of the parties are reflected as they were presented by the parties in their submissions, i.e. with reference both to the prohibited subsidies addressed in this Decision and to the actionable subsidies addressed in the separate Decision in WT/DS267/ARB/2. In the subsequent assessment by the Arbitrator in section 2 below, only the arguments relating to the prohibited subsidies at issue in these proceedings are addressed.

322 Brazil's Methodology Paper, para. 142.
323 Brazil's written submission, para. 450.
324 Brazil's written submission, paras. 452-453.
325 Brazil's written submission, para. 454.
326 Brazil's written submission, paras. 458-459.
327 Brazil's written submission, paras. 464-465.
under the SCM Agreement, not the principles and procedures under Article 22.3 of the DSU. The mandate of the Arbitrator is solely to determine whether countermeasures are "appropriate" or "commensurate".

5.7 With respect to the issue whether SCM Agreement and Article 22.3 of the DSU can be read as complementing each other, Brazil argues that "if a special or additional rule or procedure does not provide additional requirements that are to be met together with the corresponding provisions of the DSU – so as to effectively complement them without negatively affecting their legal integrity – the two sets of provisions cannot be applied together." Brazil continues to argue that if they cannot be applied together it is because there is a difference between them. In such case, Brazil argues the special or additional rule or procedure must prevail over the corresponding DSU provisions.

5.8 Brazil considers that Article 22.3 of the DSU establishes a legal standard based on the consideration by the Member concerned of the practicability and effectiveness of suspension of concessions and sets out a number of elements that have to be considered, whereas Articles 4.10 and 7.9 of the SCM Agreement contain no restrictions on the type of countermeasures that may be taken. Articles 4.10 and 7.9 of the SCM Agreement grant to the Member concerned a margin of appreciation that is broader than the one reflected in the requirements of Article 22.3 of the DSU. They cannot be applied together.

5.9 The United States argues that DSU disciplines concerning suspension of concessions, including Article 22.3, apply to the SCM Agreement. In its view, the fact that the SCM Agreement does not provide for rules relating to cross-sector suspension of concessions independent of DSU Article 22.3, when special rules for other issues were carved out, suggests the disciplines on cross-sector suspension of concessions remain securely tied to the existing DSU rules and procedures.

5.10 The United States also argues that Brazil itself explicitly invoked Article 22.3 of the DSU in its request for countermeasures for prohibited subsidies and in its request for actionable subsidies. Therefore, in the United States' view, Brazil has actually conceded that its requests are subject to Article 22.3 of the DSU. The United States also argues that the fact that Article 22.3(g) cross-references the agreements to which it applies, including the SCM Agreement, also indicates that Article 22.3 of the DSU applies to requests for countermeasures under the SCM Agreement.

5.11 The United States argues that given the general rule for suspension of concessions within the same sector under the DSU and the absence of any rule to the contrary in Articles 4.10 and 7.9 of the SCM Agreement, there is no conflict in applying both the SCM Agreement and Article 22.3 of the DSU. Thus, the better interpretation – and one that allows Articles 4.10 and 7.9 of the SCM Agreement to be applied in a complementary fashion with Article 22.3 of the DSU – is that Articles 4.10 and 7.9 deal with the amount of countermeasures, while Article 22.3 of the DSU sets forth rules for determining when countermeasures can be applied on a cross-sector basis. To the extent there is conflict between them, it is in regard to the assessment of quantity, or the amount, of the suspension of concessions. With regard to "type" or "form", the United States argues that the silence of the SCM Agreement as to cross-agreement or cross-sector countermeasures mean that there

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328 Brazil's written submission, para. 472.
329 Brazil's written submission, para. 470.
330 Brazil's responses to questions from the Arbitrator, question 40, para. 460.
331 Brazil's responses to questions from the Arbitrator, question 40, paras. 461-462.
332 US written submission, para. 320.
333 US written submission, para. 323.
334 US oral statement, para. 67.
is no "difference" in the meaning of Article 1.2 of the DSU that would require ignoring the carefully articulated, hierarchical test under Article 22.3.  

2. Assessment by the Arbitrator

5.12 The question before us relates to the definition of our mandate, as well as to the substantive legal standard that is applicable to the imposition of cross-retaliation under the SCM Agreement. Both aspects are closely related, in that the nature and scope of our mandate is logically tied to the applicable substantive requirements, the application of which we must review.

5.13 The parties essentially disagree about the extent to which the provisions of Article 22.3 of the DSU, which set out specific principles and procedures for the authorization of cross-retaliation in dispute settlement proceedings under the DSU, are applicable in the context of proceedings concerning prohibited subsidies under the SCM Agreement, which contains specific provisions relating to countermeasures.

5.14 As a starting point, we need to consider the terms of the relevant provisions of the SCM Agreement and of the DSU. We recall that Article 4.10 of the SCM Agreement specifically addresses the question of the countermeasures that may be authorized in relation to prohibited subsidies, and Article 4.10 addresses the mandate of the arbitrator in relation to such countermeasures, in the event that an arbitration is requested under Article 22.6 of the DSU in relation to prohibited subsidies. Article 4.10 requires countermeasures in relation to prohibited subsidies to be "appropriate", and footnote 9 further informs this expression. Article 4.11, in turn, provides that, in the event that a party to the dispute requests arbitration under paragraph 6 of Article 22 of the DSU, the arbitrator shall determine whether the countermeasures are "appropriate".

5.15 Article 22.6 of the DSU, in turn, provides that:

"When the situation described in paragraph 2 occurs, the DSB, upon request, shall grant authorization to suspend concessions or other obligations within 30 days of the expiry of the reasonable period of time unless the DSB decides by consensus to reject the request. However, if the member concerned objects to the level of suspension proposed, or claims that the principles and procedures set forth in paragraph 3 have not been followed where a complaining party has requested authorization to suspend concessions or other obligations pursuant to paragraph 3(b) or (c), the matter shall be referred to arbitration."

5.16 Paragraphs 10 and 11 of Article 4 of the SCM Agreement constitute "special or additional rules" under Appendix 2 of the DSU. In accordance with Article 1.2 of the DSU, "to the extent that there is a difference between the rules and procedures of this understanding and the special or additional rules and procedures set forth in Appendix 2, the special or additional rules and procedures in Appendix 2 shall prevail".

5.17 The Appellate Body has clarified the circumstances in which such a "difference" would exist:

"[I]t is only where the provisions of the DSU and the special or additional rules and procedures of a covered agreement cannot be read as complementing each other that the special or additional provisions are to prevail. A special or additional provision should only be found to prevail over a provision of the DSU in a situation where adherence to the one provision will lead to a violation of the other provision, that is, in the case of a conflict between them. An interpreter must, therefore, identify an

335 US responses to questions from the Arbitrator, question 67, para. 185.
inconsistency or a difference between a provision of the DSU and a special or additional provision of a covered agreement before concluding that the latter prevails and that the provision of the DSU does not apply.”336

5.18 The question before us in this case is whether Article 22.3 of the DSU and Article 4.10 and 4.11 of the SCM Agreement can be read as complementing each other, or whether adherence to the principles and procedures contained in Article 22.3 of the DSU would lead to a violation of Article 4.10 or 4.11 of the SCM Agreement, such that there is a conflict between the two provisions. In other words, we must clarify whether the special or additional rules of Article 4.10 and 4.11 of the SCM Agreement constitute the entirety of the applicable rules relating to the type and level of countermeasures that may be authorized in relation to prohibited subsidies, or whether the principles and procedures of Article 22.3 of the DSU and these provisions may be read as complementing each other in defining the rules applicable to the suspension of concessions or other obligations in relation to prohibited subsidies.

5.19 We first note that paragraphs 10 and 11 of Article 4, and more generally the provisions of Article 4 of the SCM Agreement concerning "remedies", are closely tied to the terms and procedures of the DSU itself. Indeed, the arbitration that is addressed in Article 4.11, which defines the mandate of the arbitrator with reference to the terms of Article 4.10, is defined as an arbitration requested "under paragraph 6 of Article 22 of the DSU". It is clear from the use of this cross-reference, that the arbitral proceedings at issue, even though they are in relation to prohibited subsidies under the SCM Agreement, are initiated under Article 22.6 of the DSU. The primary legal basis for such proceedings is therefore Article 22.6 of the DSU, as well as Article 4.10 of the SCM Agreement.

5.20 Under the terms of Article 22.6 of the DSU, the Member concerned may challenge two distinct aspects of a request for authorization to suspend concessions or other obligations. The Member concerned may object to "the level of suspension proposed", or it may "claim that the principles and procedures set forth in paragraph 3 (of Article 22) have not been followed" where a complaining party has requested authorization to suspend concessions or other obligations pursuant to paragraph 3(b) or (c). If either of these two claims is made, then "the matter shall be referred to arbitration". The reference to an arbitration requested "under paragraph 6 of Article 22 of the DSU" in Article 4.11 of the SCM Agreement, therefore, on its face, refers to the existence of (1) an objection to the "level of suspension proposed" and/or (2) a claim that the principles and procedures of Article 22.3 of the DSU have not been followed, which are to be referred to arbitration.

5.21 In the case of an arbitration carried out under the DSU alone, the mandate of the arbitrator is further defined in Article 22.7, which provides in its first sentence that "the arbitrator acting pursuant to paragraph 6 shall not examine the nature of the concessions or other obligations to be suspended but shall determine whether the level of such suspension is equivalent to the level of nullification or impairment". This is in line with the terms of Article 22.4, which provides that the level of the suspension shall be "equivalent to the level of nullification or impairment". This is comparable, in structure, to the terms of Article 4.11 of the SCM Agreement, which provides that the arbitrator "shall determine whether the countermeasures are appropriate", which is in line with the terms of Article 4.10, which provides that the DSB shall grant authorization to take "appropriate" countermeasures.

5.22 The provisions of Article 22.7 of the DSU and Article 4.11 of the SCM Agreement differ, in that Article 22.7 of the DSU further articulates that, if the matter referred to the arbitrator includes a claim that the principles and procedures have not been followed, the arbitrator shall examine that claim, whereas Article 4.11 of the SCM Agreement contains no exact equivalent. The question therefore arises as to how the mandate of the arbitrator should be understood in a situation where a

claim that the principles and procedures of Article 22.3 of the DSU have not been followed is referred to arbitration in accordance with Article 22.6 of the DSU, in relation to prohibited subsidies.

5.23 In order to give useful meaning to all the terms of the treaty, including those of Article 22.3 of the DSU and the reference to Article 22.6 of the DSU in Article 4.11 of the SCM Agreement, we must a priori read the terms of that provision as envisaging that the principles and procedures of Article 22.3 of the DSU apply, including in cases relating to prohibited subsidies, and that a claim may be made in relation to these principles and procedures. In accordance with the principle that the special or additional rules listed in Appendix 2 of the DSU would only prevail in the event of a "difference" (i.e. if it were not possible to apply both simultaneously), it is only in the event that we determine that there is a conflict or incompatibility between such a reading and the terms of Article 4.11 of the SCM Agreement, that we should conclude otherwise.

5.24 It appears to us that such a conflict or incompatibility would arise between the application of the principles and procedures in Article 22.3 of the DSU and the terms of Article 4.10 and 4.11 of the SCM Agreement only if the terms "appropriate countermeasures" in these provisions are interpreted to define not only the permissible level of countermeasures in the case of prohibited subsidies, but also the type of countermeasures that may be authorized, so that the principles and procedures of Article 22.3 of the DSU would be inoperative in cases relating to prohibited subsidies.

5.25 We are not persuaded that this is the case. As was discussed in detail in Section IV.D above, it is undisputed that the expression "appropriate countermeasures" defines the permissible level of countermeasures in relation to prohibited subsidies. In our view, it does not do more than that. The term "appropriate", as informed by footnote 9, which clarifies that this expression is not meant to allow countermeasures that would be "disproportionate", necessarily addresses the level of suspension that may be authorized. This is suggested by the use of the term "disproportionate", which can only be understood with reference to the level of countermeasures. By contrast, it is not clear that these terms provide any guidance as to the type of countermeasures that may be authorized.

5.26 In light of the level of detail in which the matter of cross-sectoral retaliation is addressed in the DSU, one would have expected the drafters of the SCM Agreement to provide express guidance to this effect, if they had intended to address differently the question of the type of permissible countermeasures, as well as their level. In fact, this would have been especially necessary in light of the fact that Article 22.6 of the DSU, which is expressly referred to in Article 4.11 of the SCM Agreement, foresees that a challenge to proposed suspension of concessions or other obligations may be based either on the level of suspension proposed, or on a claim "that the principles or procedures of paragraph 3 (of Article 22 of the DSU) have not been followed".

5.27 While the expression "the level of proposed suspension" does not in itself prejudice the standard upon which such "level" might be reviewed, and thus allows this standard to differ depending on the type of measure at issue, the reference to the "principles and procedures" of Article 22.3 of the DSU leaves no doubt as to the relevant legal standard. This part of the reference to Article 22.6 of the DSU in Article 4.11 of the SCM Agreement would have to be read out of the provision in order to conclude that the principles and procedures of Article 22.3 of the DSU do not apply in the context of proceedings relating to prohibited subsidies. In light of our analysis above, we see no basis to do so. We also note that, as treaty interpreters, we are required to "read all applicable provisions of a treaty in a way that gives meaning to all of them, harmoniously". The only manner in which we can give full meaning to all the terms of the treaty harmoniously in this context is to understand the terms of Article 4.10 and 4.11 of the SCM Agreement as meaning that the mandate of the arbitrator as defined in Article 4.11 of the SCM Agreement relates to the determination of the level

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of countermeasures, while the terms of the arbitrator's mandate in relation to a claim that the procedures and principles of Article 22.3 of the DSU have not been followed are contained in Article 22.6 of the DSU.

5.28 This interpretation is also consistent, in our view, with the context in which these provisions arise. The various paragraphs under Article 4 of the SCM Agreement may not be read in isolation from the DSU. Rather, we understand the terms of Article 4 of the SCM Agreement as providing specific additional rules on specific aspects of dispute settlement proceedings relating to prohibited subsidies, which replace the equivalent rules of the DSU only to the extent that they differ from and are incompatible with such rules.

5.29 In Article 4.11 of the SCM Agreement, it was not necessary for the drafters to clarify that, in relation to a claim that the principles and procedures of Article 22.3 have not been followed, the arbitrator would review that claim, since the terms of Article 22.7 of the DSU, which generally define the terms under which an arbitration under Article 22.6 is to be carried out, already address this point. Only to the extent that the mandate of the arbitrator differed from that set forth in Article 22.7 of the DSU, was it necessary to explicitly define it in Article 4.11 of the SCM Agreement, in order to ensure that the mandate of the arbitrator in relation to the proposed level of countermeasures would be consistent with the manner in which the permissible level of countermeasures is defined in Article 4.10 of the SCM Agreement for prohibited subsidies. Indeed, Article 22.7 of the DSU sets out a number of other aspects relating to arbitration proceedings pursuant to Article 22.6 of the DSU, which are not replicated in Article 4.11 of the SCM Agreement, but which nonetheless are clearly relevant and applicable to such proceedings. In particular, the last two sentences of Article 22.7 provide that:

"The parties shall accept the arbitrator's decision as final and the parties concerned shall not seek a second arbitration. The DSB shall be informed promptly of the decision of the arbitrator and shall, upon request, grant authorization to suspend concessions or other obligations where the request is consistent with the decision of the arbitrator, unless the DSB decides by consensus to reject the request."

These important provisions are clearly relevant to arbitral proceedings in relation to prohibited subsidies under the SCM Agreement.

5.30 Finally, we consider that our interpretation is faithful also to the object and purpose of dispute settlement proceedings in the WTO and to their integrated nature. The DSU provides the common framework under which dispute settlement proceedings are initiated in the WTO, and brings together all the covered Agreements. This is the overall framework in which the question of the possibility of seeking suspension of obligations under another sector, or another covered Agreement than that under which the violation has been found, arises, and this is logically addressed in the context of the DSU.

5.31 We are mindful that we must give full meaning to all the terms of the treaty, including the special or additional rules identified in Appendix 2, and that such special or additional rules may legitimately prevail over any relevant DSU rules and procedures. However, we are not persuaded that there is a conflict, such that the principles and procedures of Article 22.3 of the DSU would be inapplicable in the case of disputes relating to prohibited subsidies under the SCM Agreement.

5.32 In light of all the above, we conclude that the principles and procedures of Article 22.3 of the DSU apply to the claim before us and that we must review the United States' claim that these principles and procedures have not been followed by Brazil.
B. MANDATE OF THE ARBITRATOR AND BURDEN OF PROOF

5.33 Having determined that the principles and procedures of Article 22.3 of the DSU apply to Brazil’s request and that we are required to review the United States’ claim that Brazil has not followed these principles and procedures, we need to clarify further what our mandate is, in relation to this claim, and what burden of proof applies to it.

1. Main arguments of the parties

5.34 The United States considers that the drafter’s intention was that suspending concessions across sectors and agreements was the exception rather than the rule. In the United States’ view, Article 22.3 establishes a hierarchy of suspension: Members must first try to suspend concessions within the same sector, and if that is not practicable or effective, can then request permission to suspend in a different sector. This distinction is important in the GATS and TRIPS Agreements where there are multiple sectors, but does not apply with respect to goods. The bar for suspending concessions under other agreements is higher still. The United States adds that not only does the suspension within the agreement have to be neither practicable nor effective, but the violation must be serious enough to warrant cross-agreement suspension.338

5.35 The United States further considers that the disciplines of Article 22.3 are an integral part of the dispute resolution process and the rebalancing of concessions. The United States cites the statement of the arbitrator on EC – Bananas III (US) (Article 22.6 – EC), that “the basic rationale of these disciplines is to ensure that the suspension of concessions or other obligations across sectors or across agreements (beyond those sectors or agreements under which a panel or the Appellate Body has found violations) remains the exception and does not become the rule”. The United States therefore considers it necessary for the Arbitrator to determine whether Brazil has objectively followed these procedures. The United States also contends that Brazil is entitled to a certain margin of appreciation in making this determination, but the Arbitrator also has an obligation to judge whether Brazil has objectively reviewed the facts and has reached a plausible conclusion.339

5.36 The United States argues that for a party to request cross-agreement suspension of concessions, it must find that:

(a) it is not practicable or effective to suspend concessions or other obligations with respect to other sectors under the same agreement; and
(b) that the circumstances are serious enough to warrant cross-agreement suspension of concessions.

5.37 It considers that, when analysing these requirements, the party must take into account: (i) the trade in the sector or under the agreement under which the panel or Appellate Body has found a violation or other nullification or impairment, and the importance of such trade to that party, and (ii) the broader economic elements related to the nullification or impairment and the broader economic consequences of the suspension of concessions or other obligations. The complaining party must further explain how it has reached the conclusion that cross-agreement suspension of concessions is warranted.340

5.38 Brazil notes the arbitrator’s "plausibility" standard as enunciated in the US – Gambling (Article 22.6 – US) arbitration. This standard calls for an objective assessment of the facts and a

338 US written submission, para. 325.
339 US written submission, para. 326.
340 US written submission, para. 327.
plausible conclusion on the issue of whether it is "practicable or effective" to seek countermeasures in the same sector and on whether the circumstances are serious enough.  

Brazil considers, however, that the Arbitrator should be limited to examining whether Brazil has in fact considered the principles set forth in Article 22.3 of the DSU, not whether Brazil's considerations are plausible.  

Brazil notes the United States position, in the DSB meeting on the adoption of the EC – Bananas III (US) (Article 22.6 – EC) arbitration report, that arbitrators are not supposed to "second guess" the conclusions reached by the Member who considers that it is not practicable or effective to suspend concessions or other obligations under the same agreement, and that the circumstances are serious enough within the meaning of Article 22.3.  

5.39 Brazil also argues that the United States bears the burden of proving that Brazil has not followed the principles laid out in Article 22.3, specifically, (i) that it is both "practicable" and "effective" for Brazil to suspend concessions only in the goods sector, or (ii) that the circumstances are not "serious enough" to justify applying countermeasures under another covered agreement. With respect to Article 22.3(d), Brazil argues that the United States has to prove that in selecting countermeasures, Brazil did not take into account the elements indicated in items (d)(i) and (ii).  

2. Approach of the Arbitrator  

5.40 Article 22.3 sets out certain principles and procedures to be followed by a complaining party seeking to suspend concessions, as to the sector(s) and/or covered agreement in which the suspension can take place, which the United States claims that Brazil did not follow.  

5.41 We recall our earlier determination that these principles and procedures apply to Brazil's request, and that Article 22.7 of the DSU provides the basis for our mandate to review this claim. Article 22.7 provides that "if the matter referred to arbitration includes a claim that the principles and procedures set forth in paragraph 3 have not been followed, the arbitrator shall examine that claim" and that "[i]n the event the arbitrator determines that those principles and procedures have not been followed, the complaining party shall apply them consistent with paragraph 3".  

5.42 We are therefore required to examine the United States' claim that Brazil has not followed the principles and procedures of Article 22.3 of the DSU.  

5.43 As a general principle, Article 22.3(a) of the DSU provides that suspension of concessions or other obligations should first be sought in the same sector as that in which a violation was found. Article 22.3 provides in relevant part that:  

"In considering what concessions or other obligations to suspend, the complaining party shall apply the following principles and procedures:  

(a) the 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."  

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341 Brazil's written submission, para. 501.  
342 Brazil's written submission, para. 406.  
343 Brazil's written submission, para. 505.  
344 Brazil's written submission, para. 509.
5.44 Subparagraphs (b) and (c) of Article 22.3 further specify the principles and procedures to be followed by a complaining party wishing to seek suspension in another sector, or another agreement, than that in which a violation was found:

"(b) if that party considers that it is not practicable or effective for it to suspend concessions or other obligations with respect to the same sector(s), it may seek to suspend concessions or other obligations in other sectors under the same agreement;

(c) if that party considers that it is not practicable or effective to suspend concessions or other obligations with respect to other sectors under the same agreement, and that the circumstances are serious enough, it may seek to suspend concessions or other obligations under another covered agreement."

5.45 In addition, subparagraph (d) of Article 22.3 provides that:

"(d) in applying the above principles, that party shall take into account:

(i) the trade in the sector or under the agreement under which the panel or the Appellate Body has found a violation or other nullification or impairment, and the importance of such trade to that party;

(ii) the broader economic elements related to the nullification or impairment and the broader economic consequences of the suspension of concessions or other obligations."

5.46 Two prior arbitrators have considered the mandate of the arbitrator set out in Article 22.7 of the DSU with respect to the principles and procedures set forth in Article 22.3, and we find it useful to refer to their findings in clarifying the terms of our own mandate.

5.47 The arbitrator on EC – Bananas III (Ecuador) (Article 22.6 – EC), in determining the scope of its authority to review the principles and procedures relating to requests for suspension of concessions or other obligations under subparagraphs (b) and/or (c), considered that "the fact that the powers of arbitrators under subparagraphs (b)-(c) are explicitly provided for in Article 22.6 implies a fortiori that the authority of Arbitrators includes the power to review whether the principles and procedures set forth in these subparagraphs have been followed by the Member seeking authorization for suspension". 345

5.48 The arbitrator also considered the terms of Article 22.3, including the fact that a certain margin of appreciation is left to the complaining party in arriving at conclusions in respect of certain factual elements (i.e. "if that party considers" in subparagraphs (b) and (c)) as well as the fact that the party concerned is required to apply the principles of Article 22.3 (i.e. "shall apply the following principles and procedures" in the introductory clause of Article 22.3). On the basis of that textual analysis, the arbitrator determined that:

"[T]he margin of review by the Arbitrators implies the authority to broadly judge whether the complaining party in question has considered the necessary facts objectively and whether, on the basis of these facts, it could plausibly arrive at the conclusion that it was not practicable or effective to seek suspension within the same

345 Decision by the Arbitrators, EC – Bananas III (Ecuador) (Article 22.6 – EC), para. 50.
sector under the same agreements, or only under another agreement provided that the circumstances were serious enough.\textsuperscript{346}

5.49 The arbitrator in that dispute also considered more broadly the terms of Article 22.3 and noted that "these provisions imply a sequence of steps towards WTO-consistent suspension of concessions or other obligations which respects both a margin of appreciation for the complaining party as well as a margin of review by Arbitrators, if a request for suspension under Article 22.2 is challenged under Article 22.6." \textsuperscript{347}

5.50 Like the arbitrator on \textit{US – Gambling (Article 22.6 – US)}, we agree with these determinations. We agree that the principles and procedures set forth in Article 22.3 of the DSU, which require the complaining party to make certain determinations, imply "a margin of appreciation" for the complaining party in making these determinations. At the same time, Article 22.3 sets out specific principles and procedures that the complaining party must follow, and we understand the role of the arbitrator acting pursuant to Article 22.7 of the DSU to involve a review of whether those principles and procedures have been followed. It would not be sufficient for a complaining party to have considered those principles and procedures solely from the viewpoint of being able to say that it did so. The consideration must be a substantive and reasoned one, and a claim to be entitled to impose countermeasures outside the relevant sector, and then outside the relevant agreement, must arise from that consideration.

5.51 We also agree with the arbitrator on \textit{EC – Bananas III (Ecuador) (Article 22.6 – EC)} that this mandate includes a determination of "whether the complaining party in question has considered the necessary facts objectively" and also "whether, on the basis of these facts, it could plausibly arrive at the conclusion that it was not practicable or effective to seek suspension within the same sector under the same agreements, or only under another agreement provided that the circumstances were serious enough".

5.52 In addition, should we determine that Brazil has not followed these procedures or principles, we believe it to be both necessary and appropriate for us to articulate how the analysis could properly take place to the extent necessary to ensure that Brazil is in a position to apply these procedures and principles "consistent with paragraph 3" and present a request "consistent with the decision of the arbitrator" in a subsequent phase of these dispute settlement proceedings, as foreseen in Article 22.7 of the DSU.

5.53 We note in this respect that Article 22.7 provides in relevant part that:

"[I]f the matter referred to arbitration includes a claim that the principles and procedures set forth in paragraph 3 have not been followed, the arbitrator shall examine that claim. \textit{In the event the arbitrator determines that those principles and procedures have not been followed, the complaining party shall apply them consistent with paragraph 3.} The parties shall accept the arbitrator's decision as final and the parties concerned shall not seek a second arbitration. \textit{The DSB shall be informed promptly of the decision of the arbitrator and shall upon request, grant authorization to suspend concessions or other obligations where the request is consistent with the decision of the arbitrator, unless the DSB decides by consensus to reject the request.}"

(emphasis added)

5.54 This approach is consistent with the objective of prompt and positive settlement of disputes. This approach is also consistent with the practice of arbitrators acting under Article 4.10 of the

\textsuperscript{346} Decision by the Arbitrators, \textit{EC – Bananas III (Ecuador) (Article 22.6 – EC)}, para. 52.

\textsuperscript{347} Decision by the Arbitrators, \textit{EC – Bananas III (Ecuador) (Article 22.6 – EC)}, para. 55.
SCM Agreement and/or Article 22.6 of the DSU, of proceeding with a calculation of the permissible level of countermeasures in the event that they find the proposed countermeasures not to be in accordance with the applicable legal standard.348

5.55 In terms of burden of proof, we consider that it is for the United States, as the party challenging Brazil's determinations, to demonstrate that Brazil has not followed the principles and procedures of Article 22.3 of the DSU. At the same time, it is essential that Brazil provides us with explanations on how it made this determination, in order for us to be in a position to review it, and to determine whether Brazil has, in making its determinations, "considered the necessary facts objectively" and whether it could plausibly reach the conclusions that it did.

5.56 The United States also asks the Arbitrator to indicate in its decision, if necessary, the maximum amount up to which Brazil would be permitted to impose cross-agreement suspension of concessions.349 The United States requests the Arbitrator to issue separate awards, one in relation to the prohibited subsidies and one concerning actionable subsidies so that, in case the United States brings one subsidy into compliance with the DSB recommendations and rulings before it is able to comply with the other, the separate awards provide a legal basis to ensure that countermeasures are still consistent with the legal standards of the SCM Agreement and the DSU in that situation.350

5.57 We first recall that two separate decisions are being issued, one in relation to the prohibited subsidies (this Decision) and one concerning actionable subsidies (in WT/DS267/ARB/2), as the United States requests.351

5.58 We agree that, to the extent that we might determine that Brazil may impose part of the proposed countermeasures in another sector or agreement, we would need to indicate clearly the amount of countermeasures in respect of which it would be entitled to suspend concessions or other obligations in such other sector or agreement.

5.59 We do not consider it necessary, however, to determine in this Decision what our conclusion might have been, in the event that the United States should, at some future point in time, comply with the DSB's recommendations and rulings in relation to the measures covered by the other proceedings.352 This is a hypothetical matter on which it would not be appropriate for us to speculate. Rather, we base our assessment on the situation as it exists at the time of our determination, which includes the fact that the United States has not complied with two separate aspects of the underlying recommendations and rulings in this dispute and that this gives rise to an entitlement for Brazil to take countermeasures in relation to both aspects.

5.60 At the same time, we recall that our determinations in these proceedings relate only to Brazil's request in relation to the prohibited subsidies at issue. Our determinations on Brazil's request for cross-retaliation take into account the factual circumstances arising from the separate proceedings relating to the actionable subsidies also ruled on in the underlying proceedings, but no entitlement arises from this Decision for Brazil to take countermeasures in relation to such subsidies.

348 See for example Decision by the Arbitrators, EC – Hormones (US) (Article 22.6 – EC), para. 12.
349 US responses to questions from the Arbitrator, question 134, para. 165.
350 US comments on Brazil's responses to questions from the Arbitrator, question 134, para. 171.
351 See Section I.C above, at paras. 1.27-1.31.
352 See WT/DS267/ARB/2.
C. BRAZIL'S DETERMINATION THAT IT IS NOT PRACTICABLE OR EFFECTIVE TO TAKE COUNTERMEASURES WHOLLY IN TRADE IN GOODS AND THAT THE CIRCUMSTANCES ARE SERIOUS ENOUGH

1. The principles and procedures of Article 22.3 of the DSU

5.61 Article 22.3 of the DSU, as we have observed earlier, foresees certain "procedures and principles" to be followed by the complaining party, in order to seek to suspend concessions in another sector or another agreement than that in which the violation was found.

5.62 As observed by the arbitrator on US – Gambling (Article 22.6 – US):

"[T]hese provisions imply a sequence of steps towards WTO-consistent suspension of concessions or other obligations."\(^{353}\) In other words, as Antigua has expressed it, Article 22.3 of the DSU provides a 'hierarchy' of remedies that a complaining party must follow in determining in which sectors or under which agreements suspension of concessions or other obligations can be sought, namely (1) seek to suspend in the same sector in the same agreement, (2) seek to suspend within the same agreement and (3) seek to suspend under another agreement."\(^{354}\)

5.63 In this case, the initial violation was found in relation to trade in goods, and this is the "sector" (as defined in subparagraph (g) of Article 22.3) in which Brazil would normally be expected to apply countermeasures under subparagraph (a). Subparagraph (b) affords the possibility of seeking to suspend concessions or other obligations "in other sectors under the same agreement". For the purposes of this provision, all the agreements on trade in goods contained in Annex 1A of the WTO Agreement "taken as a whole" are considered to be an "agreement", and a sector is defined, with respect to goods, as "all goods".

5.64 Therefore, recourse to subparagraph (b) would in principle allow Brazil to seek to suspend concessions or other obligations in all goods, under the Agreements on trade in goods. Brazil seeks to apply countermeasures under the TRIPS and GATS Agreement. This would constitute suspension of concession or other obligations "under another agreement" within the meaning of subparagraph (c) of Article 22.3.

5.65 Accordingly, Brazil will have followed the principles and procedures of Article 22.3 if it has determined, in accordance with the terms of subparagraph (c), that:

(a) "it is not practicable or effective" to seek suspension under the same agreement (i.e. under the agreements on trade in goods); and

(b) "the circumstances were serious enough".

5.66 In addition, in applying these principles, Brazil is required to have taken into account the factors identified in subparagraph (d) of Article 22.3.

5.67 As we have determined above, our mandate is to review whether, in making these determinations, Brazil has considered the necessary facts objectively and whether, on the basis of these facts, it could plausibly arrive at the conclusion that it was not practicable or effective to seek suspension under the same agreement and that the circumstances were serious enough. In order to

\(^{353}\) (original footnote) Decision by the arbitrators, EC – Bananas III, (request by Ecuador), para. 55.

\(^{354}\) Decision by the Arbitrator, US – Gambling (Article 22.6 – US), para. 4.19.
conduct this assessment, we must first clarify the terms of these requirements, as well as the role of the elements referred to in subparagraph (d).

5.68 At the outset, we note that the two requirements within subparagraph (c) are cumulative, i.e. the complaining Member must consider that "it is not practicable or effective" to seek suspension of concessions or other obligations under the same agreement and that "the circumstances are serious enough". The additional requirement, under subparagraph (d), to take into account certain considerations, further qualifies the manner in which the principles contained in subparagraph (c) are to be applied.

(a) First requirement under subparagraph (c): a determination that it is "not practicable or effective" to suspend concessions or other obligations with respect to other sectors under the same agreement

5.69 In order to seek to suspend concessions or other obligations under another agreement, the complaining party must in the first instance consider that it is "not practicable or effective" to seek suspension under the same agreement. Brazil considers that it does not need to meet both the "practicable" and "effective" criteria, and that it is sufficient to satisfy one of the two conditions.355

5.70 We agree that the wording of the provision implies that the complaining party may consider either that it is "not practicable" or that it is "not effective" to seek suspension under the same agreement, and that it need not conclude that same-agreement suspension is both "not practicable" and "not effective", in order to reach the conclusion that it is "not practicable or effective".356

(i) "practicable"

5.71 In Brazil's view, the standard of "practicability" under Article 22.3 refers to the availability for application in practice of the suspension of concessions only in the goods sector.357 In Brazil's view, "practicability" refers to whether suspension in the same sector or agreement is available for application in practice, as well as suited for being used in a particular case. If it is not a real option or it is not suited to be used in the circumstances, it will be not practicable.358 This is how the arbitrators on EC – Bananas III and US – Gambling understood this term, and we agree with this determination.

5.72 As Brazil describes it, and as the arbitrator on EC – Bananas III (Ecuador) (Article 22.6 – EC) put it, a consideration of whether suspension in a given sector or agreement is "practicable" relates primarily to whether it is actually "available in practice" to the complaining party. We find the example used by the arbitrator on EC – Bananas III (Ecuador) (Article 22.6 – EC) helpful in clarifying the types of considerations that may be pertinent in such a determination:

"To give an obvious example, suspension of commitments in service sub-sectors or in respect of modes of service supply which a particular complaining party has not bound in its GATS schedule is not available for application in practice and thus cannot be considered as practicable."359

5.73 There may be a range of situations in which the suspension of concessions or other obligations in relation to a certain sector or agreement is not "available in practice". In our view, the

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355 Brazil's responses to questions from the Arbitrator, question 8, para. 127.
357 Brazil's written submission, para. 510.
358 Brazil's responses to questions from the Arbitrator, question 8, para. 126.
359 Decision by the Arbitrators, EC – Bananas III (Ecuador) (Article 22.6 – EC), para. 71.
essence of a consideration of "practicability" of suspension is that it relates to its actual availability and feasibility. The impracticability could be either a legal one, as postulated in the example given in EC – Bananas III (Ecuador) (Article 22.6 – EC), or a factual one, such as might arise if the countermeasure exceeds the total amount of the trade available to be countered.

(ii) "effective"

5.74 Citing the EC – Bananas III (Ecuador) (Article 22.6 – EC) arbitrator, Brazil argues that the "effectiveness" standard encourages the offending state to comply with WTO obligations, in other words, to induce compliance and allows the party seeking suspension to ensure that the impact of that suspension is strong and has the desired result, namely to induce compliance. Brazil considers that "the countermeasures that are best tailored to provide such a response are those that can maximize the likelihood of compliance".

5.75 In the United States' view, the likelihood of compliance is not a factor that the DSU provides in assessing the appropriate level or nature of the countermeasure. The United States considers that the DSU authorizes rebalancing of trade concessions in case a Member does not comply with its trade obligations. While the ultimate political goal of the DSU is to promote compliance, the legal standards for assessing countermeasures are the effects of nullification and impairment and these are two separate issues in the United States' view.

5.76 The United States considers that the word "effective" means that a Member should not be prevented from imposing countermeasures of the intended weight as a result of the limitation of those countermeasures to the same sector/agreement. The intended "weight" is what is authorized based on the applicable standard, including where special or additional rules apply. Thus, a Member should be able to take the "appropriate" amount of countermeasures with respect to prohibited subsidies and, for subsidies causing adverse effects, a Member should be able to take countermeasures commensurate with those effects.

5.77 Dictionary definitions of the term "effective" include "producing a decided, decisive, or desired effect" and "powerful in effect; producing a notable effect; effectual". The arbitrator on EC – Bananas III (Ecuador) (Article 22.6 – EC) relied on comparable definitions to conclude that "the thrust of this criterion empowers the party seeking suspension to ensure that the impact of that suspension is strong and has the desired result, namely to induce compliance with DSB rulings within a reasonable period of time". That arbitrator further elaborated on the types of circumstances in which a complaining party might consider that suspension in a given sector or agreement would not be "effective":

"One may ask whether this objective [of inducing compliance] may ever be achieved in a situation where a great imbalance in terms of trade volume and economic power exists between the complaining party seeking suspension and the other party which has failed to bring WTO-inconsistent measures into compliance with WTO law. In such a case, and in situations where the complaining party is highly dependent on imports from the other party, it may happen that the suspension of certain concessions

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360 Brazil's written submission, para. 511. EC – Bananas III (Ecuador) (Article 22.6 – EC), para. 72.
361 Brazil's Methodology Paper, para. 143.
362 US written submission, para. 337.
363 US written submission, paras. 339 and 341.
364 US responses to questions from the Arbitrator, question 137, para. 177.
367 Decision by the Arbitrators, EC – Bananas III (Ecuador) (Article 22.6 – EC), para. 72.
or certain other obligations entails more harmful effects for the party seeking suspension than for the other party.\(^{29}\) In these circumstances, a consideration by the complaining party in which sector or under which agreement suspension may be expected to be least harmful to itself would seem sufficient for us to find a consideration by the complaining party of the effectiveness criterion to be consistent with the requirement to follow the principles and procedures set forth in Article 22.3.\(^{368}\)

\(^{29}\) Of course, suspension of concessions or other obligations is always likely to be harmful to a certain, limited extent also for the complaining party requesting authorization by the DSB.

5.78 We do not share the view of the arbitrator on EC – Bananas III (Ecuador) (Article 22.6 – EC) that a consideration by the complaining party of the sector or agreement in which suspension would be "least harmful" to itself would necessarily be pertinent. As we read the terms of subparagraphs (b) and (c), a consideration of the "effectiveness" criterion under these provisions involves an assessment of the effectiveness – or lack thereof – of suspension in the same sector or under the same agreement, rather than an assessment of the relative effectiveness of such suspension, as compared to suspension in another sector or agreement. In other words, the procedures and principles under Article 22.3 do not entitle a complaining party to freely choose the most effective sector or agreement under which to seek suspension. Rather, it entitles the complaining party to move out of the same sector or same agreement, where it considers that suspension in that sector or agreement is not "practicable or effective".

5.79 We agree with the arbitrator on EC – Bananas III (Ecuador) (Article 22.6 – EC), however, that the question of whether "the suspension of certain concessions or certain other obligations entails more harmful effects for the party seeking suspension than for the other party" would be pertinent to a consideration of the "effectiveness" of the said suspension. Indeed, as the arbitrator on EC – Bananas III (Ecuador) (Article 22.6 – EC) notes, there may be situations in which, for example, the complaining party is heavily dependent on imports from the other party, to such an extent that it may cause more harm to itself than it would to the other party, if it were to suspend concessions or other obligations in relation to these imports. In such a situation, where the complaining party would cause itself disproportionate harm, such that it would in fact be unable to use the authorization, there would be a basis for concluding that such suspension would not be "effective".

5.80 It may well be that the suspension of concessions or other obligations "is always likely to be harmful to a certain, limited extent also for the complaining party" applying it. However, this does not, in our view, imply that a consideration of such harm may not be relevant for the purposes of assessing the "effectiveness" of suspension in a given sector or agreement. In foreseeing that the complaining party may consider that same-sector or same-agreement suspension is "not practicable or effective", the drafters of the DSU have precisely acknowledged and recognized the possibility of circumstances in which suspension of certain obligations would not be effective, and they have sought to allow the complaining party the possibility of ensuring that it nonetheless has at its disposal an effective remedy in such circumstances, i.e. a remedy that may produce its intended effects. This includes, in our view, situations in which the harm that may arise from same-sector or same-agreement suspension would be so significant for the complaining party as to deter it from having recourse to it.

5.81 This is consistent with the objective of inducing compliance, in that this provision seeks to ensure that the complaining party will be in a position to actually have recourse to the authorized remedy, and thus enable it to contribute to inducing compliance, as is its legitimate purpose. At the

\(^{368}\) Decision by the Arbitrators, EC – Bananas III (Ecuador) (Article 22.6 – EC), para. 73.
same time, we agree with the United States that the "likelihood of compliance", as such, is not at issue in this determination. Rather, what is at issue is the ability of the complaining party to make effective use of the awarded countermeasures in order to induce such compliance.

(b) The second element under subparagraph (c): a determination that "the circumstances are serious enough"

5.82 As noted by the arbitrator on US – Gambling (Article 22.6 – US), the text of Article 22.3(c) provides no specific guidance on how the terms "the circumstances are serious enough" are to be understood. The elements of subparagraph (d) do, however, provide useful guidance in this respect.

5.83 We therefore consider that the trade at issue, and its importance to the complaining party, as well as the broader economic elements relating to the nullification or impairment and the economic consequences of the suspension, may all be relevant in assessing whether the "circumstances are serious enough" in a given case.

5.84 At the same time, we consider that these terms inherently imply a degree of flexibility in assessing what "circumstances" may be pertinent in a given case, so that these may not be the only relevant considerations in such an assessment. We agree, in this respect, with the following determinations of the arbitrator on US – Gambling (Article 22.6 – US):

"We also consider, more generally, that this aspect of the determination, which relates to "circumstances", is of necessity an assessment to be made on a case-by-case basis, and that the circumstances that are relevant may vary from case to case. We note however, that these circumstances should be serious "enough", which suggests that it is only when the circumstances reach a certain degree or level of importance, that they can be considered to be serious enough."369

(c) The elements under subparagraph (d) of Article 22.3

5.85 Subparagraph (d) of Article 22.3 directs the complaining party to take into account two specific considerations, in applying the principles under the previous subparagraphs:

(a) the trade in the sector or under the agreement under which the panel or the Appellate Body has found a violation or other nullification or impairment, and the importance of such trade to [the complaining] party; and

(b) the broader economic elements related to the nullification or impairment and the broader economic consequences of the suspension of concessions or other obligations.

5.86 The first element, the "trade in the sector or under the agreement under which the panel or the Appellate Body has found a violation" is to be understood with reference to the definitions of the terms "sector" and "agreement" contained in subparagraph (g) of Article 22.3. As the arbitrator on US – Gambling (Article 22.6 – US) observed:

"[I]n order to determine whether suspension is practicable or effective in a certain sector, it is appropriate to take into account all the trade in that sector and its importance to the complaining party. This also appears to us consistent with the

purpose of this provision, which is to provide certain objective parameters to guide the conduct of such determination.\textsuperscript{370}

5.87 In the circumstances of this case, this means that what is to be taken into account is "the trade" in all goods under the trade in goods agreement, that is, trade in goods generally, and its importance to Brazil.

5.88 The second consideration required to be taken into account is the "broader economic elements related to the nullification or impairment" and the "broader economic consequences of the suspension. We agree with the determinations of the arbitrator on \textit{EC – Bananas III (Ecuador) (Article 22.6 – EC)}, as endorsed also by the arbitrator on \textit{US – Gambling (Article 22.6 – US)}, that:

"The fact that the former criterion relates to 'nullification or impairment' indicates in our view that this factor primarily concerns 'broader economic elements' relating to the Member suffering such nullification or impairment, i.e. in this case Ecuador.

We believe, however, that the fact that the latter criterion relates to the suspension of concessions or other obligations is not necessarily an indication that "broader economic consequences" relate exclusively to the party which was found not to be in compliance with WTO law, i.e. in this case the European Communities. As noted above, the suspension of concessions may not only affect the party retaliated against, it may also entail, at least to some extent, adverse effects for the complaining party seeking suspension, especially where a great imbalance in terms of trade volumes and economic power exists between the two parties such as in this case where the differences between Ecuador and the European Communities in regard to the size of their economies and the level of socio-economic development are substantial."\textsuperscript{371}

5.89 Accordingly, the "broader economic elements related to the nullification or impairment" to be taken into account in this case are those relating to the nullification or impairment arising for Brazil from the subsidies at issue, while the broader economic consequences of the suspension may include a consideration of the economic consequences of the suspension both for Brazil and for the United States.

5.90 The terms of subparagraph (d), which require these elements to be taken into account in applying the principles of subparagraph (c), make it clear that an assessment of whether same-sector or same-agreement suspension is "not practicable or effective" and of whether "the circumstances are serious enough" may legitimately, and indeed should, take into consideration not only the trade to which the suspension would apply, but also the economic consequences arising from the suspension.

5.91 With these considerations in mind, we now turn to consider whether a plausible determination that it is not practicable or effective to suspend obligations in trade in goods alone could be made in this case, and that the circumstances are serious enough, so that an authorization to suspend concessions or other obligations also under the TRIPS Agreement and the GATS could be given.

2. Factual assumptions

5.92 As we have found above, our mandate requires us to consider whether Brazil has followed the procedures and principles of Article 22.3 of the DSU, in determining that it is not practicable or

\textsuperscript{370}Decision by the Arbitrator, \textit{US – Gambling (Article 22.6 – US)}, para. 4.34.

\textsuperscript{371}Decision by the Arbitrators, \textit{EC – Bananas III (Ecuador) (Article 22.6 – EC)}, paras. 85-86. See also Decision by the Arbitrator, \textit{US – Gambling (Article 22.6 – US)}, para. 4.35.
effective to suspend concessions in trade in goods and in the agreements of Annex 1A and that the circumstances are serious enough.

5.93 In making its determinations, Brazil assumed that the countermeasures would be in the amount that it had requested, namely, a total of US$1.644 billion in relation to the prohibited subsidies at issue in these proceedings (Step 2 plus GSM 102). We have determined, however, that countermeasures in an amount of US$147.4 million annually\(^{372}\) would be "appropriate" in this case.

5.94 In addition, our determination in these proceedings takes place against the background of another arbitration proceeding concerning actionable subsidies, in which Brazil had requested countermeasures in the amount of US$1.037 billion annually. The arbitrator in those proceedings has determined that countermeasures in the amount of US$147.3 million would be "commensurate with the degree and nature of the adverse effects determined to exist" within the meaning of Article 7.9 of the SCM Agreement.\(^{373}\)

5.95 These circumstances raise two questions for our consideration. First, we must consider whether, for the purposes of our assessment, we must take into account the cumulated amount of countermeasures resulting from both proceedings or only the amount arising from this Decision. Secondly, we must consider what are the implications of the fact that Brazil has assumed, in making its determination, an amount of countermeasures significantly in excess of the amount that has been determined to be permissible.

(a) Whether it is appropriate to consider the cumulated amount of countermeasures arising from both proceedings

5.96 Although the arbitral proceedings relating to the prohibited and actionable subsidies respectively were conducted in parallel, they relate to different aspects of the DSB's findings in this dispute and are legally distinct. In both cases, Brazil has requested an authorization to apply the proposed countermeasures in the form of suspension of obligations under the GATS and the TRIPS Agreement, as well as under trade in goods. The question therefore arises as to the extent to which the Arbitrator in these proceedings must take into account the determinations of the arbitrator in the other proceedings, in assessing whether Brazil has followed the principles and procedures of Article 22.3 of the DSU.

5.97 Brazil considers that the amount of countermeasures on prohibited subsidies and the amount of countermeasures for actionable subsidies should be cumulated in considering whether suspension of concessions or obligations in the goods sector is practicable or effective. Brazil observes that the total amount of countermeasures is part of the objective reality in which the Member operates and in which it undertakes its consideration of the practicability or effectiveness of the countermeasures under Article 22.3 of the DSU.\(^{374}\)

5.98 The United States argues that, since the Arbitrator should issue two separate reports to reflect the two separate arbitration proceedings, separate assessments of Brazil's requests for countermeasures under the GATS and the TRIPS Agreement would be needed.\(^{375}\) However, the United States also considers that the Arbitrator in each proceeding may consider the circumstances of the other proceeding. Consequently, the Arbitrator in one proceeding may take account of countermeasures awarded in the other proceeding in determining if the total of the countermeasures in

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\(^{372}\) We recall that this is not a fixed amount, so it may vary over time. However, at this stage of our analysis, we find it appropriate to rely on the amount that we have calculated in relation to FY 2006.

\(^{373}\) See WT/DS267/ARB/2, para. 4.195.

\(^{374}\) Brazil's responses to questions from the Arbitrator, question 9, para. 133.

\(^{375}\) US responses to questions from the Arbitrator, question 9, para. 47.
the two proceedings together would justify suspending concessions under another sector or agreement.376

5.99 We first take note of the parties' agreement that, even in the context of separate assessments under the two proceedings, the Arbitrator in each proceeding would be entitled, in the circumstances of this case, to take account of the amount of countermeasures awarded in the other proceedings.

5.100 The determinations arising from this Decision are only in relation to the countermeasures concerning the subsidies covered by these proceedings, namely Brazil's proposals in relation to the Step 2 and GSM 102 payments. At the same time, we agree that it is appropriate for us to take into account the amount of countermeasures to which Brazil is entitled to under the other proceedings. As Brazil has expressed it, the amount of countermeasures determined in the other proceedings is "part of the objective reality in which the Member operates". We assume that both amounts would be applicable at the same time and that the two amounts of countermeasures would potentially be applied cumulatively by Brazil. This circumstance may have an impact on an assessment of whether it is "practicable or effective" to seek countermeasures in the same sector or the same agreement and whether "the circumstances are serious enough". As observed above, the parties agree that we can adopt a cumulative approach in this case.377

5.101 We will therefore take into account the cumulated level of countermeasures arising from both decisions, which amounts to US$294.7 million annually, in reviewing whether Brazil has followed the principles and procedures of Article 22.3 of the DSU in determining that it is not practicable or effective to seek to suspend concessions or other obligations in trade in goods alone and that the circumstances are serious enough.

(b) Implications of the difference between the level of countermeasures requested by Brazil and the level determined to be permissible

5.102 The amount of the countermeasure is a central aspect, possibly the most critically important aspect, of the consideration required to be undertaken by a complaining Member in following the principles and procedures of Article 22.3 of the DSU.

5.103 In these proceedings, Brazil has assumed, in applying the procedures and principles of Article 22.3, that it would be entitled to a total amount of countermeasures in the amount of US$2.681 billion (US$1.644 billion in relation to the prohibited subsidies plus US$1.037 billion in relation to the actionable subsidies). However, as we have determined above, the cumulated amount of countermeasures to which Brazil is entitled to is US$294.7 million.

5.104 In this case, the amount of countermeasures that we have determined to be permissible is significantly lower than the amount assumed by Brazil in its request, and this fact alone compels a finding that the complaining party has not followed the principles and procedures of Article 22.3. We must therefore find that in adopting the assumption of a total of US$2.681 billion of countermeasures as the central "fact" underlying its consideration of Article 22.3, it did not properly consider, or cannot be taken to have properly considered, "the necessary facts objectively". Consequently, it cannot have properly applied the principles and procedures of Article 22.3 on the basis of these facts. Therefore our finding must be that Brazil has not followed the principles and procedures as laid out in that Article.

5.105 It is not possible to go "back in time" for Brazil to rectify its request for the purposes of these proceedings, taking into account our determination relating to the permissible amount of

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376 US responses to questions from the Arbitrator, question 9, para. 48.
377 See para. 5.94.
countermeasures.\(^{378}\) However, Brazil will have the right to present a request for countermeasures to the DSB at the level determined in this Decision. Thus it would be both unreasonable and uninstructive to say nothing more about the way in which the principles and procedures should be applied to the lower countermeasure calculated by the Arbitrator.

5.106 We recall in this context our determination in paragraph 5.52 above that, should we determine that Brazil has not followed these procedures or principles, we should articulate how the analysis could properly take place to the extent necessary to ensure that Brazil is in a position to apply these procedures and principles "consistent with paragraph 3" and present a request "consistent with the decision of the arbitrator" in a subsequent phase of these dispute settlement proceedings, as foreseen in Article 22.7 of the DSU.

5.107 In light of these considerations, and notwithstanding our determination that Brazil has not followed the principles and procedures of Article 22.3 because it based its determination on an amount of countermeasures which is significantly in excess of the amount we have authorized, we thus now proceed to describe how, in our view, Article 22.3 should be applied in the context of a countermeasure in the amount of US$294.7 million.

5.108 In conducting this analysis, we will take into consideration the elements and arguments that have been presented to us by Brazil and the United States in these proceedings. We recognize that Brazil applied these arguments to a significantly larger amount of countermeasures. What we aim to determine in our examination of this issue, is whether the considerations that Brazil has brought forward to explain why it considered that it is not practicable or effective to suspend concessions or other obligations solely in trade in goods to the level that it assumed it was entitled to, would justify the same conclusion when applied to the level of countermeasures that we have determined would be "appropriate".

3. Whether it is practicable or effective for Brazil to suspend concessions in trade in goods

5.109 Although Brazil considers that the countermeasures must be assessed exclusively against the requirements of Article 4.10 of the SCM Agreement, Brazil claims that it has, in any event, followed the principles and procedures of Article 22.3 of the DSU. Specifically, Brazil considers that it is not practicable or effective to suspend concessions or other obligations exclusively under trade in goods, and that the circumstances are serious enough to justify suspension of concessions or other obligations under TRIPS and GATS.\(^{379}\) Brazil also argues that it considered the elements under Article 22.3(d) of the DSU.\(^{380}\)

5.110 The United States argues that the text of the DSU does not explicitly define what countermeasures are "practicable or effective", but the negotiators were clear in their intention that this be a high bar. Brazil does not reach this bar. In the United States' view, Brazil advances a claim for cross-agreement and sector suspension of concessions that is contrary to the Article 22.3 disciplines.\(^{381}\) The United States therefore requests the Arbitrator to reject Brazil's request to suspend concessions with respect to TRIPS and GATS for the reason that Brazil does not meet the requirements of Article 22.3.\(^{382}\)

\(^{378}\) This is not to say that a Member could not base its consideration on a range of possible countermeasure amounts, in order to come before an arbitrator in Article 22.6 proceedings and validly say that it did use a range of assumed facts, and arrived at the same or different outcomes in relation to cross-retaliation. In these proceedings that did not happen.

\(^{379}\) Brazil's Methodology Paper, para. 144; Brazil's written submission, para. 499.

\(^{380}\) Brazil's written submission, para. 506.

\(^{381}\) US written submission, para. 329.

\(^{382}\) US written submission, para. 342.
(a) Main arguments of the parties

5.111 Brazil states that it does not consider it adequate to suspend concessions "by creating barriers to Brazilian imports of US goods and thereby imposing additional costs on the Brazilian economy in general." \(^{383}\)

5.112 The United States considers that this claim runs headlong into the thoughtful and purposeful design of the DSU system. According to the United States, the treaty negotiators specifically created a system where Members had to first resort to suspension of concessions within the relevant agreement. Suspension of concessions with respect to goods always entails creating barriers to another Member's goods and thereby imposing additional costs on the sanctioning state's economy. The United States argues that the negotiators of the DSU were well aware that suspension of concessions with respect to goods would be painful for both the sanctioned government and the sanctioning government. \(^{384}\) In the United States' view, if the mere fact of additional costs on Brazil's domestic economy were sufficient for suspension of concessions in the same sector to be not practical or effective, it could be argued that any and all violations with respect to goods would warrant cross-agreement suspension of concessions. The United States argues that this approach is not compatible with the fact that designers of the DSU chose to impose disciplines on suspension of concessions. \(^{385}\)

5.113 The United States considers that it can demonstrate that Brazil can effectively and practicably suspend concessions with respect to goods, and that any request by Brazil to suspend concessions across sectors or across agreements is not a reasonable and objective assessment of the conditions established by Article 22.3. \(^{386}\) The United States points out that Brazil imports a sufficient amount of goods from the United States to provide practicable and effective suspension of concessions. Between 2005-2007, Brazil imported between US$15.3 billion to US$24.6 billion annually in US goods. \(^{387}\) In consumer goods, excluding food and automotive goods, Brazil imported between US$1.125 billion and US$1.676 billion annually in the same time period. Including food and automotive goods in the consumer goods category, the level of imports jumps to between US$1.826 billion and US$2.717 billion annually.

5.114 According to the United States, the level of bilateral trade between the United States and Brazil is thus sufficient to provide for suspension of concessions with respect to goods alone. Moreover, given Brazil's large and diverse economy and the actual level of nullification and impairment incurred by the US policies at issue, suspension in consumer goods alone should be effective and practicable. \(^{388}\) In the United States' view, the economic size and the diversity of the economy makes it possible for Brazil to suspend concessions in the goods sector without resort to exception cross-sector countermeasures. \(^{389}\) In the past, Brazil has proposed suspension of concessions in the amount of US$3.36 billion only in the goods sector in the Canada – Aircraft Credits and Guarantees (Article 22.6 – Canada) dispute. In the United States' view, it is difficult to understand why it was practicable and effective to suspend concessions in the goods sector in that dispute while Brazil considers it is not practicable or effective to suspend concessions in the goods sector in this case. \(^{390}\)

\(^{383}\) Brazil's Methodology Paper, para. 143.
\(^{384}\) US written submission, para. 329.
\(^{385}\) US written submission, para. 330.
\(^{386}\) US written submission, para. 335.
\(^{388}\) US written submission, para. 336. The Arbitrator takes note that these US arguments are made in the context of Brazil's requested amount of countermeasures, i.e., US$1.644 billion, for prohibited subsidies and US$1.037 billion for actionable subsidies respectively.
\(^{389}\) US responses to questions from the Arbitrator, question 135, paras. 168-170.
\(^{390}\) US oral statement, para. 71.
5.115 Citing the EC – Bananas III (Ecuador) (Article 22.6 – EC) arbitration, the United States argues that if a developing country, even one with a relatively small and undiversified economy such as Ecuador, has sufficient bilateral trade in consumer goods to impose suspension of concessions, then it must do so. Only where the government lacks the capacity to suspend concessions in the same agreement does the DSU permit the cross agreement suspension of concessions.  

5.116 Brazil explains that it would not be feasible or reasonable to apply countermeasures on capital goods, intermediate goods and other essential inputs to the Brazilian economy, which it says comprise 95 per cent of Brazil's imports from the United States. The costs involved in switching suppliers are normally prohibitive for capital goods and intermediate goods. In addition to prices, decisions on the purchase of capital or intermediate goods are conditioned by several factors that severely constrain the ability of producers to switch suppliers. These factors include: (i) long-term contracts cannot be terminated easily or without heavy pecuniary penalties; (ii) capital goods in particular are tailor-made to respond to the specific needs of the producer and are ordered many months or even years in advance; (iii) in most industries, inputs must have the exact technical specifications that match the requirements of the machinery in place. These specifications will be different depending on the brand, origin, age etc. of the machinery that equips assembly lines. As a result, theoretically similar products are not substitutable; (iv) intellectual property protection and intra-company trade determine purchase decisions and curb the ability of producers to change suppliers.

5.117 Moreover, Brazil says that its imports of consumer goods from the United States amount to US$1.27 billion. Of that amount, almost US$1.1 billion, or 86 per cent, correspond to medical and educational supplies, food, automotive goods and arms, sectors where, according to Brazil, any raising of barriers would entail serious and unreasonable costs to the Brazilian economy. In Brazil's view, the profile of Brazilian imports of consumer goods from the United States leaves very little room of manoeuvre for Brazil to adopt countermeasures that target such goods.

5.118 However, Brazil also considers that of the US$1.27 billion of annual imports of consumer goods from the United States (in 2007), approximately US$28.5 million, or 2.2 per cent, can be considered as luxury goods, in relation to which, arguably, the imposition of countermeasures would not be disproportionately costly to Brazil. In Brazil's view, these luxury goods are consumed by a very small share of Brazil's population and an increase in the costs of their importation is likely to generate limited impacts on the Brazilian economy in general.

5.119 The United States observes that Brazil has failed to explain why, given the availability of alternative sources of supply, the suspension of concessions in the goods sector is not practicable or effective. Rather, the United States argues, Brazil simply takes a broad category of goods out of consideration based on mere assertion. The United States considers that the goods sector is "all goods", and that while it may be appropriate to examine the negative impact on particular goods that are necessities, where goods are not necessities or where alternative sources of supply are available, there is no basis to assert that suspension of concessions for those goods is not practicable or effective.

5.120 Brazil considers that the United States bears the burden of proving that it is practicable and effective for Brazil to change suppliers when taking countermeasures in the goods sector alone, and

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391 US written submission, para. 333.
392 Brazil's responses to questions from the Arbitrator, question 140, para. 334.
393 Brazil's responses to questions from the Arbitrator, question 140, para. 336.
394 Brazil's written submission, para. 516.
395 Brazil's written submission, para. 523.
396 US responses to questions from the Arbitrator, question 135, para. 171.
397 US responses to questions from the Arbitrator, question 135, para. 166.
that merely identifying that alternative sources of supply exist for some products is not sufficient. In this regard, Brazil considers that the United States failed to demonstrate that countermeasures in the goods sector alone is "practicable" and "effective".

5.121 Brazil considers that the crucial question is not whether alternative sources of supply exist, but whether it would be feasible and sensible for Brazil, in practice, to force its economic agents to switch to other suppliers. Such analysis would have to take into account, among other factors, the US share in Brazil's total imports; the price levels of alternative suppliers; technical specifications and product differentiation; intellectual property and intra-company trade restrictions; and the economic, welfare and inflationary costs resulting from the disruption of production and supply chains. Brazil considers that the burden is on the United States to explain why and how the US imports can be replaced by imports from other sources, so that it is practicable for Brazil to take countermeasures only in the goods sector.

5.122 The United States comments that Brazil focuses on an even narrower scope of products than the arbitrator on EC – Bananas III (Ecuador) (Article 22.6 – EC) did. In that dispute, the arbitrator looked at the category of consumer goods because the suspension of concessions on these goods could not cause any direct adverse effects on Ecuador's domestic manufacturing and processing industries. The United States says that there is no reason to exclude such end use products as "books" and "food" (which Brazil indicates as necessity commodities) from the products for applying countermeasures. Also, the United States considers that the potential cost of changing suppliers is not unusual, but an expected result of suspension of concessions. The United States' main point is that Brazil is not constrained to the narrow range of choices of goods as it suggests given that it is one of the world's largest economies and it has many sources of supply.

5.123 Brazil further argues that within the very limited scope of consumer goods that Brazil has to target, the costs and welfare-reducing effects resulting from the adoption of countermeasures exclusively in that sector would render such an alternative not practicable. In Brazil's view, the additional costs generated by these measures would add to inflationary pressures – at a time when increasing prices have pointed to a worrying inflationary scenario – and would limit access of Brazilian consumers to these imported goods, negatively affecting Brazil's economy and the welfare of its population.

5.124 Furthermore, in Brazil's view, any measures that are contrary to the objectives of a developing country to ensure steady and sustainable development; to pursue high growth rates; to fight poverty; and to promote the increased welfare of its population within a stable macroeconomic environment will necessarily be costly and impracticable by definition. Brazil also contends that the significantly unbalanced nature of the trade relations between Brazil and the United States, and the considerable economic differences between the two countries, render the suspension of concessions and other obligations under trade in goods alone neither practicable nor effective as a response to the United States' failure to comply with its obligations.
5.125 In Brazil's view, countermeasures that are simply most likely to add to those costs and effects are not practicable, as the Brazilian Government does not consider that they could be employed in practice.\footnote{Brazil's written submission, para. 522.}

5.126 Brazil also considers that countermeasures restricted solely to trade in goods may not have sufficient political influence to press for the United States' withdrawal of the billions in US dollars annually paid subsidies or to remove their adverse effects. Therefore, such countermeasures are not "effective" for the purpose of encouraging compliance.\footnote{Brazil's written submission, para. 524.}

5.127 Brazil submits that, at the very least, it "could plausibly arrive at the conclusion that it was not practicable or effective for it to suspend concessions and other obligations" in respect of the importation of goods alone.\footnote{Brazil's written submission, para. 526.} Brazil reiterates that, besides being authorized to take countermeasures under trade in goods, it needs to have the option to suspend concessions or other obligations under TRIPS and GATS. In this regard, Brazil is seeking to take countermeasures that "produce the greatest likelihood of compliance with minimal damage to its own economy", as commented by the United States itself in a DSB meeting adopting the arbitration report in \textit{EC – Bananas III (Ecuador)} \textit{(Article 22.6 – EC)}.\footnote{Brazil's written submission, para. 527; WT/DSB/M/78, paras. 44-45.}

(b) Analysis by the Arbitrator

5.128 We recall our determination above that Brazil cannot be taken to have applied a proper consideration of the principles and procedures of Article 22.3, because the amount of the countermeasure it assumed was much greater than the countermeasure determined by the Arbitrator. Nonetheless we have proceeded further, to give guidance whether, on the basis of the level of the countermeasures authorized under this Decision, and in the circumstances of the trade between the two Members involved, an objective and plausible conclusion could be reached that it is "not practicable or effective" to seek suspension in trade in goods alone and that "the circumstances are serious enough".

5.129 We also recall that, as we have explained in our preliminary observations above, we will take into account in our review of Brazil's determinations the amount of countermeasures that we have determined that Brazil is entitled to, in relation to the ML and CCPs (US$147.3 million), as well as the amount of countermeasures determined to be "appropriate" in the separate proceedings relating to the prohibited subsidies at issue in the underlying dispute (US$147.4 million). The total amount of countermeasures in relation to which we consider Brazil's determinations is therefore US$294.7 million.

(i) Initial observations

5.130 Brazil observes at the outset that it would not be adequate to suspend concessions "by creating barriers to Brazilian imports of US goods and thereby imposing additional costs on the Brazilian economy in general". The United States responds that suspension of concessions with respect to goods always entails creating barriers to another Member's goods and thereby imposing additional costs on the sanctioning state's economy, and that the DSU negotiators were "well aware that suspension of concessions with respect to goods would be painful for both the sanctioned government and the sanctioning government". If the mere fact of additional cost on Brazil's domestic economy were sufficient for suspension of concessions in the same sector not to be practical or
effective, the United States observes, then it could be argued that "any and all violations with respect to goods would warrant cross-retaliation".

5.131 We agree with the United States that "the mere fact of additional cost on Brazil's domestic economy" would not be sufficient, in and of itself, to conclude that suspension of concessions or other obligations is "not practicable or effective" within the meaning of Article 22.3 of the DSU. To the extent that the imposition of a barrier to trade on certain imports inherently generates economic costs on the Member imposing them, the suspension of concessions on trade in goods may always have the potential to cause some harm to the economy of the Member imposing the barriers. To assume that this inherently would justify recourse to cross-retaliation would amount to reading out of Article 22.3 the principle contained in subparagraph (a). Rather, subparagraphs (b) and (c) of Article 22.3 set out the specific circumstances in which a complaining Member may be entitled to seek to suspend concessions in another sector or another agreement, whatever the sector in which the violation was found.

5.132 At the same time, as we have observed in our analysis of the terms "not practicable or effective" above, it is quite possible that the potential costs associated with the suspension of concessions or other obligations in a given sector or under a certain agreement would precisely be of such an extent and magnitude that such suspension is "not practicable or effective". The fact that subparagraph (d) requires a consideration of the "broader economic consequences of the suspension" further confirms, in our view, that it is appropriate and legitimate for the complaining party to take into account the potential costs that may be associated with the suspension, and not simply the legal feasibility of that suspension, in a determination of whether it is "practicable or effective".

5.133 In short, a consideration of the economic costs associated with the suspension is legitimate, but it is not just any economic costs associated with the suspension of concessions or other obligations in a given sector or agreement that would justify a conclusion that such suspension would be "not practicable or effective". Rather, the costs at issue would have to be of such extent and magnitude as to render the suspension "not practicable or effective".

5.134 In these proceedings, Brazil has provided general explanations as to the profile of its trade with the United States, which in its view affect its ability to suspend concessions or other obligations in trade in goods, as well as specific explanations why it considers that it would not be practicable or effective to seek to suspend obligations with respect to certain categories of imports of goods from the United States, so that the range of imports that it can actually target is very limited. Finally, Brazil also argues that, even within the range of products that it could target, suspension would not be "practicable or effective", for various reasons. We consider these three aspects in turn.

(ii) Overall profile of US imports of goods to Brazil

5.135 Brazil argues that there is a great imbalance of trade between Brazil and the United States, and that its imports account for only a small share 1.7 per cent (or US$18.7 billion) of total US exports (US$1.16 trillion) Hence an increase in tariffs imposed on this trade would not sufficiently affect the United States and therefore would be an ineffective response to the continued violation of its obligations in this dispute.410

5.136 In Brazil's view, it would be much easier for the United States to redirect 1.7 per cent of its exports to other destinations than for Brazil to find suitable alternative sources for its imports. Brazil is much more dependent on imports from the United States. Brazil indicates that among the top 20 products in the list of Brazil's imports from the United States, the United States accounts for more than 50 per cent of total Brazilian imports in 12 cases, and greater than 90 per cent of Brazilian

410 Brazil written submission, para. 514.
imports in five of these products. Brazil also presented an exhibit showing that out of the 30 HS chapters in value of imports that represents 96 per cent of total Brazil's imports from the United States in 2007, the US share was above 10 per cent in 26 cases. This share was higher than 20 per cent in 20 cases and above 30 per cent in eight cases.

5.137 The United States responds that the difference between the percentage of US imports into Brazil and the percentage of Brazil's imports into the United States is not the question. The question is whether, within trade from the United States that does occur, it would be practicable or effective to impose countermeasures in goods. The United States considers that Brazil, in fashioning its countermeasures, could take into account the difficulty of finding substitute goods from other sources (e.g., focusing on luxury goods to the extent possible, where increased costs would have little impact, and then exploring other goods where substitute goods are available). Given the size and diversity of the Brazilian economy, and the availability of goods from other countries or from Brazil itself, Brazil has many tools at its disposal to apply countermeasures within the goods sector.

5.138 The United States further observes that Brazil is an important market for the United States, which exported between US$15.3 and US$24.6 billion annually to Brazil between 2005 and 2007. If Brazil suspends concessions in the goods sector, it would deprive the United States of access to the important Brazilian market. At a time of economic challenges, loss of this large market would lead to a serious economic cost.

5.139 We take note of the fact that the total annual value of trade in goods from the United States represents more than 15 per cent of Brazilian imports overall, and that this represents less than 2 per cent of total US exports of goods. We are not persuaded, however, that this "imbalance" that Brazil describes in its trade in goods from the United States would in itself be a sufficient basis to conclude that a suspension of concessions or other obligations in relation to such goods would be "an ineffective response", as Brazil argues. In order to arrive at the conclusion that suspension in a given sector or agreement is not "practicable or effective", a more detailed consideration of the possibilities for suspension of concessions or obligations within the range of imports that could potentially be targeted is appropriate, especially where the total level of imports is not insignificant and greatly exceeds the level of permissible countermeasures to which the complaining party is entitled.

5.140 We note that the total value of Brazil's imports of goods from the United States, as estimated by Brazil, is US$18.7 billion. The United States estimates these imports at between US$15.3 and US$24.6 billion annually. Brazil's estimation of the value of its total imports of goods from the United States is therefore within the range cited by the United States.

5.141 These figures suggest that, in principle, Brazil has at its disposal a total value of US$18.7 billion of US exports that could potentially be subjected to suspension of concessions or other obligations. The question we must now consider is whether Brazil could plausibly have considered that, from those imports, it is not practicable or effective to suspend concessions or other obligations under the agreements on trade in goods alone, to a level of US$294.7 million. We are aware that Brazil, in making its determination, was assuming that it would be entitled to a total level of suspension significantly in excess of this figure and we have already outlined why it is that we are reviewing the application of the principles and procedure of Article 22.3 despite that supervening obstacle to Brazil's claim in the circumstances of this case (i.e. that it did not actually undertake the consideration that it would have had to have done in order to argue its position before the Arbitrator).

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411 Brazil's written submission, para. 515.
412 Brazil's oral statement para. 124.
413 US responses to questions from the Arbitrator, question 68, paras. 202-203.
414 US responses to questions from the Arbitrator, question 68, para. 206.
415 US oral statement, para. 69.
5.142 We recall our determination above that whether suspension in a given sector or agreement is "practicable" essentially relates to whether it is available or feasible in practice. This question is in part answered by a consideration of the total level of trade, to which suspension of concessions or other obligations could be applied. To the extent that the total level of imports from the United States exceeds the total value of imports to which suspension could apply, such suspension is at least available in principle. We also recall our determination that whether suspension in a given sector or agreement is "effective" relates more directly to the question of whether the complaining party could effectively make use of the authorization, and that this may in particular depend on the extent to which that party would cause itself significant harm in suspending concessions on the imports concerned, to such an extent that the suspension would not be effective.

5.143 Bearing in mind these general considerations, we now consider Brazil's arguments to the effect that it only has, in fact, limited scope to seek suspension in relation to its imports of goods from the United States.

(iii) Detailed profile of US imports to Brazil and availability of suspension in relation to various categories of imports

5.144 Among its US$18.7 billion of annual imports from the United States, Brazil indicates that 95 per cent is composed of imports of intermediate goods, capital goods, and other essential inputs into Brazil's economy. Brazil argues that the costs involved in switching suppliers are normally prohibitive for capital goods and intermediate goods. Brazil further argues that, of the US$1.27 billion of annual imports of consumer goods from the United States, almost US$1.1 billion, or 86 per cent, correspond to medical and educational supplies, food, automotive goods and arms, sectors where any raising of barriers would entail serious and unreasonable costs to the Brazilian economy. We consider in turn Brazil's determination relating to capital, intermediate and other input goods, and its determination in relation to consumer goods.

Capital goods, intermediate goods and other goods constituting inputs into Brazil's economy

5.145 Brazil observes that in addition to prices, decisions on the purchase of capital or intermediate goods are conditioned by several factors that severely constrain the ability of producers to switch suppliers, including long-term contracts that cannot be terminated easily or without heavy pecuniary penalties, the fact that capital goods in particular are tailor-made to respond to the specific needs of the producer and are ordered many months or even years in advance, the fact that in most industries, inputs must have the exact technical specifications that match the requirements of the machinery in place, as well as the fact that intellectual property protection and intra-company trade determine purchase decisions and curb the ability of producers to change suppliers.

5.146 The United States does not specifically comment on Brazil's assessment that suspension of concessions in relation to capital, intermediate or other input goods would not be practicable or effective. The United States generally considers, however, that Brazil takes a broad category of goods out of consideration based on mere assertion, and that "while it may be appropriate to examine the negative impact on particular goods that are necessities, where goods are not necessities or where alternative sources of supply are available, there is no basis to assert that suspension of concessions for those goods is not practicable or effective".

5.147 We note that the arbitrator on EC – Bananas III (Ecuador) (Article 22.6 – EC) considered a comparable argument in relation to "primary goods and investment goods". In approaching this question, the arbitrator made the following assumption:

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416 Brazil's responses to questions from the Arbitrator, question 140, para. 336.
417 Brazil's responses to questions from the Arbitrator, question 140, para. 334.
"[W]e presume that the suspension of concessions on imports by Ecuador from the European Communities of those types of goods and the imposition of additional tariffs would increase the cost of domestic production in the absence of alternative sources of supply at a similar price".  

5.148 The arbitrator in that dispute then considered whether the European Communities had provided sufficient information and evidence to demonstrate that alternative sources of supply existed for these products at a similar price. It ultimately concluded that the European Communities had not succeeded in rebutting Ecuador's argument that switching to other than EC sources of supply would involve transitional costs of adjusting to those sources of supply, which Ecuador considered were relatively significant for it as a developing country.

5.149 We first note, as the arbitrator on EC – Bananas III (Ecuador) (Article 22.6 – EC) did in relation to "primary goods and investment goods", that suspension of concessions in relation to capital, intermediate or other input goods, which constitute direct inputs into domestic production, has the potential to be damaging to economic operators domestically. We also note the arguments presented by Brazil to explain why, in relation to such goods specifically, it may be especially difficult to have recourse to alternative suppliers without significantly upsetting the supply chain.

5.150 We see merit in this argument particularly in relation to capital and intermediate goods, although we consider it may have less force in relation to primary goods which are more homogenous in character. It could be expected that a significant proportion of imports of goods constituting inputs for manufacturing or processing are in the form of such primary goods, for which alternative sources of supply may be more readily available than for certain other more differentiated products.  

5.151 However, the United States has not specifically addressed this question or attempted to rebut Brazil's arguments by identifying such imports. Although the United States has presented a number of examples of products in relation to which Brazil could, in the view of the United States, easily find alternative suppliers, none of these examples appear to relate to capital, intermediate or input goods (except arguably computers, discussed below). We also note the acknowledgement, by the United States, that it could be appropriate to consider the negative impact of suspension of concessions in relation to goods that are "necessities".

5.152 There remains a question of definition of the scope of capital goods, as far as computers are concerned. Brazil considers that computers, in relation to which the United States argues that Brazil has the opportunity to import from other sources than the United States, are capital goods, in relation to which it would be harmful to retaliate. The United States has not specifically responded to this assertion. The United States has also not indicated what level of imports computers represent.

5.153 In light of the elements presented to us, and in the absence of any sufficiently specific argument of the United States to the effect that suspension in relation to capital goods, intermediate

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418 Decision by the Arbitrators, EC – Bananas III (Ecuador) (Article 22.6 – EC), para. 91.
419 We note, in this context, that with respect to agricultural goods specifically, Brazil's experts state that: "Agricultural goods are largely undifferentiated, relatively homogeneous and therefore highly fungible." (Annex 1 to Brazil's written submission (the "Sumner-Sundarm Statement", para. 8).
420 See US oral statement, paragraph 70. The United States identifies the following product categories as examples of goods for which alternative sources of supply can be found easily: passenger cars, antibiotics, computers, salmon. See also Brazil's responses to questions from the Arbitrator, question 140, para. 344.
421 We note in this respect that Exhibit US-109, presented by the United States for the purposes of illustrating the US share of imports to Brazil in various product categories, was contested by Brazil, who stated that this table was in fact erroneous and represented the share of that HS chapter in Brazil's imports from the United States, rather than the US share in Brazil's total imports. See Brazil's oral statement, paras. 122-123. The United States did not present alternative figures.
goods or other inputs into the Brazilian economy would be practicable or effective, we accept, for the purposes of our determination, Brazil's position that it would not be practicable or effective to seek to suspend concessions or other obligations in relation to imports of capital, intermediate and other essential inputs into Brazil's economy.

**Consumer goods**

5.154 Brazil further argues that, of the US$1.27 billion of annual imports of consumer goods from the United States, almost US$1.1 billion, or 86 per cent, correspond to medical and educational supplies, food, automotive goods and arms, sectors where any raising of barriers would entail serious and unreasonable costs to the Brazilian economy.  

5.155 The United States provides different figures for Brazilian imports of consumer goods from the United States. It states that, including food and automotive goods in the consumer goods category, Brazil imported between US$1.826 billion and US$2.717 billion annually from the United States between 2005-2007. Excluding food and automotive goods, the United States estimates that Brazil imported between US$1.125 billion and US$1.676 billion in consumer goods annually in the same time period. In the United States' view, given Brazil's large and diverse economy and the actual level of nullification and impairment incurred by the US policies at issue, suspension in consumer goods alone should be effective and practicable.

5.156 Neither party provides an explanation for the significant differences in values that they present concerning Brazil's imports of consumer goods from the United States. Apart from the fact that Brazil uses import data and the United States relies on export data, the most likely explanation for the difference is that the parties do not have the same definition of consumer goods. However, it is not possible to confirm this since the United States has provided only an aggregate figure and does not provide a listing of the individual tariff lines (as Brazil does) of what it considers to be consumer goods.

5.157 In light of these elements, and given that the United States has not explained why Brazil's classification of consumer goods would be incorrect and provides no detailed list of its own, the Arbitrator assumes, for the purposes of its analysis, that Brazil's figures in respect of consumer goods (as found in Exhibit Bra-754) reflect an adequate classification of such goods (see Table 3). At the same time, we take note of the fact that there is a very significant difference between the two sets of figures presented, and that Brazil's total figure for imports of consumer goods from the United States is more than 50 per cent lower than those presented by the United States, for the same categories of products.

5.158 This means that, in principle, assuming that Brazil's figures are accurate, it has at its disposal a total value of at least US$1.127 billion worth of US imports of consumer goods to which suspension of concessions or other obligations could in principle be applied.

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422 Brazil's responses to questions from the Arbitrator, question 140, para. 336.
424 US written submission, para 336.
425 The only specific product category, the classification of which the parties have discussed, is "computers". In response to an argument that Brazil has alternative sources of supply for computers, Brazil has responded that computers are "capital goods", in relation to which it would not be appropriate to suspend obligations. It is therefore possible that the United States classifies computers as "consumer goods", while Brazil has classified them as "capital goods". However, we are not in a position to determine what impact this difference in classification has, in the absence of further information on the level of Brazilian imports of computers from the United States.
5.159 We also note at the outset the following observations of the arbitrator on EC – Bananas III (Ecuador) (Article 22.6 – EC):

"Suspension of concessions with respect to consumer goods cannot cause any direct adverse effects on Ecuador's domestic manufacturing and processing industries. Thus Ecuador's main argument with respect to investment goods and primary goods referred to above cannot apply with respect to consumer goods. It is also true that resulting price increases resulting from the suspension of concessions on consumer goods could cause welfare losses to end-consumers in the country suspending concessions."

5.160 Similarly, in these proceedings, it cannot be assumed that the types of economic costs that we have accepted would be likely to arise as a result of a suspension affecting capital goods, intermediate goods and other goods constituting inputs into Brazil's economy would be equally relevant to consumer products. While some welfare costs to end-consumers might arise in the event that the suspension leads to price increases, this would only occur if no alternative substitute is available at a comparable price.

5.161 In light of the fact that the value of Brazil's annual imports of consumer goods from the United States (at least US$1.273 billion) significantly exceeds the total level of countermeasures that it is entitled to take (US$294.7 million), it would therefore in principle be possible for Brazil to suspend concessions or other obligations entirely in relation to imports of consumer goods from the United States.

5.162 However, Brazil suggests that, out of the US$1.273 billion of consumer goods that it imports from the United States, a total of only US$182.8 million would potentially be available for suspension of concessions or other obligations, once the sectors where raising of barriers would entail "serious and unreasonable costs to the Brazilian economy" are deducted.

<table>
<thead>
<tr>
<th>Tag*</th>
<th>Description</th>
<th>Value (in US$ millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical</td>
<td>Medicines and other medical or safety products</td>
<td>909.5 (-)</td>
</tr>
<tr>
<td>Food</td>
<td>Food Products</td>
<td>88.7 (-)</td>
</tr>
<tr>
<td>Books</td>
<td>Books, teaching material and related products</td>
<td>28.9 (-)</td>
</tr>
<tr>
<td>Arms</td>
<td>Arms and ammunition</td>
<td>0.6 (-)</td>
</tr>
<tr>
<td>Autos</td>
<td>Automobiles and related goods</td>
<td>62.6 (-)</td>
</tr>
<tr>
<td>Total minus selected groups of products</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Total minus selected groups of products | 182.8 (=) |

Source: Exhibit Bra-754

5.163 The United States considers, however, that Brazil has simply taken broad categories of goods out of consideration based on mere assertion, and that, while it may be appropriate to examine the negative impact on particular goods that are necessities, where goods are not necessities or where alternative sources of supply are available, there is no basis to assert that suspension of concessions for those goods is not practicable or effective. The United States observes that Brazil's economy is sufficiently diversified, that it could easily turn to other sources of supply, and that the key question is whether alternative sources of supply exist.

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426 Decision by the Arbitrators, EC – Bananas III (Ecuador) (Article 22.6 – EC), para. 100.
5.164 Brazil considers that the crucial question is not whether alternative sources of supply exist, but whether it would be "feasible and sensible for Brazil, in practice, to force its economic agents to switch to other suppliers". Brazil identifies a number of considerations that would be relevant to such an assessment: "the US share in Brazil's total imports; the price levels of alternative suppliers; technical specifications and product differentiation; intellectual property and intra-company trade restrictions; and the economic, welfare and inflationary costs resulting from the disruption of production and supply chains".427

5.165 We agree that the question of whether suspension of concessions or other obligations is "practicable or effective" is not strictly limited to whether alternative sources of supply exist, but involves a broader consideration of whether it would be feasible, in practice, for Brazil to require its economic agents to switch to other operators, taking into account the range of factors that may have a bearing on this question.

5.166 Bearing this general observation in mind, we now consider Brazil's arguments to the effect that suspension of concessions or other obligations on imports of medical and food products, books, arms and automobiles would entail "serious and unreasonable costs". In doing so, we recall that Brazil accepts that in relation to "other" consumer goods, the costs of suspension would not be excessive. This represents an amount of US$182.8 million of imports of consumer goods from the United States, in relation to which it is undisputed that it would be practicable or effective to suspend concessions or other obligations. The margin between this figure and the amount of authorized countermeasures is small, in relative terms.

5.167 The first category of consumer goods for which Brazil considers that the costs of suspension concessions would be "serious and unreasonable" is "medicines and other medical or safety products." This category, according to Brazil, represents a value of US$909.5 million in annual imports (2007).428 The United States observes that medical sterilizers exported by Brazil exceed the imported amount from the United States in 2007 (US$4.6 million in exports, US$1.5 million in imports). The United States further notes that both China and Korea exported about twice as much antibiotics into Brazil as the United States in 2008, by value, and that China and Korea both substantially increased their share of exports to Brazil from the prior year (19.4 per cent to 33 per cent for China and 13 per cent to 31 per cent for South Korea). Brazil responds that a "big share" of purchases of antibiotics is made by the Ministry of Health after arduous price negotiations and following the rules of public procurement. Therefore, Brazil argues, finding other suppliers is not easy, and there are sometimes no alternatives at all. Moreover, Brazil argues, increasing the costs of health care provision will affect the welfare of the people.

5.168 We see merit in Brazil's argument with respect to the specificities of the market and purchasing practices for certain pharmaceutical products, which may make it difficult to freely switch suppliers with respect to such products. We also note that, even within a given category of medicines, such as "antibiotics", products are not necessarily freely interchangeable. Brazil has not provided exact indications, however, as to what proportion of its imports of "medicines and other medical or safety products" is subject to such purchasing practices or requirements, such that would allow us to ascertain what proportion of such imports would be adversely affected in the event of a suspension of concessions in this sector.429

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427 Brazil's responses to questions from the Arbitrator, question 140, para. 337.
428 See Exhibit Bra-754, reproduced above as Table 3.
429 We observe that even within this sub-category of consumer goods, there are items where the US share of imports is less than 20 per cent. If one adds up the value of these imports of medical goods, where the US share was below 20 per cent in 2007, the total amounted to US$193.7 million. The import share is not the only relevant consideration in evaluating the ease of sourcing alternative supplies, as domestic producers
5.169 Brazil also excludes imports in the "food" and "books" categories from the range of consumer products that could be considered for suspension of concessions. The United States considers that there is no reason to exclude such end use products from the range of products to which countermeasures could be applied.

5.170 With respect to **food products**, where US imports represent a total value of US$88.7 million, the United States notes for example that US$1.8 million of sugarless chewing gum is imported. The United States also indicates that under the "food" category, US$10.071 million of pears and quinces were imported from the United States in 2007, but imports from Argentina jumped from US$73 million in 2007 to US$98 million in 2008. Brazil argues that more Brazilians have sufficient income today to buy food items than before and that such social and economic development should be preserved at all costs. However, Brazil accepts that certain items classified as food, could be considered luxury products, though the amount and value of such products is rather limited.

5.171 Brazil therefore essentially argues that, except for a limited range of foods that can be considered as luxury products, food products as a whole should not be targeted because "more Brazilians have sufficient income" than in the past to buy food and this should be preserved. Naturally, if the suspension of concessions or other obligations were to deprive consumers of the opportunity to purchase food, it could legitimately be concluded that such suspension would not be "practicable or effective". However, this would only be the case if there was no opportunity to source the same or substitutable goods from other domestic or imported sources. Brazil has not explained, however, why this would be the case with respect to the entire category of food products.\(^{430}\)

5.172 With respect to **books**, for which it estimates the total value of imports from the United States at US$28.9 million, Brazil observes that increased tariffs would be highly detrimental to the policy goal of increased access to education and the improvement of education standards. Also, Article 150 VI (d) of the Federal Constitution exempts printed publications from import taxes, so that it is not practicable to take countermeasure on books. We note that books, almost by definition, are totally differentiated products, such that it may not be possible to assume that one title could easily be substituted for another. However, we also note that many books have a primarily entertainment rather than educational purpose.

5.173 Brazil also considers that the **automotive sector** (for which imports from the United States amount to US$62.6 million annually) should not be targeted. The United States observes that it accounts for less than 2 per cent of imports to Brazil of passenger cars in 2007-2008, and that auto parts, similarly, range from about 6 to about 8 per cent. Brazil responds that many limitations, including intra-company restrictions, apply to auto parts, making it virtually impossible or extremely costly for this industry to change suppliers. With respect to passenger cars, the main characteristic of trade in this sector, Brazil argues, is intra-company trade. Countermeasures on cars of "General Motor do Brasil", and "Ford do Brasil", for example, are unlikely to be well received by these subsidiaries and will affect their operations in Brazil. Moreover, imports of vehicles from the United States rely on long-established networks of authorized retailers and maintenance services, which make it virtually impossible for importers to easily switch suppliers. In addition, Brazil observes, car sales in Brazil fell more than 40 per cent in December 2008, and given the present crisis may also be potential suppliers. However, neither party has given us information on the US share of the market including domestic products.\(^{430}\)

\(^{430}\) We note that Brazil's imports of food from the United States in 2007 accounted for only 10 per cent of its entire imports of food. Adding up the value of those food imports where the US share was below 20 per cent in 2007 gives an amount of US$33.2 million. As noted above, the import share is not the only relevant consideration in evaluating the ease of sourcing alternative supplies, as domestic producers may also be potential suppliers. However, neither party has given us information on the US share of the market including domestic products.
affecting the car industry worldwide, the Brazilian Government has adopted several measures to improve the car market conditions including reducing the rates of federal tax on industrialized products. Brazil considers that it is therefore not viable to adopt measures that will distort the car market and prevent consumers from reaping the benefits of such incentives. Finally, Brazil notes that it wishes to maintain the conditions of competition and prices prevailing in Brazilian car market.\textsuperscript{431} We note that the US share of Brazil's imports in the automotive sector is only 2 per cent, which suggests that only limited competitive pressure could be exerted through such imports. However, we see merit in Brazil's arguments relating to the structure of trade in the automotive sector being such that a suspension could be harmful to Brazilian subsidiaries importing the cars. We also agree that auto parts from different manufacturers are not necessarily substitutable for each other. In light of these elements and in the absence of specific arguments from the United States disputing Brazil's description of the situation on the automotive market in Brazil, we accept Brazil's position that suspension in this sector would entail "serious and unreasonable costs".\footnote{Brazil's responses to questions from the Arbitrator, question 140, paras. 345-347.}

5.174 In the \textit{arms} category (annual value of imports from the United States estimated at US$0.6 million), the United States observes that Brazil has not indicated the extent to which these imported goods are to be used by the police, military, or others in the public service. In response, Brazil indicated that "a very high percentage" of imports are to be used by the police or military and the level of imports of these products is very low as shown by Exhibit Bra-754.\textsuperscript{432} This very general indication, however, expressed only in terms of "a very high percentage" does not allow us to ascertain exactly what amount of imports would fall into this category. The total annual value of imports from the United States is in any event very small.\footnote{Brazil's comments on US responses to questions from the Arbitrator, question 135, paras. 395-397.}

5.175 The United States also observes that exports of \textit{computers} from China to Brazil continue to outpace those from the United States, at 36.7 per cent in 2008 compared to 18.5 per cent. Brazil considers, however, that computers are in the category of "capital goods", and that it would be unreasonable and very costly to impose additional hurdles on the importation of information technology products, as increased costs of information technology products would have widespread effects on the whole economic structure and would have a direct negative impact on the welfare of Brazil's population.\textsuperscript{433} Since the United States has not sufficiently rebutted Brazil's classification of consumer goods, we do not consider the treatment of computers under this category.

5.176 Overall, in light of the above, we are not convinced that Brazil could plausibly conclude that suspension of concessions or other obligations would entail "serious and unreasonable costs" in the entirety of these various sectors. At best, Brazil has plausibly explained why suspension in relation to some imports within these categories of consumer goods might not be practicable or effective.

5.177 We are therefore not convinced that Brazil could plausibly determine, on the basis of the elements presented to us in these proceedings, that it is not practicable or effective to seek to suspend concessions or other obligations in relation to the entirety of the broad range of consumer products that it proposes to exclude from consideration, in particular in the areas where the US share of imports is relatively small.

5.178 In light of the elements presented to us as discussed above, we can accept Brazil's determinations, on the whole, in relation to books and the automotive sector. However, in relation to the categories of medical products, food and arms, we are not persuaded that Brazil could plausibly

\textsuperscript{431} Brazil's responses to questions from the Arbitrator, question 140, paras. 342-344.
determine, on the basis of the elements that it has presented to us alone, that suspension would entail "serious and unreasonable costs" in relation to the entire range of products in these sectors.

5.179 We find it useful, in this context, to consider the extent to which it may be expected that Brazil would in fact have alternative sources of supply at its disposal for these remaining product categories, as a further indication of whether Brazil could plausibly determine that it is not practicable or effective to suspend concessions or other obligations on such imports.

5.180 We recognize that within the broad categories of "medicines" and "food", certain products may not be readily substitutable. In particular, we recognize that some medicines, including those that are subject to proprietary rights, may need to be sourced from a specific supplier. We also recall our determination above that we see merit in Brazil's argument that certain medicines, such as antibiotics, are sourced through public procurement in such a manner that a change in supplier may be impracticable. We also note, however, that medical products and food, as a whole and taken together, represent the vast majority of Brazil's consumer goods imports from the United States and that they both contain a very broad range of products. The category "[m]edicines and other medical or safety products" thus include, for example, items such as "[t]ooth brushes, incl. dental-plate brushes". In these circumstances, we find that the US share of imports in these product categories as a whole may provide a useful indicator of the likelihood of other sources of supply being available, and thus of the level of substitutability on the market, for these product categories.

5.181 While there is no exact mathematical precision to this determination, we consider that, for the purposes of our assessment in these proceedings, a US share of imports of 20 per cent constitutes a reasonable threshold by which to estimate the extent to which Brazil may be able to find alternative sources of supply for these three remaining categories of consumer goods imports. This does not take into account the fact that the actual market share of US products might be smaller if domestic competition were to be included also, but we have not been provided any figures that would have allowed us to estimate that. In selecting this indicative threshold, we also bear in mind our earlier determinations in relation to other categories of imports. In particular, we recall that we have accepted Brazil's broad assertion that all capital goods, intermediate goods and other inputs to the Brazilian economy should be excluded from consideration. We have also accepted Brazil's overall classification of consumer goods, including the exclusion of computers from this category. At the same time, in future arbitrations of this nature, a Member arguing against the plausibility of another Member's determination of the practicability and effectiveness of taking countermeasures only within the goods sector might present a more detailed and scientific rebuttal of the determination made by that other Member. In applying a benchmark of 20 per cent, this Arbitrator is not intending to signal that this is the appropriate percentage to use in this kind of analysis in all cases.

5.182 The table below (Table 4) reflects the results of this assessment. It calculates the amount of Brazil's imports of consumer goods from the United States that could be the subject of countermeasures. It is based on data at the 8-digit level of the tariff headings within the relevant consumer good categories, as reflected in Brazil's own submission. The calculations proceed as follows. First, it excludes the value of imports of books and autos from the United States reflecting Brazil's determination that suspension of concessions in these sectors would entail "serious and unreasonable costs". Second, it includes imports of "other" consumer goods, which amount to US$182.8 million, reflecting Brazil's acceptance that in relation to "other" consumer goods, the costs of suspension would not be excessive. Finally, for food, pharmaceutical products and arms, it includes only the import value of those tariff lines where the US share in Brazil's imports is less than 20 per cent. For illustrative purposes, the table also includes the results of the same calculation for a 10 per cent and 30 per cent threshold.

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434 Tariff line 9603.21.00, Exhibit Bra-823.
435 Exhibit Bra-823.
Table 4: Amount of Brazil's imports of consumer goods from the United States that could be the subject of countermeasures
(Millions of dollars)

<table>
<thead>
<tr>
<th>Item</th>
<th>Threshold Applicable to Food, Medical Products and Arms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10%</td>
</tr>
<tr>
<td>-- Food</td>
<td>$11.0</td>
</tr>
<tr>
<td>-- Medical products</td>
<td>$15.3</td>
</tr>
<tr>
<td>-- Arms</td>
<td>$0.0</td>
</tr>
<tr>
<td>-- Books</td>
<td>$0.0*</td>
</tr>
<tr>
<td>-- Autos</td>
<td>$0.0*</td>
</tr>
<tr>
<td>-- Others</td>
<td>$182.8**</td>
</tr>
<tr>
<td>All Consumer goods</td>
<td>$209.1</td>
</tr>
</tbody>
</table>

* In respect of Books and Autos, no amount is included, to take into account our determination that we accept Brazil's position that suspension in these sectors would entail "serious and unreasonable costs".

** In respect of the "Others" category, the total amount of imports from the United States is included, as Brazil accepts that suspension in these sectors would not entail "serious and unreasonable costs".

Sources: Exhibit Bra-754 and Exhibit Bra-823.

5.183 Using the 20 per cent benchmark for the share of the US imports (and not taking into consideration the availability of domestic products that also can substitute imports), the results of this calculation suggest that, even if we were to assume that Brazil would choose not to suspend concessions in any category of imports of capital goods, intermediate goods and other inputs into its economy, and that it would also not suspend concessions in books or the automotive sector, it would still have at its disposal imports of other consumer goods from the United States amounting to a total value of at least US$409.7 million, from which to suspend concessions or other obligations. This would therefore still leave a value of US imports of consumer goods significantly in excess of US$294.7 million, to which suspension could be applied.436

5.184 We also recall that, of these US$409.7 million of consumer goods imports from the United States, Brazil itself concedes that the costs would not be "serious and unreasonable", up to a level of US$182.8 million. This means that Brazil would only in fact need to find an additional amount of imports of other goods from the United States to a total value of US$112.1 million to which to apply the suspension of concessions or other obligations, in order to apply the full level of suspension that it is entitled to, on imports of goods from the United States.

5.185 We further observe that the above calculation is made on the basis of the arguments and information provided by the parties. For the purposes of the calculation, we have accepted Brazil's

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436 We also note that Brazil accepts that suspension of concessions in relation to certain items that could be considered luxury products, amounting to a total of US$28 million, would probably not lead to excessive costs on the Brazilian economy. This amount may partially overlap with other categories, so we have not added it to the figures considered in this section.
determinations in relation to capital goods, intermediate goods and other inputs into the economy, and also in relation to various categories of consumer goods. However, our analysis does not imply that Brazil necessarily has to retaliate in the categories in question. It would in fact remain entitled to apply the suspension to any imports of goods that it chooses to target for suspension. Keeping in mind that the overall amount of imports from the United States to Brazil is US$18.7 billion, and that imports of consumer goods alone represent at least US$1.273 billion in total, we are confident that, on the basis of what was put before us in these proceedings and at current levels, Brazil has at its disposal a sufficient level and variety of imports from the United States, to which it could apply the suspension that it is entitled to, without incurring "serious or unreasonable costs" to its economy.

(iv) General considerations

5.186 Even in relation to the range of imports in relation to which Brazil considers that it could in principle be practicable to retaliate (which it estimates at US$182.8 million), Brazil also argues that such suspension would not be practicable or effective, due to its potential adverse welfare effects in an inflationary environment and also because any measures contrary to Brazil's development objectives should be avoided. Brazil also generally argues that the trade imbalance between the parties would render such suspension ineffective. We therefore now consider these aspects.

General economic and welfare costs

5.187 Brazil considers that "within the very limited scope of consumer goods that it has to target, the costs and welfare-reducing effects resulting from the adoption of countermeasures exclusively in that sector would render such an alternative not practicable".

5.188 As we have observed in paragraph 5.133 above, a consideration of the economic costs associated with the suspension is legitimate, but it is not just any economic costs associated with the suspension of concessions or other obligations in a given sector or agreement that would justify a conclusion that such suspension would be "not practicable or effective". Rather, the costs at issue would have to be of such extent and magnitude as to render the suspension "not practicable or effective". We have also already considered in detail Brazil's specific arguments relating to the economic and welfare costs of the suspension of concessions and other obligations on various categories of US imports. Even considering consumer goods alone, our determinations above suggest that, at current levels, Brazil has at its disposal a total value of at least US$409.7 million of imports of goods from the United States, to which it could apply a suspension.

5.189 This confirms to us that, in principle, Brazil has at its disposal sufficient imports of goods from the United States and elsewhere in order to allow it to suspend concessions on a total value of US$294.7 million of imports from the United States without incurring significant costs to its economy. We further emphasize that nothing would compel Brazil to apply the suspension of concessions or other obligations "exclusively in that sector". As we have observed in paragraph 5.185 above, Brazil would be entitled to apply the suspension to any imports of US goods that it chooses to target for suspension. As we also observed above, keeping in mind that the overall amount of imports from the United States to Brazil is of US$18.7 billion, and that imports of consumer goods alone represent at least US$1.273 billion, we are confident that, on the basis of what was put before us in these proceedings and at current levels, Brazil has at its disposal a sufficient level and variety of imports from the United States, to which it could apply the suspension that it is entitled to, without incurring "serious or unreasonable costs" to its economy.

437 Based on Exhibit Bra-754.
Inflationary pressure

5.190 Brazil also argues that the adoption of countermeasures exclusively in the small range of consumer goods that it has to target would add to inflationary pressures at a time when increasing prices have pointed to "a worrying inflationary scenario" and would limit access of Brazilian consumers to these imported goods, negatively affecting Brazil's economy and the welfare of its population.  

5.191 As evidence of the threat of inflation, Brazil points out that all its price monitoring agencies have recorded rising inflation in 2008, whichever measuring standard is used. As an example, it claims that the annualized change in the Broad Consumer Price Index (IPCA), which is used as the standard inflation index by the Brazilian Central Bank, reached 5.9 per cent in 2008. Brazil contends that this surpassed the inflation target of 4.5 per cent set by the Central Bank.

5.192 As a result of these strong inflationary pressures, it claims that the Brazilian Central Bank has been compelled to consistently raise basic interest rates since the beginning of 2008. After four consecutive increases, yearly basic interest rates reached 13.75 per cent in September 2008, making Brazil one of the countries with the highest real interest rates in the world.

5.193 The United States does not dispute that there are costs, including the risk of inflation, from imposing countermeasures on merchandise goods. But it argues that countermeasures are by definition counter to WTO disciplines. Furthermore, given the size and diversity of Brazil's economy, and the availability of goods from other sources or from Brazil itself, it claims that Brazil has many tools at its disposal to apply countermeasures within the goods sector.

5.194 Brazil has provided sufficient evidence to show that the threat of inflation seriously concerns Brazilian policymakers. The United States has not disputed the magnitude of the inflation rate in the country nor of the successive steps taken by the Central Bank to increase the interest rate. However, we believe that while the risk of price increases from applying countermeasures on merchandise goods exist, it does not rise to a level where Brazil has no room to apply countermeasures on merchandise goods.

5.195 The size of the countermeasures, at current levels, is not large relative to the value of consumer goods imports from the United States. We also note that the inflation index is based on domestic consumption, which is made up predominantly of domestically-produced goods. This suggests that countermeasures on merchandise goods imports may only have a limited impact on inflation given the composition of the basket of goods that enter into the calculation of the inflation index.

Development objectives, imbalance in trade relations and political influence

5.196 Brazil further argues that any measures that are contrary to the objectives of a developing country to ensure steady and sustainable development will necessarily be costly and impracticable by definition, and that the significantly unbalanced nature of the trade relations between Brazil and the United States, and the considerable economic differences between the two countries, render the suspension of concessions and other obligations under trade in goods alone neither practicable nor effective as a response to the US failure to comply with its obligations.

438 Brazil's written submission, para. 487.
439 Brazil's written submission, para. 488.
440 Brazil's written submission, para. 489.
441 US responses to questions from the Arbitrators, question 68, para. 206.
5.197 Finally, Brazil also argues that suspension in the area of trade in goods alone may not have sufficient political influence to press for the United States' withdrawal of the billions of dollars it pays annually in subsidies or to remove their adverse effects, and that, therefore, they are not "effective" for the purpose of encouraging compliance.

5.198 We agree that a complaining Member seeking to suspend concessions or other obligations should not be required to act against its own interests in applying such suspension. However, our findings above suggest to us that Brazil has at its disposal a sufficient range of imports of goods, including consumer goods, from the United States, so as to enable it to suspend concessions in the area of trade in goods alone, without causing itself such economic harm as to render such suspension "not practicable or effective". In the absence of other specific detailed arguments as to why such suspension would otherwise adversely affect Brazil's interests, we conclude that, on the basis of the elements presented to us and at current levels, Brazil could not conclude that suspension in trade in goods alone would not be "practicable or effective". Further, Brazil's insistence that its countermeasures must have "sufficient political influence" from the perspective of the United States to press for the withdrawal of the subsidies and the removal of their adverse effects is misplaced. "Effectiveness" relates to the ability of a Member to have recourse to the authorized remedy, such that it can serve to induce compliance. However, the preference of a Member for a particular type of countermeasure, because it would constitute a more powerful form of persuasion in a political sense, is not a relevant consideration for an arbitrator in these proceedings.

5.199 Our conclusion is not modified by the "significantly unbalanced nature of the trade relations between Brazil and the United States". As we have observed above, the elements presented to us do not suggest that Brazil's dependence on US imports is such that it could not find at least US$294.7 million worth of imports of goods from the United States in relation to which it would have sufficient alternative domestic or imported sources of supply at its disposal, so as to suspend concessions effectively. In addition, the fact that exports to Brazil only represent a very small proportion of US exports generally does not, in itself, necessarily imply that countermeasures applied to some of these goods would not be "effective" for the purposes of inducing compliance. It would be up to Brazil to identify those US exports in relation to which it would apply the suspension, and to do this in a manner that would make such measures as effective as possible within the limits of the permissible level of countermeasures. In light of the fact that the total value of imports to Brazil from the United States, at current levels, significantly exceeds the level of permissible countermeasures, we see no reason to assume that this would not provide a sufficient margin or discretion for Brazil to target accordingly the specific products to which suspension would be applied.

(v) Overall conclusion

5.200 In light of all the above, we conclude that, on the basis of the elements presented to us and at current levels, Brazil could not plausibly have reached the conclusion that it is not practicable or effective to suspend concessions or other obligations in trade in goods alone, even if it had considered the "necessary facts", i.e. taking into account a level of permissible countermeasures not exceeding US$294.7 million.

5.201 We recall, however, that the level of countermeasures that we have determined to be permissible in these proceedings is variable. We have based our determinations above on the level of countermeasures as calculated on the basis of FY 2006 and on the basis of Brazil's imports of consumer goods in the year 2007. Given the volume and composition of Brazil's imports of consumer goods in the year 2007, we determined that there was at least US$409.7 million worth of Brazil's imports of consumer goods from the United States that could be the subject of countermeasures ("threshold"). However, in the event that the level of countermeasures that Brazil would be entitled to
in a given year\textsuperscript{442} should increase to a level that would exceed this threshold, updated for the same year in a manner described in Section V.C.6 below to account for the change in Brazil's total imports from the United States, then, we find that it would be concluded, on the basis of the elements presented to us, that the suspension of concessions or obligations applied to trade in goods alone would not be "practicable or effective" within the meaning of Article 22.3(c) of the DSU.

5.202 In light of this determination, we must consider further Brazil's determination that "the circumstances are serious enough" within the meaning of Article 22.3 and its consideration of the elements of subparagraph (d) of Article 22.3.

4. Whether "the circumstances are serious enough"

(a) Main arguments of the parties

5.203 Brazil says that, with respect to prohibited subsidies, the granting or maintenance of such subsidies constitutes in itself, at the very least, a strong indication that "circumstances are serious enough". In addition, the seriousness of the breach in the present case is compounded by the specific characteristics of the subsidy at issue. The GSM 102 programme and the guarantees granted thereunder constitute recurrent export subsidies, granted year after year in connection with billions of dollars in agricultural exports in violation of US WTO obligations. Brazil notes that these subsidies have been granted since 1981 and have been distorting international markets on a continuous and cumulative basis for the whole period covered by this dispute (from 1999 up to 2009). The statutory framework of the programme ensures that it is offered continuously and requires that billions of dollars in guarantees be made available every year. Brazil argues that the subsidies are particularly pernicious in light of their stated objective and performance measure, to open high risk markets to US commodities and establish the dominance of US exporters by means of prohibited export subsidies, to the detriment of competing exporters. In a single day, on 6 October 2008, the USDA received applications for ECGs worth US$3.5 billion. According to a director of CoBank, this enormous amount of applications is a result of "the credit markets seizing up".\textsuperscript{443}

5.204 With respect to the actionable subsidies, Brazil considers that the sheer amount of the subsidies granted under the ML and CCP programmes, which have been found to cause adverse effects in the form of significant price suppression in the world market; the repeated refusal of the United States to comply, since 2005, with the rulings and recommendations adopted by the DSB; and the concrete expectation, confirmed in the 2008 Farm Bill, that the same design and structure for the granting of the same subsidies will be maintained in the future also demonstrate that the circumstances are serious enough to justify the types of countermeasures proposed by Brazil.\textsuperscript{444}

5.205 Brazil says that these subsidies provide a pernicious predictability for US producers and exporters – who may take for granted that they will enjoy an artificial competitive advantage vis-à-vis other competitors every year – and for producers of the other Members – who have their production and investment decisions negatively affected in the long term by the chilling effect caused by the permanent availability of the US subsidies. Brazil argues that these subsidies constitute a structural element of the world markets for the wide range of products they support, and that the current credit crisis only heightens their distorting effects. Producers and exporters all over the world, who are struggling to find credit for their operations, have to compete with US producers and exporters that are cushioned from the effects of the crisis by the unlawful subsidies, as the US$5.5 billion worth of

\textsuperscript{442} It is understood that this amount is to be calculated taking into account the entirety of the level of countermeasures that Brazil is entitled to at that point in time, arising both from the application of the formula identified in paragraph 6.5(a) and from the Decision by the Arbitrator contained in WT/DS267/ARB/2.

\textsuperscript{443} Brazil's written submission, para. 530.

\textsuperscript{444} Brazil's written submission, para. 530.
ECGs under the GSM 102 available in FY 2008 strikingly reminds us. In Brazil's view, these features render the circumstances certainly no less than serious enough.445

5.206 In Brazil's view, the fact that the United States has revived in the 2008 Farm Bill, under a slightly different disguise, the only subsidy it had eliminated as part of its implementation of the recommendations and rulings of the DSB in the present case – the "Step 2" programme – constitutes additional indication that the circumstances are serious enough.446

5.207 The United States argues that "circumstances are serious enough' may refer to the potential consequences for the Member of suspending concessions in the same sector and agreement, or the potential consequences of forgoing the right to suspend concessions".447 In the circumstances of this dispute, where Brazil's proposal for countermeasures does not substantiate any adverse effect on Brazil from the measure at issue, it is not clear, in the United States' view, what consequences these would be or whether they would be serious at all.448 In the United States' view, Brazil's agricultural sector, and its cotton producers in particular, have been effective competitors worldwide even with the existence of GSM 102, marketing loan payments and countercyclical payments and without any countermeasures, and Brazil's cotton exports have reached record levels in recent years.449

5.208 Brazil responds that the United States' erroneous legal analysis first equates the meaning of "circumstances" with that of "potential consequences" and then moves on to argue that "potential consequences" means trade damage to Brazil. In Brazil's view, however, there is no legal basis to argue that in selecting the type of countermeasures Brazil must show "any adverse effect on Brazil from the measures at issue" to enable an assessment of whether circumstances are serious enough. In any event, Brazil argues, as regards actionable subsidies, the existence of adverse effects of the measures at issue has already been determined by two panels and the Appellate Body. Brazil notes that with respect to the GSM 102 subsidies, the two panels and the Appellate Body found that they constitute prohibited subsidies – arguably the most egregious violation of WTO disciplines, as can be inferred from the special rules applicable to them – and that they should have been withdrawn without delay. Hence, Brazil argues, even under the US flawed and convoluted logic, circumstances would be serious enough because the consequences of maintaining the subsidies in place could not be anything less than serious, as is made clear by the findings, rulings and recommendations of the panels and the Appellate Body in this dispute.450

5.209 Brazil considers that Article 22.3(c) of the DSU can encompass the impact on Brazil of applying countermeasures under trade in goods alone, as well as broader circumstances which surround Brazil's consideration of retaliatory action against the United States' failure to comply with the DSB's recommendations and rulings in this dispute, such as the demonstrated lack of willingness of the United States to comply.451

5.210 In the view of the United States, the circumstances surrounding potential countermeasures in services and intellectual property are also a factor. Brazil has not detailed how it might impose such countermeasures; and in fact it is not obligated to do so at this time. Effectively, the United States argues, if Brazil is authorized to impose countermeasures under these other Agreements it would

445 Brazil's written submission, para. 531.
446 Brazil's written submission, para. 532.
447 US responses to questions from the Arbitrator, question 136, para. 174.
448 US responses to questions from the Arbitrator, question 136, para. 174.
449 US responses to questions from the Arbitrator, question 136, para. 175.
450 Brazil's comments on US responses to questions from the Arbitrator, question 136, paras. 401-402.
451 Brazil's comments on US responses to questions from the Arbitrator, question 136, para. 403.
cause an additional layer of uncertainty for these sectors, with potentially devastating consequences.\textsuperscript{452}

5.211 Brazil welcomes the United States' acknowledgement that Brazil "is not obligated" to detail how it might impose countermeasures with respect to services and intellectual property rights.\textsuperscript{453} Brazil also notes that the United States, by referring to "potentially devastating consequences,"\textsuperscript{454} seems to agree with Brazil's view that countermeasures under the TRIPS Agreement and the GATS would be much more effective within the meaning of Article 22.3 of the DSU than countermeasures under trade in goods alone.\textsuperscript{455}

(b) Analysis by the Arbitrator

5.212 Under Article 22.3(c) of the DSU, in order for suspension of obligations to be permissible, the complaining party is required to have determined that "the circumstances are serious enough", in addition to having determined that suspension under the same agreement is "not practicable or effective".

5.213 We recall our determination in paragraph 5.84 above that an assessment of whether "the circumstances are serious enough" is necessarily a case-by-case assessment depending on the specific circumstances of the case.

5.214 The United States argues that "circumstances are serious enough' may refer to the potential consequences for the Member of suspending concessions in the same sector and agreement, or the potential consequences of forgoing the right to suspend concessions".\textsuperscript{456} In Brazil's view, Article 22.3(c) of the DSU can encompass the impact on Brazil of applying countermeasures under trade in goods alone, as well as broader circumstances which surround Brazil's consideration of retaliatory action against the United States' failure to comply with the DSB's recommendations and rulings in this dispute, such as the demonstrated lack of willingness of the United States to comply.

5.215 As we have determined in paragraph 5.83 above, an assessment of whether circumstances are "serious enough" would legitimately include a consideration of the elements identified in subparagraph (d) of Article 22.3, namely the trade in the sector in which a violation has been found and its importance to the complaining party (in this case, trade in goods, including trade in cotton and other products affected by the measures at issue), as well as "the broader economic elements related to the nullification or impairment and the broader economic consequences of the suspension". At the same time, the assessment is not limited to these factors, and may include other elements, depending on the specific "circumstances" of the case. We therefore agree with Brazil that a determination of whether "the circumstances are serious enough" may in principle encompass both the impact on Brazil of applying countermeasures under trade in goods (i.e. "the broader economic consequences of the suspension") and "broader circumstances which surround Brazil's consideration of retaliatory action" against the US failure to comply with the DSB's recommendations and rulings.

5.216 Brazil considers that a number of elements render the circumstances "serious enough" in this case, including the granting or maintenance by the United States of the prohibited subsidies, the fourfold increase in the transactions supported by the GSM 102 programme in 2009: the continued granting of actionable subsidies and the enactment of 2008 Farm Bill. In Brazil's view, these facts show that the United States has no intention of complying with the DSU recommendations and rulings.

\textsuperscript{452} US responses to questions from the Arbitrators, question 136, para. 176.
\textsuperscript{453} US response to questions from the Arbitrators, question 136, para. 176.
\textsuperscript{454} US response to questions from the Arbitrators, question 136, para. 176.
\textsuperscript{455} Brazil's comments on US responses to questions from the Arbitrator, question 136, para. 399.
\textsuperscript{456} US responses to questions from the Arbitrator, question 136, para. 174.
rulings. Brazil further argues that the design and structure of the subsidies at issue is such as to create "an artificial competitive advantage for US operators vis-à-vis other competitors every year" to the detriment of producers of other Members "who have their production and investment decisions negatively affected in the long term by the chilling effect caused by the permanent availability of the US subsidies". Brazil argues that these subsidies constitute "a structural element of the world markets for the wide range of products they support", and that the current credit crisis only heightens their distorting effects. Brazil further considers that the conditions that render the circumstances "serious enough" also include the potential effects on Brazil if countermeasures are confined to the goods sector, which will lead to disproportionate costs to the Brazilian economy and to the welfare of its population.457

5.217 In our view, Brazil's determination that the circumstances are serious enough within the meaning of Article 22.3(c) of the DSU is reasonable in light of the circumstances of the case.

5.218 In this regard, we recall some salient aspects of the findings of the original and compliance panels and of the Appellate Body in relation to the subsidies concerned:

"As we have just indicated, several of the United States subsidies are directly linked to world prices for upland cotton, thereby numbing the response of United States producers to production adjustment decisions when prices are low. We have readily available information on the record showing us that the price-contingent subsidies in question involve very large amounts of United States government money benefiting United States upland cotton. In our view, the collective operation of these subsidies was akin to a very large, counter-cyclical, deficiency payment laced with additional enhancements. We believe that the structure, design and operation, particularly of the price-contingent subsidies, constitutes strong evidence supporting a finding of price suppression."458 (emphasis added)

"Given that in most recent years actual market prices have been lower than expected market prices at the time of planting and that the adjusted world price has been below the marketing loan rate, the Panel considers that it is reasonable to conclude that the fact that US cotton producers know that they will receive marketing loan payments whenever the adjusted world price is below the marketing loan rate continues to be an important factor affecting the level of acreage planted to cotton (and thus the level of production), even when, as in MY 2006, the expected market price for upland cotton at the time of planting is higher than the marketing loan rate. The Panel also notes in this regard that according to FAPRI and USDA data, the projected amount of marketing loan payments in MY 2006 is very significant."459 (emphasis added, footnote omitted)

"First, we recall that the original panel noted that the CCC has access to funds from the US Treasury and benefits from the full faith and credit of the US Government. This is still the case, and were the GSM 102 programme to incur massive losses, it would have access to additional funds from the US Treasury."460 (emphasis added, footnote omitted)

"The Panel considers, in light of the approach taken by the panel and Appellate Body in the original proceeding, that in determining whether the magnitude of the subsidies

457 Brazil's comments on US responses to questions from the Arbitrator, question 136, paras. 404-405.
458 Panel Report, para. 7.1308. See also para. 7.1349 of that report.
at issue in this proceeding supports a finding that the effect of these subsidies is significant price suppression, it is necessary to examine this factor in relation to other factors. Thus, the relevance of the magnitude of the subsidies in this connection must also be assessed in light of our analysis above of the structure, design and operation of the subsidies. We recall, in this respect, our conclusion regarding the important revenue-stabilizing effect of these mandatory, price-contingent subsidies. In the latter regard, the evidence before us indicates that marketing loan and counter-cyclical payments play a significant role in stabilizing the revenues of US upland cotton producers. The share of marketing loan payments and counter-cyclical payments in total revenues of US upland cotton producers was 35 per cent in MY 2004 and 27 per cent in MY 2005.\(^{461}\) (emphasis added, footnotes omitted)

"Table 6B shows market revenue from cotton lint, total costs (less ginning costs) and the difference between market revenue and total costs on a per acre basis in MY 2002-2006. Over the period examined, US cotton producers' market revenue exceeded total costs of production twice, in MY 2003, when cotton prices were at their highest since MY 1997, and also in the year immediately following that. In other marketing years, total costs of production exceeded market revenue, at times by very huge margins. In MY 2002, for example, total costs exceeded market revenue by 84 per cent. Data provided by Brazil for MY 2006 suggests that total costs will continue to exceed market revenue. The gap is expected to be about 56.25 dollar per acre, which would be equivalent to about 14.7 percent of US cotton producers' market revenue in that marketing year. Cumulated over the five marketing years 2002-2006, US cotton farmers' costs of production have exceeded market revenues by an average of 227.49 dollars per acre.\(^{462}\) (emphasis added)

"In conclusion, the Panel finds that there exists a significant gap between the total costs of production of US upland cotton producers and their market revenue. The Panel considers that this gap between costs and revenue, when analyzed in conjunction with the magnitude of the marketing loan and counter-cyclical subsidies and their importance as a share of the revenue of US cotton producers, supports the proposition that the marketing loan and counter-cyclical payments are an important factor affecting the economic viability of US upland cotton farming. The Panel therefore also considers that without these subsidies the level of US upland cotton acreage and production would be considerably lower.\(^{463}\) (emphasis added, footnotes omitted)

"We do not see a contradiction between the fact that United States shares of world production and exports of upland cotton have remained stable at consistently high levels between MY 2002 and MY 2007 and the Panel's findings of substantial proportionate influence of the United States in the world market for upland cotton. This is because stable high United States shares of world production and exports of upland cotton could be seen as evidence of the fact that the United States continued to exert a substantial proportionate influence in the period examined by the Panel, just as it had during the period examined by the original panel. We also observe that the Panel specifically noted that this element supported its finding of significant price suppression when "analysed in the light of the totality of the evidence". Therefore, we do not consider that the Panel erred in finding that the United States exerts a

substantial proportionate influence on the world market for upland cotton.\textsuperscript{464}

We are not persuaded that, as Brazil argues, the very granting of the subsidies at issue would be sufficient to conclude that the circumstances are "serious enough". It is inherent in the situation at hand that a violation has taken place and that compliance has not been achieved in a timely manner. This circumstance alone, which is common to all cases in which suspension of obligations is sought under the DSU, would not in our view justify the conclusion that the circumstances are "serious enough". However, we agree with Brazil that the specific design and structure of the subsidies at issue, as they have been maintained over a significant period of time, is such as to have created an artificial and persisting competitive advantage for US producers over all other operators, and that this has a significant trade-distorting impact, not just on the US domestic market, but on the world market in these products.

The United States responds that Brazil has in fact remained very competitive in the agricultural sector, including cotton, even with the US subsidies in place and without countermeasures. We are not persuaded, however, that this consideration alters the essence of the situation. The fact that Brazil may have remained competitive in spite of the trade-distorting conditions arising from the granting and maintenance of the subsidies at issue does not in essence modify the fact that these subsidies have a trade-distorting impact on the world market for cotton and the other products affected by them. Given the structure and design of the programmes at issue, and in light of the time period over which they have been in place, these distortions are virtually, as Brazil puts it, a "structural" element of the world market for the affected products, including cotton, as long as they remain available. Our earlier determinations in relation to the level of permissible countermeasures suggest that these trade-distorting effects are not insignificant, including on Brazil. Furthermore, these impacts are felt not only on the US market but on other markets for the products at issue. In addition, as Brazil observes, in times of credit crisis, this trade-distorting impact will be further amplified, at least in so far as the GSM 102 programme is concerned. These considerations, in our view, support the conclusion that "the circumstances are serious enough".

In addition, Brazil observes that the disproportionate adverse impact of the suspension of concessions or other obligations on its economy, if applied only to trade in goods, also contributes to the "circumstances" being "serious enough". We agree that this may also be a relevant consideration in such determination.\textsuperscript{465} We have considered extensively Brazil's arguments concerning the potential adverse impact on its economy of a suspension applied to trade in goods alone, in reviewing whether it is "practicable or effective" for Brazil to seek suspension in trade in goods alone. In this context, we concluded that, to the extent that the level of countermeasures that Brazil would be entitled to take would exceed a certain threshold, such suspension would be "not practicable or effective". These considerations also inform the determination of whether "the circumstances" would be "serious enough" to justify cross-agreement suspension. If the threshold were reached, such that suspension of concessions or other obligations under the same sector or agreement would not be practicable or effective for Brazil, this would also directly contribute to the circumstances being "serious enough" to justify recourse to suspension under another agreement.

In light of all the above, and on the basis of the elements presented to us, we find that Brazil could reasonably determine that "the circumstances are serious enough" within the meaning of Article 22.3(c) of the DSU.

\textsuperscript{464} Appellate Body Report, US – Upland Cotton (Article 21.5 – Brazil), para. 446.

\textsuperscript{465} We note in this respect the observation of the arbitrator on US – Gambling that the circumstances that justified a determination that "the circumstances are serious enough" in that case could be "directly related to the practicability and effectiveness of suspension under the agreement in which the violation was found (in that case, the GATS). See Decision by the Arbitrator, US – Gambling (Article 22.6 – US), para. 4.115.
5.223 In light of our determinations in the previous section above, we note that the two conditions foreseen in Article 22.3(c), i.e. a determination that "it is not practicable or effective" to seek suspension under the same agreement and a determination that "the circumstances are serious enough" would only be met simultaneously in this case whenever the threshold identified in paragraph 5.201 above would be exceeded.

5.224 The United States has suggested that the potential implications of a suspension of obligations under the TRIPS Agreement is also a consideration to be taken into account, in light of the "layer of uncertainty" that may arise from such suspension in the sectors concerned and the "potentially devastating consequences" of such suspension. We recognize that there may be legitimate considerations to which the complaining Member should be attentive in applying any suspension of obligations under the TRIPS Agreement.466 We are not persuaded, however, that this is a relevant consideration for us to take into account in reviewing the question of whether the "circumstances are serious enough" to justify suspension of obligations under that agreement. We first note that there is no general hierarchy in the DSU as between suspension in various sectors or under various WTO Agreements, such that we should assume that a suspension of obligations under the TRIPS Agreement would be inherently more detrimental to the responding Member than another. The only hierarchy to be found in the DSU in this respect is relative to the sector and agreement in which the violation has been found (thus, in a case involving a TRIPS violation, same-sector suspension would have to be sought first under the TRIPS Agreement). We also note that the level of suspension authorized will be the same whatever sector or agreement it may apply to. We further note that, as the United States itself has observed in these proceedings, Brazil is not obligated at this time to explain in detail how it might impose such countermeasures. This question is, in our view, beyond the scope of this enquiry, and it is not for us to speculate how a suspension of certain obligations under the TRIPS Agreement might be applied by Brazil or to assume that it would have more detrimental consequences than a suspension in another sector or agreement. In fact the United States itself does not explain what "devastating consequences" it is referring to.

5.225 We make no determination in relation to the United States' willingness or unwillingness to comply with the recommendations and rulings at issue. We assume that the United States intends in good faith to promptly comply with these recommendations and rulings. We have also not based our findings on Brazil's arguments relating to the adoption of the 2008 Farm Bill, as such, in relation to which we have made no specific determinations.

5. Brazil's consideration of the elements under subparagraph (d) of Article 22.3

5.226 Subparagraph (d) of Article 22.3 of the DSU requires the complaining party to "take into account", in applying the principles of subparagraphs (a) to (c), two elements:

"(i) the trade in the sector or under the agreement under which the panel or Appellate Body has found a violation or other nullification or impairment, and the importance of that trade to [the complaining] party

(ii) the broader economic elements related to the nullification or impairment and the broader economic consequences of the suspension of concessions or other obligations."

5.227 As we have determined in Section V.C.1(c) above, in the circumstances of this case, this means that what is to be taken into account is "the trade" in all goods under the trade in goods agreement, that is, trade in goods generally, and its importance to Brazil, as well as "the broader economic elements" relating to the nullification or impairment arising for Brazil from the subsidies at

466 See para. 5.233.
issue and the broader economic consequences of the suspension, including a consideration of the economic consequences of the suspension.

5.228 As we have discussed extensively in the preceding sections above, Brazil's determinations that it was not practicable or effective for it to seek to suspend obligations in trade in goods alone and that the circumstances are serious enough, were based importantly on a consideration of the importance to its economy of its trade in goods with the United States, and of the potential consequences of the proposed suspension, which it considers would be disproportionately detrimental to its economy if applied solely to trade in goods. In addition, Brazil has also taken into account the economic impact of the measures on the market of the products affected by the measures at issue.

5.229 In light of these elements, we are satisfied that Brazil has taken into account the relevant elements under subparagraph (d) of Article 22.3 in accordance with the requirements of that provision.

6. Conclusion

5.230 In light of our determinations above, we find that in the event that the level of countermeasures that Brazil would be entitled to in a given year would increase to a level that would exceed the threshold identified in paragraph 5.201 above, updated for the same year in a manner described in the next paragraph to account for the change in Brazil's total imports from the United States, then Brazil would be entitled to suspend certain obligations under the TRIPS Agreement and/or the GATS as identified in its request pursuant to Article 4.10 of the SCM Agreement and Article 22.2 of the DSU, with respect to any amount of permissible

467 It is understood that this amount is to be calculated taking into account the entirety of the level of countermeasures that Brazil is entitled to at that point in time, arising both from the application of the formula identified in paragraph 6.5(a) and from the Decision by the Arbitrator contained in WT/DS267/ARB/2.

468 See WT/DS267/21. Brazil identifies the following obligations in its request:

With respect to the TRIPS Agreement:

"The following sections of Part II of the Agreement on Trade-Related Aspects of Intellectual Property Rights:

Section 1: Copyright and related rights
Section 2: Trademarks
Section 4: Industrial designs
Section 5: Patents
Section 7: Protection of undisclosed information."

With respect to the GATS:

"horizontal and/or sectoral concessions and obligations for all sectors contained in Brazil's Schedule of Specific Commitments (GATS/SC/13) under the General Agreement on Trade in Services. Those sectors are:

1. Business Services
2. Communication Services
3. Construction and Related Engineering Services
4. Distribution Services
7. Financial Services
9. Tourism and Travel Related Services
11. Transport Services"
countermeasures applied in excess of that figure. In any subsequent year where the level of
countermeasures that Brazil would be entitled to falls below this threshold, updated to account for the
change in Brazil's total imports from the United States, Brazil would be entitled to suspend
concessions or other obligations only in trade in goods.

5.231 As stated in the previous paragraph, in order to determine whether suspension of certain
obligations under the TRIPS Agreement or the GATS is permissible in a given year, the threshold
should be updated to account for the change in Brazil's total imports from the United States. For
year 2008, for example, the updated amount of the threshold would be equal to US$409.7 million
multiplied by \((1 + g_{2008})\), where \(g_{2008}\) is the percentage change in the value of Brazil's total imports
from the United States between the years 2007 and 2008, or in the absence of the trade data for years
2007 and 2008, the percentage change in the value of Brazil's total imports from the United States
based on the last available annual trade statistics.\(^{469}\) In general, the following difference equation and
initial condition shall determine the updated amount of the threshold:

\[
T_{t+1} = T_t \times (1 + g_{t+1}) , \quad T_{2007} = \text{US$409.7 million}
\]

where:

\(T_{t+1}\)=threshold value in year \(t+1\);

\(T_t\)=threshold value in year \(t\);

\(g_{t+1}\) = percentage change in the value of Brazil's total imports from the United States between the
years \(t\) and \(t+1\), or in the absence of the trade data for years \(t\) and \(t+1\), the percentage change in the
value of Brazil's total imports from the United States based on the last available annual trade
statistics.

5.232 The "same" year shall mean that the amount of countermeasures, calculated based on
GSM 102 transactions in, for example, fiscal year 2008 (1 October 2007 to 30 September 2008) and
the fixed amount from the Decision by the Arbitrator contained in WT/DS267/ARB/2, shall be
compared to the value of the threshold in year 2008 (1 January 2008 to 31 December 2008).

5.233 In light of our determination that Brazil, may, in application of the above, be entitled to
suspend certain obligations under the TRIPS Agreement and the GATS, we note the remarks made by
the arbitrators on EC – Bananas III (Ecuador) (Article 22.6 – EC), with respect to the suspension of
obligations under the TRIPS Agreement,\(^{470}\), which were also noted by the arbitrator on US – Gambling
(Article 22.6 – US).\(^{471}\) We consider these remarks to be relevant also to this case, in that the same
considerations will be pertinent to the manner in which Brazil might implement a suspension of its
obligations under the TRIPS Agreement in this case.

5.234 In light of the fact that the level and form of permissible countermeasures may vary over time,
we urge Brazil, if and when it submits a revised request for authorization to suspend concessions or
other obligations to the DSB in accordance with this Decision, to be as specific as possible about the
terms of the measures to be adopted, so as to promote transparency and predictability in this process.

\(^{469}\) Brazil shall use UN Comtrade data for the purpose of calculating the percentage change of its total
imports from the United States.

\(^{470}\) Decision by the Arbitrators, EC – Bananas III (Ecuador) (Article 22.6 – EC), Section V,
paras. 139-165.

\(^{471}\) Decision by the Arbitrator, US – Gambling (Article 22.6 – US), para. 5.11.
5.235 We also take note of the undertaking by Brazil in its request under Article 4.10 of the SCM Agreement and Article 22.2 of the DSU, that:

"Every year, Brazil will notify to the DSB the amount and the form of the suspension of concessions and other obligations in the light of data concerning the operation of the identified programmes in the most recent concluded marketing and fiscal year, as applicable."472

5.236 Finally, like previous arbitrators473, we also note that the United States may have recourse to the appropriate dispute settlement procedures in the event that it considers that the level of concessions or other obligations suspended by Brazil exceeds the level of countermeasures we have determined to be "appropriate" in this case.

VI. CONCLUSIONS AND AWARD

6.1 For the reasons set out above, the Arbitrator determines that the annual level of "appropriate countermeasures" in relation to the GSM 102 payments is as described in paragraphs 4.231-4.244, 4.253-4.255 and 4.267-4.277 above (also see Annex 4). For FY 2006, this amounts to US$147.4 million.

6.2 We have also determined that Brazil has not followed the principles and procedures of Article 22.3 of the DSU in determining that it is not practicable or effective to suspend concessions or other obligations in trade in goods and that, at current levels, it could not have plausibly determined that it is not practicable or effective to suspend concessions or other obligations in trade in all goods under the Agreements contained in Annex 1A of the WTO Agreement. We have also found, however, that, in the event that the level of countermeasures that Brazil would be entitled to in a given year474 should increase to a level that would exceed a threshold, as identified in paragraph 5.201 above, updated for the same year in a manner described in paragraphs 5.231-5.232 to account for the change in Brazil's total imports from the United States, then, it could be reasonably concluded that it is not practicable or effective for Brazil to suspend concessions or other obligations on trade in goods alone. We have also determined that the circumstances are serious enough and that Brazil has complied with the requirements of subparagraph (d) of Article 22.3.

6.3 In light of these findings, we find that Brazil would be entitled to suspend certain obligations under the TRIPS Agreement and/or the GATS, with respect to any amount of permissible countermeasures applied in excess of the threshold identified in paragraph 5.201 above, updated for the same year in a manner described in paragraphs 5.231-5.232 to account for the change in Brazil's total imports from the United States. In any subsequent year where the level of countermeasures that Brazil would be entitled to falls below this threshold, updated to account for the change in Brazil's total imports from the United States, Brazil would be entitled to suspend concessions or other obligations only in trade in goods.

6.4 We have also found that, in determining whether the level of countermeasures that Brazil would be entitled to has increased to an amount that would allow it to suspend certain obligations under the TRIPS Agreement and/or the GATS, the data in Table 4 shall be updated to reflect the amount of imports in the same year, as described in paragraph 5.232 above.

472 WT/DS267/21.
473 Decisions by the Arbitrators, EC – Hormones (US) (Article 22.6 – EC), para. 82; US – 1916 Act (EC) (Article 22.6 – US), para. 9.2; US – Offset Act (Byrd Amendment) (EC) (Article 22.6 – US), para. 4.27; and US – Gambling (Article 22.6 – US), para. 5.12.
474 It is understood that this amount is to be calculated taking into account the entirety of the level of countermeasures that Brazil is entitled to at that point in time, arising both from the application of the formula identified in paragraph 6.5(a) and from the Decision by the Arbitrator contained in WT/DS267/ARB/2.
6.5 Accordingly, the Arbitrator determines that:

(a) Brazil may request authorization from the DSB to suspend concessions or other obligations under the Agreements on trade in goods in Annex 1A, at a level not to exceed the value of US$147.4 million for FY 2006, or, for subsequent years, an annual amount to be determined by applying the methodology described in Annex 4.

(b) In the event that the total level of countermeasures that Brazil would be entitled to in a given year\(^{475}\) should increase to a level that would exceed the threshold described in paragraph 5.201, updated to account for the change in Brazil's total imports from the United States, then, Brazil would also be entitled to seek to suspend certain obligations under the TRIPS Agreement and/or the GATS, as identified in footnote 468, with respect to any amount of permissible countermeasures applied in excess of that figure.

\(^{475}\) It is understood that this amount is to be calculated taking into account the entirety of the level of countermeasures that Brazil is entitled to at that point in time, arising both from the application of the formula identified in paragraph 6.5(a) and from the Decision by the Arbitrator contained in WT/DS267/ARB/2.
ANNEX 1

Trade-distorting impact (price effect)  
(Millions of dollars)  

<p>| | |</p>
<table>
<thead>
<tr>
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<tr>
<td>1. in Brazil's domestic market</td>
<td>$12.64</td>
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<tr>
<td>2. in non-Brazilian markets</td>
<td>$12.63</td>
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<td>Total</td>
<td>$25.27</td>
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Exports of GSM 102 products  
(Billions of dollars)  

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<td>Brazil</td>
<td>13.1</td>
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<td>Share</td>
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Sources: Exhibit Bra-815 and UN Comtrade.
### IRS by individual average obligor

<table>
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<tr>
<th>Country/Obligor</th>
<th>ECGs issued by country/obligor in FY 2006 (mUSD)</th>
<th>Transaction value secured by ECGs in FY 2006 (mUSD)</th>
<th>Obligor rating (average over all obligors for country) (numerical)</th>
<th>Maturity of the credit (years)</th>
<th>Cumulative default probability (%)</th>
<th>Benchmark interest rate (%)</th>
<th>Payments per year (%)</th>
<th>CCC risk-based fee (%)</th>
<th>Subsidy rate S (Ohlin formula) (%)</th>
<th>Interest rate subsidy (IRS) (mUSD$)</th>
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<td>Interest rate subsidy (IRS) (mUSDS)</td>
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ANNEX 2

Trade-distorting impact (displacement effect of uncreditworthy obligors) (Millions of dollars)

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<td>1. in Brazil's domestic market</td>
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<td>2. in non-Brazilian markets</td>
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<td><strong>Total</strong></td>
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Exports of GSM 102 products (Billions of dollars)

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*Sources: Exhibit Bra-815 and UN Comtrade.*
### Full additionality by individual average obligor

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<th>Obligor rating</th>
<th>ECGs issued by country/obligor in FY 2006 (numerical)</th>
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<th>Transaction value secured by ECGs in FY 2006 (mUSD)</th>
<th>Full additionality (applicable solely to credit groups &quot;15&quot; and worse) (in USD million)</th>
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### ANNEX 3

**Trade-distorting impact (displacement effect of creditworthy obligors)**

(Millions of dollars)

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<th>Description</th>
<th>Amount</th>
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<td>2. in non-Brazilian markets</td>
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<td><strong>Total</strong></td>
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**Exports of GSM 102 products**

(Billions of dollars)

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<td><strong>Share</strong></td>
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*Sources: Exhibit Bra-815 and UN Comtrade.*
Marginal additionality by individual average obligor

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<th>Country/Obligor</th>
<th>ECGs issued by country/obligor or in FY 2006 (mUSD)</th>
<th>Transaction value secured by ECGs in FY 2006 (mUSD)</th>
<th>Obligor rating (average over all obligors for country) (numerical)</th>
<th>Maturity of the credit (years)</th>
<th>Cumulative default probability (%)</th>
<th>Creditworthy Obligor</th>
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<th>D_i</th>
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*Source: Exhibit Bra-794*
1. This Annex explains the formula to be used to calculate the amount of countermeasures that Brazil is authorized to take on an annual basis and describes the data required to apply it. At the outset it should be made clear that the Arbitrator could have chosen the methodology used in Annexes 1, 2 and 3 of this Decision. This methodology required calculating the price and displacement effects of the export credit guarantees. However, given the complexity of the methodology and the likely need to periodically update the information on which it was based (risk-free interest rate, default probabilities, credit risk ratings of obligors, etc.), the Arbitrator was aware of the potential risk of disputes between the parties. As a consequence, the Arbitrator has modified the methodology in a way that substantially reduces this risk. While the current formula is a simplification, it hews to the principle that countermeasures should be appropriate and not disproportionate by making the size of future countermeasures depend on the magnitude of GSM 102 transactions and Brazil's share of world exports in GSM 102 products.

2. The amount of countermeasures shall depend on the transaction value secured by GSM 102 export credit guarantees obtained by Brazilian and non-Brazilian obligors, Brazil's share of world exports of GSM 102 products (corn products, cotton, feed grains, hides and skins, oilseeds, pig meat, poultry meat, protein feed, rice, and tallow) and a set of parameters. This is expressed in the following equation:

\[ CM_{t+1} = \alpha(GSM_t^B) + \beta(share_t)(GSM_t^{NB}) \]

where:

- \( CM_{t+1} \) is the amount of countermeasures in year \( t+1 \) that Brazil is authorized to apply;
- \( GSM_t^B \) is the transaction value secured by GSM 102 export credit guarantees in fiscal year \( t \) obtained by Brazilian obligors (adjusted for US export subsidy commitments);
- \( GSM_t^{NB} \) is the transaction value secured by GSM 102 export credit guarantees in fiscal year \( t \) obtained by non-Brazilian obligors (adjusted for US export subsidy commitments);
- \( share_t \) is Brazil's share of world exports of GSM 102 products in calendar year \( t \);
- \( \alpha \) is the parameter that relates the transaction value secured by GSM 102 export credit guarantees obtained by Brazilian obligors to their trade-distorting impact on Brazil; and
- \( \beta \) is the parameter that relates the transaction value secured by GSM 102 export credit guarantees obtained by non-Brazilian obligors to their trade-distorting impact on Brazil (apportioned to Brazil's share of world exports of GSM 102 products).

3. The values of the parameters \( \alpha \) and \( \beta \) are derived from data on GSM 102 transactions in FY 2006 and the calculated trade distorting impacts on Brazil of those guarantees. They result in values of the parameters: \( \alpha = 1.033947 \) and \( \beta = 0.731148 \).

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1 The transaction value secured by GSM 102 export credit guarantees obtained by Brazilian obligors was US$65.45 million while the trade-distorting impact on Brazil attributable to the export credit guarantees was US$67.67 million. This produces a value of \( \alpha \) equal to 1.033947. The transaction value secured by GSM 102 export credit guarantees obtained by non-Brazilian obligors was US$932.19 million, Brazil's world...
4. The transaction value secured by GSM 102 export credit guarantees is defined as the amount of GSM 102 transactions divided by the factor 0.98.2

5. The United States shall provide the most recent fiscal year data on GSM 102 transactions. The data on GSM 102 transactions by commodity and by obligor shall be supplied in the exact format (and software) as Exhibit US-78. Should the United States not be able to provide the most recent fiscal year data on GSM 102 transactions, Brazil shall use the data from the last available fiscal year.

6. The formula shall be applied to scheduled products (pig meat, poultry meat and rice) only to the extent that the export subsidies provided to volumes of exports of the products are in excess of US quantity or budgetary outlay reduction commitments. This shall require a deduction to be made to the transaction value secured by GSM 102 export credit guarantees issued for a particular fiscal year, so that only export subsidies that exceed US WTO commitments are included. To determine the reduction, the United States' quantity reduction commitment for pig meat, poultry meat and rice shall be multiplied by the US export prices of the three scheduled commodities. The United States shall provide the most recent data on US export prices of the scheduled products.3 Should the United States not be able to provide this information, Brazil shall use US export unit values4 of the scheduled products based on data obtained from the UN Commodity Trade Statistics Database (Comtrade).

7. The trade data to be used to calculate Brazil's share of world exports of GSM 102 products shall be obtained from UN Comtrade. Brazil shall use the harmonised system codes of GSM 102 products in Exhibit Bra-814 for this purpose. Brazil shall ensure that the period covered by the trade data corresponds to the fiscal year of the GSM 102 data, i.e. if GSM 102 data of fiscal year 2008 is used, trade data of calendar year 2008 shall be employed.

market share of GSM 102 products was 11.7 per cent, while the trade-distorting impact on Brazil attributable to the export credit guarantees was US$79.73 million. This produces a value of $\beta$ equal to $0.731148$.

2 Under the GSM 102 programme, the transaction risk is divided 98:2 between the Commodity Credit Corporation and the exporter, i.e., 98 per cent of the transaction is backed by the CCC via the export credit guarantees, while the exporter bears the risk on the remaining two per cent of the transaction. Thus, the total value of US exports that could be secured by the GSM 102 transaction is greater by a factor of 1/(0.98).

3 The period covered by the data on US export prices must correspond to the fiscal year of the GSM 102 data, i.e. if GSM 102 data of fiscal year 2008 is used, data on US export prices for calendar year 2008 shall be employed.

4 The US export unit value of a scheduled product $i$ is defined as $UV_i = V_i/Q_i$, where $UV_i$ is the US export unit value of scheduled product $i$, $V_i$ is the total dollar value of US exports of scheduled product $i$ and $Q_i$ is the total volume of US exports of scheduled product $i$. Brazil shall use the harmonised system codes of the scheduled products in Exhibit Bra-814 for the purpose of calculating the US export unit values.