WHAT ROLE FOR THE PRECAUTIONARY PRINCIPLE IN WTO LAW AFTER JAPAN-APPLES?

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Abstract

This article examines the contribution of the Japan-Apples case to the understanding of the role of the precautionary principle in WTO law, in particular under the SPS Agreement. First, the background is set for the discussion by examining the extent to which the precautionary principle, or related concerns, played a role in the negotiation of the SPS Agreement, and its resulting provisions. Then a brief survey of existing case law on the topic is conducted, in order to place the Japan-Apples decision in context. Thereafter, the findings in the Japan-Apples dispute of relevance to the precautionary principle are discussed. Attention is first paid to the interpretation given in that case to the first requirement of Article 5.7, a provision that has been previously held by the Appellate Body to embody the precautionary principle. This first requirement stipulates that the situation be one where “relevant scientific evidence is insufficient”, and may be regarded as the “trigger” for the application of Article 5.7. This is the first case where this trigger factor is addressed, and may thus be regarded as a landmark decision in this respect. Second, the Appellate Body’s findings regarding the possible relevance of the precautionary principle for the standard of review to be applied by panels when evaluating the scientific evidence before them are considered. This contribution concludes by arguing that the findings in the Japan-Apples case, like other cases before it, have had the effect of limiting the role of the precautionary principle in the SPS Agreement almost entirely to the particular embodiment given to it in Article 5.7. Within the four corners of this Article, measures taken in accordance with the precautionary principle must comply with rigorous, yet realistic, requirements to guard against protectionist measures. Thus, Article 5.7 creates a limited exception for cases where there is a true lack of relevant and reliable scientific evidence on the risk at issue. Reliance on the precautionary principle outside Article 5.7 has once again been unsuccessful.

1. Balancing Trade and Health in the SPS Agreement

Precaution and the precautionary principle are the new buzzwords at the forefront of current discussions on risk regulation in the areas of health and environment. However, this was not always the case. Certainly, it was not so when trade negotiators got together in the Uruguay Round (1986-1994) to draft the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement).1 This agreement aims to balance the aim of trade liberalisation with the recognition of the right of governments to protect human, animal and plant life and health in their territories. It does so, inter alia, by establishing scientific disciplines for health regulations (or SPS measures in WTO jargon). SPS measures may not be maintained without sufficient scientific evidence2 and must be based on a risk assessment.3

1 The text of the SPS Agreement is available at http://www.wto.org/english/docs_e/legal_e/15-sps.pdf
2 Article 2.2 of the SPS Agreement
3 Article 5.1 of the SPS Agreement
Although the precautionary principle was receiving increasing attention on the environmental scene by the end of the Uruguay Round negotiations, this had not yet spilled over to the area of risks to human or animal health. Therefore, no mention was made of the precautionary principle in the negotiations, even by the EC delegation, and the term appears nowhere in the text of the SPS Agreement.

This is not to say that, in practice, governments have not traditionally acted in accordance with the old adage “it’s better to be safe than sorry” when addressing sanitary and phytosanitary risks. For example, it was then, and is now, common practice for harbour officials to quarantine a shipment of agricultural products if, upon its arrival, insect pests are suddenly discovered in the harbour area. They do not wait for samples of the shipment to be taken and inspected to confirm the presence of the pest. Immediate action is necessary to avoid possible entry and spread of the insects, pending the results of inspections and tests. This type of action is generally recognised by governments as a legitimate risk management option. The negotiators of the SPS Agreement were therefore careful to include a provision that would permit governments to take temporary action where scientific evidence is insufficient. This provision is contained in Article 5.7 of the SPS Agreement and provides:

In cases where relevant scientific evidence is insufficient, a Member may provisionally adopt sanitary or phytosanitary measures on the basis of available pertinent information, including that from the relevant international organizations as well as from sanitary or phytosanitary measures applied by other Members. In such circumstances, Members shall seek to obtain the additional information necessary for a more objective assessment of risk and review the sanitary or phytosanitary measure accordingly within a reasonable period of time.

Despite the absence of a specific intention to incorporate the precautionary principle into the SPS Agreement, we shall see that it finds reflection, in some form, in Article 5.7.

2. The Role of the Precautionary Principle after EC-Hormones

The question arises whether Article 5.7 represents the only scope for the precautionary principle in the SPS Agreement. In EC-Hormones, the EC’s ban on hormone-treated beef was challenged by the US and Canada on the basis that it was maintained without sufficient scientific evidence and was not based on a risk assessment. The EC had categorised its measure as final rather than provisional and therefore did not rely on Article 5.7 as a justification. However, it did attempt to rely on the precautionary principle as such, as a general customary rule of international law, or at least a general principle of law, applying to the interpretation of both the risk assessment and the risk management disciplines in the SPS Agreement. In other words, it asked the Panel to interpret in the light of the precautionary principle the

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4 It is difficult to assess whether the “precautionary principle” as such is, or is not, reflected in the disciplines of the SPS Agreement, due to the fact that there is as yet no generally accepted definition of this principle. It is not the purpose of this article to examine the various formulations of this principle or the question whether it has evolved into a general principle of international law. Instead, it proceeds on the basis that Article 5.7 can be regarded as being one embodiment of some of the elements underlying the various formulations of the precautionary principle.
requirement (in Articles 5.1 and 5.2 of the SPS Agreement) that an SPS measure be based on a risk assessment, as appropriate to the circumstances, taking into account several factors. These provisions state:

1. Members shall ensure that their sanitary or phytosanitary measures are based on an assessment, as appropriate to the circumstances, of the risks to human, animal or plant life or health, taking into account risk assessment techniques developed by the relevant international organizations.

2. In the assessment of risks, Members shall take into account available scientific evidence; relevant processes and production methods; relevant inspection, sampling and testing methods; prevalence of specific diseases or pests; existence of pest- or disease-free areas; relevant ecological and environmental conditions; and quarantine or other treatment.

The Panel refused to do as the EC asked, finding that the precautionary principle could not override the explicit wording of Articles 5.1 and 5.2, particularly since it “has been incorporated and given a specific meaning in Article 5.7 of the SPS Agreement.”\(^5\)

On appeal, the Appellate Body noted that while the precautionary principle is viewed by some as having developed into a general principle of international environmental law, its status as a principle of general or customary international law is less than clear. However, it found it unnecessary to decide on this issue.\(^6\) Instead, it agreed with the Panel that the precautionary principle finds reflection in Article 5.7, stating:

It appears to us important, nevertheless, to note some aspects of the relationship of the precautionary principle to the SPS Agreement. First, the principle has not been written into the SPS Agreement as a ground for justifying SPS measures that are otherwise inconsistent with the obligations of Members set out in particular provisions of that Agreement. Secondly, the precautionary principle indeed finds reflection in Article 5.7 of the SPS Agreement…(emphasis added)\(^7\)

Further, the Appellate Body found that this does not exhaust the relevance of this principle, which it found to be also reflected in the sixth recital of the preamble and in Article 3.3, both of which refer to Members’ right to determine their own levels of protection.\(^8\) However, it is doubtful whether these provisions can really be said to embody the precautionary principle. Logically, before a Member may decide on a level of protection, there has to be “sufficient scientific evidence” for the measure, and a risk assessment to support it. The precautionary principle is precisely at issue where a lack of scientific evidence hinders the fulfilment of these requirements, yet prompt action is necessary to address suspected risks. Thus, the fact that a Member

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\(^7\) *Ibid.*, para. 124.

\(^8\) *Ibid.*
may determine its own level of protection when the risk is certain does nothing to incorporate the precautionary principle into SPS disciplines. 9

The Appellate Body in EC-Hormones further held that the precautionary principle cannot override the explicit requirements of Articles 5.1 and 5.2 of the SPS Agreement, and that the principle (presumably whatever its status in international law) does not, by itself, relieve a panel from the duty to apply normal customary international law principles of treaty interpretation to the SPS Agreement. 10 This finding seems to be based on a mischaracterisation of the issue at stake. In fact, it is argued here, it is precisely those normal principles of customary international law of treaty interpretation that would require a panel to interpret the scientific disciplines of the SPS Agreement in the light of the precautionary principle, if it has emerged as a principle of customary international law. The interpretation of vaguely worded terms, such as “sufficient scientific evidence” in Article 2.2 and “risk assessment, as appropriate to the circumstances” in Article 5.1, and the application of these requirements to the factual evidence could be fruitfully guided by recourse to such a principle. The determination of the status of the precautionary principle by the Panel or Appellate Body was therefore important for the proper adjudication of this dispute.

Interestingly, while not referring to the precautionary principle in this regard, the Appellate Body did interpret one of the scientific disciplines of the SPS Agreement in a way that creates flexibility for regulators in cases of scientific controversy. According to the Appellate Body, a risk assessment as required by Article 5.1 does not have to come to a monolithic conclusion but may set out both mainstream and divergent views. Further, where conflicting scientific views exist, Members do not have to rely on the majority or mainstream opinion but are free to base their measures on a divergent opinion coming from a qualified and respected source. 11 It would therefore appear that the Appellate Body has unintentionally itself applied a “precautionary” approach to the interpretation of the risk assessment requirement. 12

9 The Appellate Body appears to be confusing the precautionary principle with the preventive principle. The latter principle is a forerunner of the precautionary principle, dealing with the duty of governments to take action to prevent the materialisation of risks that have been established scientifically. Thus the ability of a government to set a high level of protection once a risk has been proved, falls under this principle. The precautionary principle represents a step forward in that it requires government action in the face of suspected risks that cannot be scientifically proven in the current state of scientific knowledge. It evolved precisely due to the need to address the regulatory paralysis that results from a lack of scientific certainty. See Hohmann, H. Precautionary legal duties and principles of modern international environmental law 1994 (1st ed.): London, Graham & Trotman/Martinus Nijhof at 10.

10 Ibid.

11 Ibid., paras 193-194.

12 In addition, the Appellate Body recognised that, in their application of Article 2.2, panels should bear in mind that “responsible, representative governments commonly act from perspectives of prudence and precaution where risks of irreversible, e.g. life-terminating, damage to human health are concerned.” Appellate Body Report, EC-Hormones, WT/DS26/AB/R para. 124. However, it is as yet unclear what effect this directive to panels may have in practice. It would appear that the Appellate Body was making room for a limited application of the precautionary principle to the interpretation of the requirement of “sufficient scientific evidence”, for extreme cases of risks to human life. The Appellate Body itself refused to allow reliance on the precautionary principle to soften the requirements of Article 2.2 in Japan-Varietals, holding that a flexible interpretation of that Article would render Article 5.7 meaningless, Appellate Body Report, Japan-Varietals, WT/DS76/AB/R, para. 80.
However, formally, as the case law now stands, the Appellate Body’s decision in *EC-Hormones* effectively limits the relevance of the precautionary principle to Article 5.7, while perhaps keeping the door slightly ajar for the potential introduction of other considerations in the future thanks to the paragraph’s “non-exhaustive” qualification. It is therefore necessary to examine how Article 5.7, and in particular the requirements it lays down, has been interpreted in the case law. This determines the role of the precautionary principle in the SPS Agreement and fleshes out the content of this principle for the purposes of WTO law.

3. **Application of the Article 5.7 Criteria in Japan-Varietals**

In *Japan-Varietals*, the Appellate Body identified the four cumulative requirements that must be met in order to adopt and maintain a provisional SPS measure under Article 5.7. Under the first sentence, the measure must be:

1. imposed in respect of a situation “where relevant scientific information is insufficient”; and
2. adopted “on the basis of available pertinent information.”

Under the second sentence, the Member must:

3. seek to “obtain the additional information necessary for a more objective assessment of risk”; and
4. review the measure accordingly “within a reasonable period of time.”

For reasons of judicial economy, only the last two requirements were addressed by the Panel and Appellate Body in *Japan-Varietals*. With regard to the third requirement, the Appellate Body held that the obligation is merely to “seek to obtain” additional information – there are no explicit requirements regarding the method of collecting information or the results to be achieved. However, as the information is to be sought in order to enable the Member to conduct a more objective risk assessment, the information sought must be germane to conducting such a risk assessment. Thus, although the third requirement of Article 5.7 seems to embody an obligation of endeavour rather than result, it does require the Member to seek information relevant to the evaluation of the risk according to the SPS measures that might be applied. Engaging in general information collection exercises is not sufficient.

The fourth requirement, namely the obligation to review the SPS measure within a reasonable period of time, is clearly linked to the provisional nature of measures under Article 5.7. In this case, the Appellate Body took the view that what constitutes a reasonable period of time has to be established on a case-by-case basis. Circumstances it judged to be relevant were the difficulty of obtaining the

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15 *Ibid*.
additional information and the characteristics of the provisional measure at issue. This leaves room for taking into account the state of scientific knowledge and the time needed for this knowledge to develop. Provisional measures can therefore be taken even in circumstances where scientific uncertainty persists for a long time or where the risks at issue are expected to materialise only in the long term.

The clarification of these requirements of Article 5.7 by the Appellate Body seems to allow sufficient scope for governments to take precautionary measures in situations covered by Article 5.7, without setting artificial time limits or imposing particular data-collection methods. At the same time, the Appellate Body makes clear that this possibility is not unlimited. The provisional nature of the permissible measures is clearly linked to the state of scientific information and therefore also encompasses an obligation on governments to actively work at obtaining the necessary scientific data for a proper risk assessment.

However, the crucial question of when Members may rely on this provision, i.e. what constitutes insufficient scientific evidence, remained unanswered until the decision in the Japan-Apples case.


In Japan-Apples, the US challenged a series of phytosanitary requirements applied by Japan to protect its territory against the risk of introduction of fire blight through the importation of apples from the US. Fire blight is a bacterium that causes the infected parts of the plant to wither and darken. The US claimed, inter alia, that Japan’s phytosanitary requirements were maintained without sufficient scientific evidence, as there was no proof that fire blight could be transmitted through the importation of mature, symptomless apples. Japan disputed this claim. In the alternative, further, it argued that even if this were the case, its measure would be justified under Article 5.7.

For the first time, in Japan-Apples, the Panel and Appellate Body addressed the first requirement of Article 5.7, namely that the situation is one where “relevant scientific evidence is insufficient”. It is interesting that this was not done already in Japan-Varietals, as it can be argued that compliance with this requirement is what triggers the application of Article 5.7 in the first place. Although the Panel in Japan-Apples started its examination of Article 5.7 by looking at this requirement, it stated that the analysis under Article 5.7 could begin with any of the four requirements.

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17 Ibid.
18 These requirements were: that the apples were produced in designated fire blight-free orchards; that the orchard was free of fire blight-infected plants and other host plants of fire blight; that the orchards were surrounded by a 500-meter buffer zone; that the orchard and buffer zone were inspected at least three times per year; that the harvested apples, harvesting containers and interior of the packing facility be disinfected; that apples destined for Japan be kept separate from other apples after harvesting; that U.S. officials certify that the apples are not infested or infected with fire blight and were disinfected; and that Japanese officials confirm the certification and carry out inspections themselves.
19 Panel Report, Japan-Apples, WT/DS245/R, para.8.214. Here the Panel referred back to the finding by the Appellate Body in Japan Varietals that the Panel in that case had not erred by starting its analysis with the second sentence of Article 5.7 (Appellate Body Report, Japan-Varietals, WT/DS76/AB/R, para. 91).
The Panel in *Japan-Apples* had first determined that Japan’s quarantine requirements for apples from the US were maintained without sufficient scientific evidence, under Article 2.2 of the SPS Agreement. The Panel then proceeded to examine whether Japan could nevertheless justify its measure under Article 5.7. It found that the fact that a measure has been found to be maintained “without sufficient scientific evidence” under Article 2.2 does not automatically mean that “relevant scientific evidence is insufficient” under Article 5.7, which is a separate question. It held:

> ... Article 5.7 refers to “relevant scientific evidence” which implies that the body of material that might be considered includes not only evidence supporting Japan’s position, but also evidence supporting other views.

Thus, a clear distinction must be made between the concepts of sufficiency in Article 2.2 and that in Article 5.7. The sufficiency requirement under Article 2.2 requires that the evidence supporting the SPS measure applied be sufficient, whereas the evidence to be considered under Article 5.7 includes not only evidence supporting the measure, but also other evidence regarding the risk at issue, including that supporting other views. Thus, all available information must be insufficient before a Member can rely on Article 5.7. Since a wealth of scientific evidence was submitted in that case by both the parties and the panel experts, the Panel found that it was indisputable that a large amount of relevant scientific evidence was available. It held:

The current “situation”, where scientific studies as well as practical experience have accumulated for the past 200 years, is clearly not the type of situation Article 5.7 was intended to address. Article 5.7 was obviously designed to be invoked in situations where little, or no, reliable evidence was available on the subject matter at issue ...(emphasis added)

The Panel thus concluded that the first requirement of Article 5.7 was not met and that Japan’s measure could therefore not be justified under this Article.

Japan challenged the Panel’s finding of non-compliance with the first requirement of Article 5.7 on appeal, arguing that the insufficiency of the evidence should be interpreted to relate to a particular measure or a particular risk, but not to the subject matter in general. The Appellate Body, on the contrary, held that Japan’s reliance on this distinction was misplaced. Instead, it identified a contextual link

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20 After examining the scientific evidence submitted to it, the Panel held that a negligible risk of transmission of fire blight through apple fruit was shown and that there was no sufficient scientific evidence that apple fruit was likely to serve as a pathway for the entry, establishment or spread of fire blight in Japan. As a result, the Panel held that Japan’s measure was “disproportionate” to the negligible risk identified. The Panel therefore came to a provisional conclusion that the measure as a whole was maintained without sufficient scientific evidence contrary to Article 2.2. The Panel could not make a final conclusion on the violation of Article 2.2 until it had established whether Japan’s measure could be justified under Article 5.7, which provides an exception to the requirements of Article 2.2. Panel Report, *Japan-Apples*, paras 8.169, 8.176, 8.181, 8.198-199.


22 Ibid., para. 8.216.

23 Ibid., para. 8.215

24 Ibid., para. 8.222.

between the first requirement of Article 5.7 and the obligation to perform a risk assessment in Article 5.1. Thus, relevant scientific evidence will be insufficient for purposes of Article 5.7 if it:

…does not allow, in qualitative or quantitative terms, the performance of an adequate assessment of risks as required under Article 5.1.

According to the Appellate Body, the factual findings of the Panel showed that the scientific evidence available did permit the performance of a risk assessment under Article 5.1 and the relevant scientific evidence was thus not insufficient within the meaning of Article 5.7.

Japan also appealed the Panel’s finding that Article 5.7 is intended only to address situations where little, or no, reliable evidence was available on the subject matter at issue. Japan argued that this would not provide for situations of “unresolved uncertainty”. According to Japan, Article 5.7 covers not only situations of “new uncertainty” (where a new risk is identified) but also “unresolved uncertainty” (where there is considerable scientific evidence but still uncertainty remains). The Appellate Body, however, upheld the Panel’s finding, pointing out that Article 5.7:

…is triggered not by the existence of scientific uncertainty, but rather by the insufficiency of scientific evidence.

Moreover, it held that the Panel’s finding referred to the availability of reliable evidence, and thus did not exclude cases:

…where the available evidence is more than minimal in quantity, but has not led to reliable or conclusive results.

This analysis of the first requirement of Article 5.7 is groundbreaking. It clarifies the role of Article 5.7, establishing that it is there to address situations where there is a true lack of sufficient scientific evidence regarding the risk at issue, either due to the small quantity of evidence on new risks, or due to the fact that accumulated evidence is inconclusive or unreliable. In either case, the insufficiency of the evidence must be such as to make the performance of an adequate risk assessment impossible. Thus Article 5.7 cannot be used to justify measures that are adopted in disregard of existing scientific evidence. It can also not be used in situations of scientific controversy, where proper risk assessments have been conducted, but are in conflict with each other. Provision is made for the latter situation by the interpretation by the Appellate Body in EC-Hormones of the

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26 The Appellate Body found these contextual elements in the following: first, the concepts of relevance and insufficiency in Article 5.7 imply a relationship between scientific evidence and something else; second, Article 5.1, obliging Members to base their measures on a risk assessment, contains a key discipline under Article 5 and informs the other provisions of Article 5; and third, Article 5.7 itself refers to “a more objective assessment of risks”. Ibid., para. 179.

27 Ibid., para. 179.

28 Ibid., para. 184.

29 Ibid., para. 185.
requirement in Article 5.1 that SPS measures must be “based on” a risk assessment, discussed above, which allows for reliance on divergent, even minority, views.\(^{30}\)

The Panel and Appellate Body’s findings in this case with regard to the trigger for the application of Article 5.7 establish the fact that the precautionary principle, as embodied in Article 5.7, does not create a broad loophole in the scientific disciplines of the SPS Agreement through which protectionist measures can slip. Rather, it creates a limited exception for cases where there is a true lack of relevant and reliable scientific evidence on the risk at issue. This interpretation could go a long way to allay fears that Article 5.7 could be misused by Members to justify measures adopted in disregard of scientific evidence.

5. Objective Assessment of the Evidence

Aside from its reliance on Article 5.7, Japan also attempted to rely on the precautionary principle itself in challenging the evaluation of the scientific evidence by the Panel, in terms of Article 11 of the Dispute Settlement Understanding (DSU). This provision has been held by the Appellate Body in *EC-Hormones*, to set out the standard of review to be applied by panels.

The issue of the appropriate standard of review is an important one, as it raises the question of whether (or to what extent) Panels are entitled to interfere in Members' regulatory determinations, or whether they must defer to such decisions and confine themselves to the question of whether the procedural rules in making these decisions have been followed. This is crucial to the question of the limits to the policing of national regulatory choices in favour of free trade.

The standard of review, as embodied in Article 11, was raised in this case because it affects the question of how a panel must deal with the scientific evidence before it. Article 11 of the DSU, under the heading “Function of Panels” provides:

> The function of panels is to assist the DSB in discharging its responsibilities under this Understanding and the covered agreements. Accordingly, a panel should make an objective assessment of the matter before it, including an objective assessment of the facts of the case and the applicability of and conformity with the relevant covered agreements, and make such other findings as will assist the DSB in making the recommendations or in giving the rulings provided for in the covered agreements. Panels should consult regularly with the parties to the dispute and give them adequate opportunity to develop a mutually satisfactory solution.

In *EC-Hormones*\(^{31}\) the question of the appropriate standard of review was first dealt with. According to the Appellate Body in that case, although the SPS Agreement itself is silent on the issue of the standard of review, Article 11 of the DSU articulates this standard for both the determination of the facts and the legal characterisation of these facts.\(^{32}\) The standard of review established by this Article is

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\(^{30}\) To the extent that the “precautionary principle” may be said to encompass the possibility to take measures based in divergent or minority scientific opinions, this interpretation of Article 5.1 may be regarded as reflecting that aspect of the precautionary principle for purposes of the SPS Agreement.


neither total deference nor de novo review, but rather the objective assessment of the facts (with respect to fact-finding) and an objective assessment of the matter, including the applicability of and conformity with the relevant covered agreements (with respect to legal issues). The Appellate Body in EC-Hormones clarified that a claim that a panel has failed to conduct an objective assessment of the facts, requires proof that there has been a deliberate disregard of or refusal to consider submitted evidence, or a wilful distortion or misrepresentation of the evidence. These do not indicate a mere error of judgement but imply an egregious error, which calls into question the good faith of the panel. That the Appellate Body will not lightly find that this element of bad faith is present, is apparent from its finding in that case that although the Panel had misquoted and possibly misinterpreted the evidence, its actions had not been deliberate and there had thus been no failure to make an objective assessment of the facts. It thus seems that the only limitation on the powers of review of a panel, is its obligation to act in good faith. Further, it seems that a panel is free to substitute its own judgement, however incorrect its appreciation of the scientific evidence before it, for that of the Member government without any real limits.


The question whether the precautionary principle can play a role in a panel’s fulfilment of its task under Article 11 of the DSU arose in Japan-Apples. On appeal, Japan argued that Article 11 had been violated as the Panel had failed adequately to take into account the precautionary principle in its evaluation of the evidence. According to Japan, the fact that the experts consulted by the Panel had recognised the need for caution with respect to the elimination of the phytosanitary measures protecting Japan from fire blight, should have been given greater weight by the

33 Ibid., para. 117.
34 Ibid., para. 133.
35 The Appellate Body (Ibid., para. 138) agreed with the EC that the Panel had misquoted the evidence of an EC expert, Dr. Lucien. Further, in response to the EC’s contention that the panel had distorted the views of Dr. André by stating that they supported those of the other panel experts when, in fact, they rather supported the views of EC scientists, the Appellate Body stated, “Whether or not the views of Dr. André support the statements made by the other Panel experts or the opinions expressed by the EC scientists may be an issue of fact; it does require some technical expertise to deal with it. However, even if the Panel has interpreted the views of Dr. André incorrectly, we see no reason, and no reason was advanced, to consider this mistake as a deliberate disregard or distortion of evidence” (Ibid., para. 139). It would appear that the Appellate Body gives a certain leeway for the lack of “technical expertise” of the panel to deal with scientific evidence, provided the mistake is not deliberate. When one bears in mind that cases under the SPS Agreement often turn on scientific evidence, this is a worrying result.
36 This trend continued in both Australia-Salmon (Appellate Body Report, Australia-Salmon, WT/DS18/AB/R, para. 266) and Japan-Varietals (Appellate Body Report, Japan-Varietals, WT/DS76/AB/R para. 142), where errors of the Panel in the appreciation of evidence were not characterised by the Appellate Body as failures to make an objective assessment of the facts, due to lack of an egregious nature.
38 Although the experts were of the opinion that the completion of the pathway for transmission of fire blight was highly unlikely, some slight risk could not be excluded completely. Thus the experts were not comfortable with the complete elimination of all Japan’s phytosanitary requirements. Ibid., paras 235-237
Panel in considering the evidence regarding the completion of the transmission pathway for fire blight.

The Appellate Body noted that Japan did not argue that the precautionary principle should have been applied as distinct from the provisions of the SPS Agreement, nor did it argue that the Panel should have used the precautionary principle as part of its interpretative analysis of the Agreement. Instead, it understood Japan to argue that the principle was embodied in the cautionary opinions of the experts and should have been given greater weight in the Panel’s conclusions on the completion of the transmission pathway for fire blight.

The Appellate Body then noted that it is established case law that the credibility and weight to be properly ascribed to a particular piece of evidence is in the discretion of a panel as the trier of facts. This discretion is limited only by a panel’s duty to make an “objective assessment” of the facts. Since Japan made no argument challenging the objectivity of the Panel’s assessment, it failed to establish a violation of Article 11.39 The fact that the Panel did not give as much weight as Japan would have liked to the statements of caution by the experts regarding the changes to Japan’s requirements did not, according to the Appellate Body, indicate that the Panel had exceeded its discretion as the trier of facts.40

The implications of this finding for the standard of review applied by a panel in its evaluation of the scientific evidence before it is clear. A panel’s discretion is not guided by the precautionary principle, and it therefore is not obliged to err on the side of caution in its factual findings on the evidence before it.41 The fact that the Member applying the measure itself gives more weight to statements of caution in the evidence is irrelevant, as the panel does not have to defer to these choices. Instead, the panel will make its own evaluation of the credibility and weight of the evidence.

The practical consequences of this approach may be problematic. Where a Member genuinely believes that a risk exists, however small, despite the contrary finding of the panel, it will be hesitant to remove the measure found to be in violation of the SPS Agreement by the panel.42 Were the panel to be guided by the precautionary principle to, in case of doubt, give greater weight to reliable evidence

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39 Ibid., para. 238.
40 Ibid.
41 One application of the precautionary principle in risk analysis is the use of prudential approaches in risk assessment. This recognises that some degree of uncertainty is inherent in scientific risk assessment, and is dealt with by means of “science policy” or decisions on assumptions, extrapolations and models used in the risk assessment process. A prudential approach to risk assessment entails that these policy decisions reflect conservative or cautious approaches to risk, including that in case of doubt, greater weight is given to evidence suggesting risk, that the vulnerability of very sensitive members of the population is used to establish safety factors, etc. In other words, in the assessment of risk, a choice is made to err on the side of caution.
42 This was the case in the Japan-Apples dispute, where Japan claimed it had complied with the ruling, while it had, in fact revised its SPS measure to an extremely limited extent (it had only reduced three of the phytosanitary requirements that comprised its measure, and referred to new scientific studies to support remaining elements). The dispute had to be taken before a compliance Panel, which found that Japan was still in violation of its obligations as it continued to maintain elements of the measure which were not supported by scientific evidence and were not based on a risk assessment (See Japan-Apples (Article 21.5) WT/DS245/RW). Only, after continued technical consultations with the United States, a mutually agreed solution was reached, whereby Japan eliminated all those components of its measure that did not relate to ensuring that only mature, symptomless apples were imported from the US. See Japan-Apples: Notification of Mutually Agreed Solution, WT/DS245/21; G/L/520/Add.1; G/SPS/GEN/299/Add.1.
suggesting a need for caution, it would avoid placing a Member in this untenable 
position. This would contribute to ensuring compliance by Members with the 
recommendations and rulings of the Dispute Settlement Body (DSB) in disputes 
under the SPS Agreement.

7. Conclusion

In Japan-Apples, the role of the precautionary principle under the SPS Agreement 
has been further fleshed out. In particular, the fact that the scope for this principle is 
effectively limited to the framework established under Article 5.7 has been essentially 
confirmed, and the first requirement of this article has been clarified. 43

The contribution of this case to the clarification of Article 5.7 can be 
applauded. It has now been established that the trigger for the applicability of Article 
5.7 is not the presence of scientific uncertainty, per se. Instead, it is only those 
situations of scientific uncertainty that arise where relevant scientific information is 
insufficient (i.e. too little or too unreliable) to permit the performance of a proper risk 
assessment, that fall under Article 5.7. Where substantial amounts of reliable 
evidence is available, a Member is expected to conduct a proper risk assessment as 
required under Article 5.1 and 5.2, and to base its measure on this risk assessment.

This interpretation of the trigger for reliance on Article 5.7 is unobjectionable, 
when seen as complementary to previous case law on the risk assessment 
requirement. According to this previous case law, in cases of scientific controversy, 
Members can choose whether to base their measures on the mainstream or 
divergent scientific views, provided they come from qualified and respected sources. 
Thus, Japan’s concern that situations of “unresolved uncertainty” would fall through 
the cracks of the SPS Agreement seems unfounded. Where this unresolved 
uncertainty is due to unreliable or inconclusive evidence, Article 5.7 is available to 
justify the measure. Where it, instead, arises from scientific controversy, this will not 
prevent a Member from relying on a minority view from a respected source under 
Article 5.1.

Where question marks do arise in respect of the Appellate Body’s findings in 
the Japan-Apples case, is with its continued disregard for the precautionary principle 
outside the ambit of Article 5.7. The Appellate Body in Japan-Apples has established 
that the Panel, as trier of facts, is not bound by the precautionary principle in its 
weighing of the evidence before it. It does not need to give more weight to scientific 
evidence that reflects the need for caution in its evaluation of whether the scientific 
requirements of the SPS Agreement have been met.

Once again, as was the case in EC-Hormones, the role of the precautionary 
principle in the SPS Agreement has been limited to the particular embodiment given 
to this principle in Article 5.7, as interpreted by panels and the Appellate Body. 
Outside of the four corners of this Article, the precautionary principle has not been 
allowed to influence the interpretation and application of the disciplines of the SPS 
Agreement, regardless of its status in international law.

43 This despite the Appellate Body’s statement that the precautionary principle is also reflected in 
Article 3.3 and the 6th recital of the preamble, for reasons set out in Section 2 above. Once again, as 
mentioned above, it should nevertheless be borne in mind that the Appellate Body’s interpretation of 
Article 5.1, in EC-Hormones, to allow for reliance on minority scientific opinions may be regarded as 
reflecting another aspect of the “precautionary principle” (see note 30 above).
It will be interesting to see the further development of the case law on the precautionary principle that is likely to result from the currently ongoing EC-Biotech dispute.\footnote{EC-Biotech, WT/DS291, WT/DS292, WT/DS293. As an aside, it is interesting to note that one of the panellists in the Japan-Apples case, Christian Haberli (the Head of International Affairs of Swiss Federal Office for Agriculture) has been appointed by the WTO Director-General to be the Chair of the Panel that will decide this case.} In this dispute, the EC partly relies on Article 5.7 to justify what is commonly referred to as its de facto moratorium on the approval of new varieties of biotechnology products, and the ban of certain Member States on approved varieties of such products.\footnote{European Communities-Measures Affecting the Approval and Marketing of Biotech Products. First Written Submission by the European Communities, (Geneva: dated 17 May 2004).}

The extent to which the Panel and, if appealed, the Appellate Body show sensitivity in dealing with the delicate balance between the sovereign choices of a Member in this controversial area and the need to enforce the regulatory disciplines of the SPS Agreement in an effective way, is likely to have far-reaching consequences. Not only will it have implications for the likelihood of compliance with the resulting DSB recommendations and rulings,\footnote{The EC-Hormones dispute is a classic example of a case where compliance with DSB rulings through removal of an SPS measure found in violation of the SPS Agreement has proved politically impossible. The EC has chosen instead to bring its measure into compliance by conducting new scientific studies in support thereof. This was only achieved over four years after the expiry of the reasonable period of time for compliance, and whether this can be seen as compliance is still hotly disputed by the US and Canada, who refuse to lift their retaliatory measures. The result is that new disputes have had to be been initiated by the EC in this regard against the continued retaliation by the US and Canada (WT/DS320 and WT/DS321). This situation does little for the standing of the SPS Agreement in the eyes of other Members and the public.} but it will also either fan the flames of civil society criticism of the effect of WTO rules on public health in cases of scientific uncertainty, or instead start to snuff them out. Allowing the precautionary principle, if certain core aspects thereof can be regarded as having developed into a general international law principle, to guide the interpretation and application of SPS disciplines could provide the flexibility needed to achieve a balanced result that accords both with the words and with the spirit of the SPS Agreement.