

***INDIA – MEASURES CONCERNING THE IMPORTATION
OF CERTAIN AGRICULTURAL PRODUCTS:
RECOURSE TO ARTICLE 22.6 OF THE DSU BY INDIA***

(DS430)

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

November 15, 2017

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US-59	Declaration of Maurice Landes Regarding the Price-Responsiveness of Indian Poultry Meat Demand.
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US-61	Jiau Looi Kee, Alessandro Nicita, and Marcelo Olarreaga, “Import Demand Elasticities and Trade Distortions,” <i>The Review of Economics and Statistics</i> , Vol. 90, Issue 4, November 2008, pp. 666–682.
US-62	Mahdi Ghodsi, Julia Grubler, Robert Stehrer, “Import Demand Elasticities Revisited,” The Vienna Institute for International Economic Studies, November 2016, available at: https://wiiw.ac.at/import-demand-elasticities-revisited-dlp-4075.pdf .
US-63	Shipping Contracts (WTO CONFIDENTIAL)

INTRODUCTION

1. As discussed in greater detail below, a key challenge facing the Arbitrator in determining the appropriate level of suspension of concessions is identifying readily available, reliable data on which to base its calculations. The reality of the situation is that such data are limited.
2. The United States government maintains relatively detailed records about the U.S. poultry industry, including survey-based data on production, consumption, trade, inventory levels, and prices, among others. But both the United States and India appear to recognize that similar data are not available for India. While the USDA does estimate total Indian poultry consumption—the accuracy of which India does not dispute—there is precious little other data that are reliable, particularly for specific categories of poultry products.
3. Neither the Indian government nor any other organization provides timely, survey-based measures of key variables, such as the size and growth rate of the Indian processed poultry market, nor is there a uniform definition of the term “processed poultry” in India. As a result, the parties dispute the correct values of these variables, and each party cites to different sources to support its arguments. The questions posed by the Arbitrator in many cases appear to seek information that the United States considered including in its methodology. But the United States ultimately chose not to use proxies for those variables due to this lack of reliable data. For example, the WTO-inconsistent import ban at issue in this arbitration affects all poultry products. But the model calculates the level of nullification or impairment only for frozen chicken leg quarters (“CLQs”) because that is the product subject to the import ban for which price and trade data are readily available, in addition to other factors that make CLQ an attractive import for India, such as low price and the Indian preference for dark meat. Given the data limitations in this case, it would be more appropriate to use the model that has been accepted by both parties and focus on the reasonable values of the variables to use in that model.

QUESTION 1

Regarding data on US exports and imports to India of products in the tariff line HS 020714:

- a. (India): Please provide data on India's imports of HS 020714 from all countries for the five years (or longer) preceding the entering into force of the measure at issue.***
- b. (United States): Please provide data on US exports of HS 020714 to all countries for the five years (or longer) preceding entering into force of the measure at issue.***
- c. (India and United States): Please explain to what extent these data provide support to your calculation of the value of the imports that would occur in the counterfactual scenario.***

4. The requested data on U.S. exports for the five years preceding the measure at issue are provided in Exhibit 51.

5. These data, as well as the data the United States believes India will provide, do not affect the conclusion that removing the WTO-inconsistent import ban would result in India importing at least 650,000 metric tons of CLQs from the United States. These data show that in 2006 the United States was exporting millions of metric tons of frozen chicken parts each year. That number has only increased in the intervening decade. Some countries, such as Russia and China, imported more than 100,000 metric tons (in the case of Russia, more than 600,000 metric tons) each year. There is no reason to think that India's post-ban imports could not match Russia's imports from 2003, or that the U.S. poultry industry could not satisfy this demand.

6. Further, given that the WTO-inconsistent import ban has been in place for over a decade, import and export data pre-dating that ban do not assist the Arbitrator in determining the nullification or impairment resulting from the ban in 2016. As discussed in greater detail in both the U.S. Methodology Paper and the U.S. Written Submission, the Indian poultry market has seen dramatic change in just the past few years—from an increased consumer demand for quick service restaurant and institutional poultry products and the related expansion of cold chain capacity, to a rising national income and changing consumer preferences. Because of these changes, pre-2006 import and export data do not assist in estimating how Indian consumers would react in 2016 if the import ban were removed.

QUESTION 2

The methodology paper of the United States (paragraphs 24-25) assumes that in the counterfactual scenario where the measure at issue is withdrawn, the difference between the Indian demand for and supply of processed/frozen chicken would be captured entirely by US exporters. In other words, the United States would be the sole supplier.

- a. ***Given that there are other potential exporters of processed/frozen chicken to India, should the proposed methodology also account for other possible suppliers of this type of products into the Indian market?***
- b. ***How could the economic model be modified to account for the presence of these other exporters?***

7. For a number of reasons, it is unlikely that other major chicken exporters¹ would compete with the United States in the Indian processed poultry market if the import ban were removed. First, the other major poultry exporters—Brazil and Thailand in particular, and to a lesser degree the EU—were not subject to India’s WTO-inconsistent import ban because, in general, neither low pathogenic nor high pathogenic avian influenza were reported in their poultry populations.² Despite being *able* to export to India, by and large they did not. According to data from India, in 2016 none of these countries exported frozen chicken cuts or offal to India, and only Thailand and the EU (Spain) had exported any poultry products.³

8. Second, and related, Brazil and Thailand generally are not price competitive with the United States for frozen CLQs due to the structure of their poultry export sectors. Brazil and Thailand generally target higher-income markets (like Europe, Japan, and the Middle East) with specific poultry cuts and preparations that can be sold for much higher prices than bone-in CLQs. Relatively low labor costs and specialized processing methods give Brazil and Thailand a comparative advantage in exporting these high-value boneless cuts and other processed products to developed countries. Therefore they are less likely to export bone-in CLQs. Also, import data from other countries for Brazilian and Thai bone-in CLQs show that the per unit prices are higher than those of U.S. frozen CLQs.⁴

¹ In 2016, the United States, Brazil, the EU, and Thailand accounted for 83 percent of global chicken exports tracked under the harmonized schedule categories 020711, 020712, 020713, and 020714. Exhibit US-52.

² Some EU countries notified an outbreak of high pathogenic avian influenza in late 2016, but before that outbreak there were only marginal poultry exports to India.

³ Spain exported 1 metric ton of fresh/chilled turkey cuts and edible offal (HS 020726) and Thailand exported 29 metric tons of duck meat (HS codes 020741, 020742, and 020745). Singapore, which is not a major poultry producer, exported 16 metric tons of frozen whole turkeys, while Turkey exported 1 metric ton of frozen whole turkeys in 2016. Exhibit US-53.

⁴ Unlike the United States, Brazil does not report the volume or value of bone-in CLQ exports specifically. Rather, Brazilian export data is for all frozen chicken cuts (HS 020714), which includes both white and dark meat, as well as boneless and bone-in cuts. But, the per unit import price for Brazilian and Thai bone-in CLQs can be derived from review of import customs data from Japan and other major Asian markets that specifically report imports of bone-in CLQs or a like product (*e.g.*, frozen bone-in chicken legs). These data demonstrate that in 2016 per unit import values for product from Brazil and Thailand were higher than those for product from the United States. See Exhibit US-54.

9. Third, while the EU is similar to the United States in that it exports bone-in leg quarters due to lower domestic demand for dark meat, it is not a major exporter of CLQs.⁵ Trade data indicate that European CLQs are not price-competitive with those from the United States.⁶

10. As a result, there is no need to account for other countries in the economic model that the United States and India agree will reasonably calculate the trade effect of India's WTO-inconsistent import ban. As noted above, other major suppliers have not exported to India despite not being subject to the import ban, and, in any event, their products are not price-competitive with U.S. CLQs. Instead, these major exporters either shipped specialty, premium products to higher-priced markets or, in the case of the EU, focused on markets that provide preferential access (such as South Africa and other countries with which the EU has a preferential arrangement). Further, the United States has sufficient capacity to meet the entirety of the import requirement forecast by the model. As noted in the Methodology Paper, "[t]he U.S. poultry sector is highly efficient, due to economies of scale and scope in processing and marketing. Vertical integration gives processors the ability to lower per-unit processing costs and meet consumer requirements."⁷ Plus, the U.S. poultry sector has exported hundreds of thousands of kilograms of CLQs to a single country (Russia) in the recent past,⁸ providing evidence that the United States could meet the calculated demand that would result from India lifting its WTO-inconsistent import ban.

11. Further, an academic study⁹ found very high supply elasticities for U.S. chicken leg exports ranging from 4.5 for real prices with a seasonal dummy variable to 9.3 for nominal prices with no seasonal variables. These very high export supply elasticities confirm that U.S. exporters are well positioned to meet the total increase in demand for CLQ imports into India following removal of the ban. Therefore, there is no need to modify the economic model to account for the presence of other exporters.

⁵ EU exports of frozen chicken legs in 2016 were 97,124 metric tons, or about 10 percent of total EU frozen chicken cut and offal exports under HS 020714. The EU also has an export code for frozen chicken halves and quarters, which could include some CLQs. The EU exported 265,637 metric tons under this code in 2016. But, even combining all of the exports under this code with the exports of frozen chicken legs, EU export volume is still just a fraction of U.S. CLQ exports in 2016, which were *1.4 million* metric tons. Exhibit US-55.

⁶ In 2016, average per unit EU export price for frozen chicken legs (HS 02071416) was \$975 per metric ton, and average per unit EU export price for frozen chicken halves and quarters (HS 02071420) was \$944.31 per metric ton, compared to \$759 per metric ton for frozen CLQs from the United States. Exhibit US-56.

⁷ Methodology Paper, para. 15.

⁸ Annual exports of U.S. CLQs to Russia averaged 730,000 metric tons between 2005 and 2009. Exhibit US-57.

⁹ Exhibit US-58.

12. Finally, in addition to the fact that there is no basis to consider CLQs from other countries that might supply some of the increased demand were India's measure withdrawn, it is not feasible to revise the model accepted by the parties since the necessary data are not available.

QUESTION 3

India and the United States have provided values of the Indian elasticity of demand for processed/frozen chicken but for which no econometric evidence is presented (see for instance Exhibits IND-29 and USA-11). Please provide other economic evidence based on econometric estimations in support of the claims about the value of the Indian elasticity of demand for processed/frozen chicken. As an example, Kee, Nicita and Olarreaga (2008 and 2009) have estimated thousands of import demand elasticities (which would dispense with the need to provide a separate estimate of the supply elasticity) across 117 countries for 4,900 HS 6-digit products. While they do not provide estimates of the Indian import demand elasticity for HS 020714, they do present estimates of Indian import elasticity for other processed/frozen meat.

13. As an initial matter, the United States does not believe it necessary for the Arbitrator to use import demand elasticities, such as those reported in the Kee article, because the price demand elasticity of -1.5 taken from Exhibit US-11 (the "Elasticity Value") is supported by econometric analysis and the reasoned judgment of agricultural economists with decades of experience studying the Indian market. As explained in the U.S. Written Submission, and as explained in greater detail in the attached declaration of Maurice Landes,¹⁰ the Elasticity Value was not arrived at haphazardly. These economists estimated a price demand elasticity of -1.5 based on extensive field research, information obtained from interviews with industry participants in India, and review of a number of different data points, including a substantial increase of Indian poultry consumption combined with moderate price growth.

14. The Elasticity Value is further supported by subsequent econometric research that estimates a price demand elasticity in Indian urban areas of -1.37 (and even higher in rural areas),¹¹ and another econometric study that estimates the market demand elasticity for CLQs in China ranging from -0.9 to -2.1 (with the mid-point being -1.5).¹² Importantly, these estimates are up to twice as elastic as the price demand elasticity estimate for poultry overall that was

¹⁰ Exhibit US-59.

¹¹ Exhibit US-47.

¹² Exhibit US-58. Though differences exist between the overall poultry market in China and India, the processed markets are more similar. As a result, Chinese demand elasticity is a reasonable proxy for Indian demand elasticity here. Both countries are large markets with rising incomes and increasing urbanization. In both countries, this in turn is fueling the growth of demand for processed chicken by quick service restaurants and institutional buyers, even though both countries still feature sizeable wet markets. China, like India, also has a thriving domestic poultry industry, and Chinese consumers generally prefer dark meat parts.

calculated by a separate study of demand elasticities for various food products in China.¹³ This is consistent with the general economic theory that price demand elasticity for narrowly defined products is more elastic than price demand elasticity for broadly defined products,¹⁴ and undermines Dr. Pouliot’s contention that Indian price demand elasticity for CLQs would be less than half the price demand elasticity for meats generally.

15. By contrast, import demand elasticity estimates, such as those provided by Kee et al., are not appropriate to use in calculating the level of nullification or impairment resulting from India’s WTO-inconsistent import ban for multiple, independent reasons.

16. First, import demand elasticity estimates, such as those determined by Kee et al., are not appropriate for the partial equilibrium model described in the Methodology Paper because they measure the change in *imports* in response to a change in price and not the change in *total demand* due to a change in price. The partial equilibrium model calculates the change in total demand (and total supply) given the removal of the price wedge; this is then used to calculate the total change in imports. An import demand elasticity is not the relevant variable to use in this modeling exercise, but rather the relevant variable is price demand elasticity.

17. The question also suggests that using import demand elasticity instead of price demand elasticity could “dispense with the need to provide a separate estimate of the supply elasticity.” But this would be fundamentally inconsistent with the model both parties accept should be used. The level of nullification or impairment calculated by the model has two components: first, the total increase in demand resulting from lower prices; and second, the total decrease in domestic supply resulting from lower prices. Using an import demand elasticity to calculate the level of nullification or impairment would be an entirely new approach. Taking this new approach would require significant changes to the model—completely disregarding the second component, adding new variables, and changing the assumptions. None of these are addressed in either the Arbitrator’s questions or the submissions from the parties.

18. Second, as acknowledged in the question, in the Kee et al. paper there is no specific estimate of the Indian import demand elasticity for CLQs, or chicken, or even poultry in general. Rather, the estimate is only for “Other meat and edible meat offal — Other.” This is not an appropriate proxy for Indian import demand elasticity for CLQs for a number of reasons, not the least of which is that demand for chicken and other poultry meat would be captured by other codes in the harmonized schedule, and therefore explicitly *excluded* from the value. Further, this value is not representative of the Indian demand elasticity for CLQs because Indian consumers prefer dark meat portions such as CLQs,¹⁵ and prefer poultry meat over “other meats” because they consider it more hygienic and because it is available all year throughout the country. Also,

¹³ Exhibit US-60.

¹⁴ Exhibit US-31.

¹⁵ Exhibit US-11.

narrowly defined markets such as CLQs tend to have more elastic demand than broadly defined markets such as “Other meat and edible meat offal — Other.”¹⁶

19. Third, leaving aside the fact that the Kee et al. estimates are not relevant to the model described in the Methodology Paper and do not present a reliable proxy for Indian import demand elasticity of chicken or poultry meat, the sole import demand elasticity estimate of meat products for India that Kee et al. did calculate is not statistically significant. The value estimate is only -0.04, while the standard error for that value is 0.61. Relying on this value for *any* purpose would not be methodologically sound.

20. Fourth, as a general matter it is impossible to estimate an import demand elasticity for chicken in India because *India’s WTO-inconsistent import ban substantially limits India’s ability to import chicken*. Calculating an import demand elasticity for any given product or product category requires imports to be greater than zero.¹⁷ Because India’s import ban artificially restricts imports, there are no imports to input into the equation. Therefore an import demand elasticity for chicken cannot be calculated. This may explain why the United States has been unable to locate *any* chicken import demand elasticity estimate for India from any source.

21. Even if it were more appropriate to use an import demand elasticity in the model, there is no reason to believe that such an elasticity would result in a demand elasticity substantially different from the Elasticity Value. A recent academic study, using improved data, updated the calculations presented by Kee et al., and also analyzed differences across countries, regions, and income levels.¹⁸ That study noted that India was one of the countries with the most elastic demand for imports generally,¹⁹ but it did not calculate an Indian import demand elasticity for poultry. Perhaps it did not do this for the same reason that Kee et al. did not; namely, that there are no data on Indian poultry imports to use in the calculation.

22. The proper price demand elasticity to use in the model is -1.5, if not more. The United States has conducted a thorough and exhaustive search of the academic literature for India demand elasticities. We were unable to locate any specific estimates of price demand elasticity for processed poultry, which we believe is the result of data limitations regarding India’s poultry market and consumption practices. For the reasons discussed above, import demand elasticities, such as those calculated by Kee et al., should not be used in the model. Rather, the figures discussed in Exhibits US-11 and US-47 are the best available estimates for the Indian price elasticity of demand for processed poultry.

¹⁶ Exhibit US-31.

¹⁷ Exhibit US-61 at p. 669.

¹⁸ Exhibit US-62.

¹⁹ Exhibit US-62 at p. 14.

QUESTION 4

In paragraph 42 of its methodology paper, the United States argues that processed poultry accounts for up to 20% of the poultry market and uses 15% as a conservative assumption of the size of the Indian market for frozen CLQs. However, exhibits submitted by the United States include a range of estimates from 1-1.5% (US-11), 6% (US-6) up to 7-10% (US-14). The differences in the estimates are to some extent due to the differences in product definitions. The first exhibit refers to frozen processed poultry; the second refers to processed poultry cut up in parts and further processed products; and the third one refers to processed poultry in general. The latter is therefore based on the broadest product definition and hence the highest consumption share. Note that frozen CLQs would fall under both frozen processed poultry and processed poultry cut up in parts.

- a. (United States): Please provide reasoning which of the aforementioned estimates should be used in the economic model.*
- b. (United States and India): Bearing in mind that the US methodology paper focuses solely on frozen CLQs, can the parties explain why processed poultry consumption (of which frozen CLQs are just a small subset) is the correct product definition to be considered in the economic model.*

23. As explained in the Methodology Paper and the U.S. Written Submission, the United States uses a conservative estimate of 15 percent, which may well underestimate the size of this market. This estimate takes into account the range of estimates in the academic literature on the size of India's processed poultry segment, which at least one source estimates as 20 percent of the total Indian poultry market.

24. The United States acknowledges that the differences in the estimates cited in the Methodology Paper are to some extent due to differences in product definitions. But those differences are also the result of the different years in which the estimates were made, and the rapid growth of the processed poultry market since that time. For example, the estimate reported in Exhibit US-11 was calculated for frozen processed poultry in India in 2004, and therefore does not reflect the rapid growth in demand for frozen poultry products that has occurred since 2004 in the institutional sector (*e.g.*, hotels, restaurants and fast food establishments) and the retail sector (*e.g.*, the emergence of a number of new approaches by poultry integrators such as the establishment of franchised chilled/frozen poultry shops and sales counters in existing food shops, and home delivery services for chilled/frozen poultry products). Studies that are more recent reflect the rapid growth of India's processed poultry sector, such as Exhibit US-6 from 2014, which reports that 20 percent of the Indian poultry market is processed. This study defines the processed market as comprising dressed chickens/chilled or frozen whole carcasses (70 percent of the market) and cut up parts/further processed products (30 percent of the market). Taking into account the range of estimates and the relevant economic factors, including the rapid

growth rate of this sector, the United States uses a conservative estimate of 15 percent to estimate the size of the Indian processed poultry market in 2016.

25. The United States also recognizes that CLQs are a subset of the processed poultry market. But, CLQs compete generally with other products within that market (i.e. frozen whole carcasses), especially given Indian consumer preference for dark meat.²⁰ Accordingly, if India’s WTO-inconsistent import ban were withdrawn, consumers who currently participate in the processed poultry segment of the India poultry market could potentially purchase CLQs. As a result, the processed poultry market in general is the correct product definition for the economic model.

QUESTION 5

Question 5a: What is the legal and economic basis to grant a level of nullification or impairment that is represented by a formula? Does it apply generally or only under certain conditions (e.g. the measure is an import prohibition)?

26. As discussed in the U.S. Written Submission, the legal and economic basis for determining the level of suspension of concessions by means of a formula is the requirement in the *Understanding on Rules and Procedures Governing the Settlement of Disputes* (“DSU”) that the level of suspension of concessions be equivalent to the level of nullification or impairment caused by the WTO-inconsistent measure. Setting that level based on a formula that recognizes that the level of nullification or impairment will necessarily grow over time as the market for the affected products grows is consistent with the equivalence requirement of the DSU.

27. As previous arbitrator decisions have recognized, nothing in the DSU prohibits an arbitrator from determining, based on a formula, the level of suspension of concessions that would be equivalent to the level of nullification or impairment.²¹ Those past decisions have not found that the flexibility afforded to arbitrators under the DSU is limited only to certain types of measures such as import prohibitions.²² Indeed, the United States is not aware of any instance in which an arbitrator denied a complaining party’s request that the level of suspension of concessions be based on a formula to reflect changes over time.

28. Further, the utility of using the suspension of concessions to encourage compliance with WTO obligations could erode over time if the level of suspension does not grow in recognition of the fact that changes in market conditions over time also mean changes in the level of nullification or impairment. This is because “it is possible that the level of suspension of concessions or other obligations would become, as time goes by, significantly less than the actual

²⁰ Exhibit US-11.

²¹ *US – Offset Act (Brazil) (Article 22.6 – US)*, para. 4.20.

²² *US – Offset Act (Brazil) (Article 22.6 – US)*, para. 4.20.

level of nullification or impairment resulting from the continued application” of India’s import ban.²³

29. Whether it is more appropriate to set the level of suspension of concessions based on a fixed value or a formula depends on the facts and circumstances of each case. For example, if the WTO-inconsistent measure at issue affects trade in a good for which imports are necessarily limited by another measure, such as a WTO-consistent tariff rate quota, it may not be necessary to use a formula to estimate the level of nullification and impairment.²⁴

30. But in this case, a formula should be used. India’s processed poultry sector has experienced rapid growth in the recent past (driven by growth in demand for quick service restaurant and hotel/institutional offerings), and that rapid growth is expected to continue.²⁵ Therefore, any determination of a level of nullification or impairment that is fixed over time will result in a level that is less than the level of nullification or impairment in the future. Also, the effect India’s import ban has on CLQs is just a subset of the total trade effect that its import ban has on all poultry imports, and, as a result, the possibility that the level of suspension of concessions could exceed the level of nullification or impairment is remote.

Question 5b: If the Arbitrator agrees with the United States' contention that the annual level of nullification or impairment will not be static but will increase each year due to population growth resulting in increased consumption of the products subject to India's import prohibition, should the Arbitrator also take into consideration changes on the supply side, e.g. rising productivity of Indian producers of processed/frozen chicken, in the same way that the Arbitrator is to take into account shifts in demand?

31. It would not be entirely accurate to suggest that that the model would increase the nullification or impairment “each year due to population growth resulting in increased consumption of the products subject to India’s import prohibition.” As noted in both the U.S. Methodology Paper and the U.S. Written Submission, growth in the Indian processed poultry sector is driven not only by population growth, but also by “[r]ising incomes . . . urbanization, and foodservice-sector expansion.”²⁶ While population growth is an important aspect, a number of other factors are contributing to the rapid growth of India’s processed poultry market.

32. Regardless, the Arbitrator should not take into consideration changes on the supply side in the same way. Rapid growth experienced in India’s processed poultry sector is expected to continue in the future. A formula takes this into consideration and helps ensure that the level of

²³ *US – Offset Act (Brazil) (Article 22.6 – US)*, para. 4.25.

²⁴ *See, e.g., EC – Hormones (US) (Article 22.6 – EC)*, para. 29.

²⁵ *See, e.g., U.S. Written Submission*, paras. 27, 35–36.

²⁶ *Methodology Paper*, para. 12; *see also U.S. Written Submission*, paras. 32–36.

suspension of concessions will more accurately reflect the level of nullification or impairment in future years. As noted above, there are substantial challenges associated with collecting accurate and relevant data for the inputs that are already accounted for in the model. Those challenges will only multiply if the model attempts to incorporate additional variables indirectly related to any adjustments that may be made to the supply side. That concern would be especially acute here, as any increase in supply that might result in the future would be highly speculative, especially since it would require the Arbitrator to make a number of assumptions regarding increased efficiency or other unknown developments in the industry.

33. Similarly, there is no basis to assume a change in domestic supply in the short run that is different from the model's determination that domestic supply will decline in response to the lower market price. India has not presented any evidence explaining how its domestic suppliers would react to the lower prices of U.S CLQs, probably because, according to basic economic theory, lower prices would result in a reduction of quantity supplied by India's domestic producers.

Question 5c: If the Arbitrator grants the United States' request, what would the consequence be of using a fixed poultry consumption rate (15%) in a scenario where the actual observed growth rate differs from this number? For instance, if at the end of any given year the observed growth rate is 10%, would that mean that the granted level of suspension of concessions would not be equivalent to the actual level of nullification or impairment? How would this be compatible with the Arbitrator's mandate?

34. A fundamental challenge in making any determination for purposes of Article 22.4 of the DSU is that changes in the market situation in the future cannot be predicted with certainty and precision. Any determination runs the risk of not being equivalent in future years if the market situation is not what was predicted.

35. But this is just as true for a determination that does not use a formula as it is for one that does. A level that is fixed and thus does not vary over time may well mean that the level of suspension of concessions is not equivalent to the level of nullification or impairment in any given year. Indeed, the fact that a determination is based upon recent years that are considered to be representative of the current year in which the determination is made means that there is a risk that the level determined for that current year may differ from the actual level of nullification or impairment for that year.

36. In this dispute, moreover, it is almost certain that the processed poultry market in India will continue to grow. Therefore, it is also almost certain that a level that does not increase over time will result in a level of suspension of concessions that is not equivalent to the level of nullification or impairment.

37. The question, then, is how best to reflect the fact that the market for poultry in India will increase. For the reasons set forth in the Methodology Paper and the U.S. Written Submission, a

15 percent growth rate in the level of suspension of concessions would reasonably—and conservatively— approximate the actual growth rate of the level of nullification or impairment. Using that reasonable and conservative estimate of the growth rate should prevent the calculated level of suspension of concessions for any given year from exceeding the level of nullification or impairment for that year.

38. At the same time, it is highly unlikely that use of *any* reasonable fixed growth rate to calculate the level of suspension of concessions each year would cause that level to exceed the actual level of nullification or impairment. As noted in the Methodology Paper and the Written Submission, India’s import ban affects *all* poultry products, while the United States only requests that the Arbitrator determine the level of suspension of concessions based on a subset of those products, namely frozen CLQs. Indeed, India and the United States agree that the Arbitrator should calculate the effect of the CLQ portion of the import ban as affecting no more than 15 percent of the overall poultry market. Given this, it would be highly unlikely that the level of suspension of concessions would exceed the total level of nullification or impairment resulting from India’s import ban.

39. And, as prior arbitrators have explained, if India considered that “the actual application of the suspension . . . exceeds the level of nullification or impairment, then it may challenge the . . . suspension through the appropriate dispute settlement procedures.”²⁷

Question 5d: Could a variable growth rate be used, for instance, one that is represented by an index, instead of having a fixed growth rate? For instance, where the projected growth rate for year $t + 1$ would be based on the observed growth rate between for example year $t-1$ and year t or to a moving average of the growth over the past k years?

40. While it is theoretically possible to use a variable growth rate in the formula for determining the level of suspension of concessions, the United States does not believe it to be appropriate here, because this adjustment could result in an underestimation of the actual nullification or impairment in a given year.

41. In developing its methodology, the United States attempted to identify a reasonable proxy for the relevant growth rate in year t , but could not find one. As discussed above, this arbitration is characterized by limited reliable, verifiable data about the size and scope of the Indian poultry market in general, as well as the market for processed poultry in particular. As a result, the United States is not aware of a way to reliably calculate or otherwise determine the correct value.

42. Further, the United States is not aware of any metric that would reasonably approximate the growth rate of the Indian processed poultry market more accurately than the 15 percent discussed in the Methodology Paper. The United States considered using GDP growth of India as a whole, as well as inflation in India as a whole, but determined that those variables did not

²⁷ *US – 1916 Act (EC) (Article 22.6 – US)*, para. 7.9.

adequately capture the strong growth in the processed poultry market. As a result, using either of those as the growth rate would understate the level of nullification or impairment, and therefore would result in a level of suspension of concessions that would not be equivalent to the level of nullification or impairment.

Question 5e: *In paragraph 41 of its written submission India disagrees with what appears to be an implicit assumption by the United States that an x per cent increase in the consumption of processed CLQs in India would yield an equivalent x per cent increase in imports of US frozen CLQs. Assuming one can ignore shifts on the domestic supply side, under what circumstances would an x per cent increase in consumption result in an x per cent increase in imports? Are these circumstances likely to be special or apply generally? Are there economic parameters, such as the domestic income and price elasticities, the foreign export supply elasticity, etc., whose values will determine what the likely outcome will be?*

43. The proportionate increase follows directly from the model. This applies generally and is not confined to any special circumstance or additional assumptions unique to this arbitration.

44. According to the model—the use of which India accepts—the calculation of the trade damage is as follows:

$$\left((\varepsilon^S) * Q_1 * \frac{p^w \tau^{AI}}{p^{i,AI}} \right) - \left((\varepsilon^d) * Q_1 * \frac{p^w \tau^{AI}}{p^{i,AI}} \right)$$

where Q_1 is the size of the processed poultry sector in India. Thus, if the processed sector grows by 15 percent, then the level of nullification or impairment in the next period would be 15 percent greater, as shown below:

$$\left((\varepsilon^S) * (Q_1 * 1.15) * \frac{p^w \tau^{AI}}{p^{i,AI}} \right) - \left((\varepsilon^d) * (Q_1 * 1.15) * \frac{p^w \tau^{AI}}{p^{i,AI}} \right)$$

This result holds for the given economic parameters.

QUESTION 6

The United States requests that the annual level of nullification or impairment should be represented by a formula. In making its request, the United States refers in footnote 7 of its methodology paper to previous arbitration proceedings where the complaint has also made this request. Please respond to the following questions:

- a. *Does the fact that previous arbitrators have granted this type of request mean that the Arbitrator in the present proceedings should follow the same approach? If not, what are the factors that distinguish these proceedings from those mentioned in footnote 7?*

b. What was the legal basis for the arbitrators in those cases granting a level of nullification or impairment expressed in a formula?

45. Prior arbitrators have relied on the language of the DSU, in particular Article 22.4 of the DSU. As the arbitrator in *US – Offset Act (Brazil) (Article 22.6 – US)* explained:

The requirement of Article 22.4 is simply that the two levels be equivalent. As long as the two levels are equivalent, we do not see any reason why these levels may not be adjusted from time to time, provided such adjustments are justified and unpredictability is not increased as a result. In fact, we see no limitation in the DSU to the possibility of providing for a variable level of suspension if the level of nullification or impairment also varies.²⁸

Further, as discussed above, using a formula to set the level of nullification or impairment is appropriate here because India’s processed poultry market is growing rapidly. The formula described in the U.S. Methodology Paper would better capture the current level of nullification or impairment in any given year than a static number that is necessarily limited by its backward-looking nature.

46. Although there is no *stare decisis* in the WTO dispute settlement system—so the Arbitrator is not bound by prior arbitration decisions—prior decisions can be helpful in understanding the correct interpretation of the DSU.

QUESTION 11

In footnote 34 of the methodology paper, the United States mentions that freight and insurance costs per container of CLQs were calculated based on data provided from the U.S. industry sources. Chinese Taipei is used as a proxy market and a container is assumed to average 27 MTs.

- a. Please provide the aforementioned data.***
- b. Please explain why Chinese Taipei was chosen as a proxy market and provide reasoning for why it is a good proxy for India.***
- c. Please explain where the assumption that a container averages 27 MTs comes from.***

47. The requested data on U.S. shipping rates to Chinese Taipei is included as Exhibit US-63. This exhibit is designated WTO Confidential.

48. The United States chose Chinese Taipei as a relative comparator market both because it is geographically close to India and because, like India, it has a domestic market that would

²⁸ *US – Offset Act (Brazil) (Article 22.6 – US)*, para. 4.20.

compete with imports of U.S. poultry. Chinese Taipei also imports high volumes of U.S. poultry so that any volume discounts would be reflected in the shipping costs, similar to volume discounts that U.S. exports would receive when shipping hundreds of thousands of metric tons of CLQs to India. These factors make Chinese Taipei a reasonable proxy for determining the freight and insurance costs that would result from shipping CLQs to India.

49. As discussed in the U.S. Written Submission, publicly available sources state that the maximum capacity of a refrigerated shipping container for CLQs is 27 metric tons.²⁹

FOLLOW-UP QUESTION

Follow-up Question a: What would the parties' views be if the Arbitrator were to adopt the following modified version of the United States' partial equilibrium model instead?

$$X_t^d - X_t^s = US_t + ROW_t$$

$$\text{Price wedge} = P_t^{I, AI} - P_t^W(1 + \tau)$$

where:

X_t^d is Indian demand for processed/frozen chicken in year t ;

X_t^s is Indian supply of processed/frozen chicken in year t ;

US_t is the U.S. export supply of processed/frozen chicken in year t ;

ROW_t is rest of the world export supply of processed/frozen chicken in year t ;

$P_t^{I, AI}$ is the domestic price of processed/frozen chicken in India with the measure at issue in place in year t ;

P_t^W is the world price of processed/frozen chicken adjusted for freight and insurance to the Indian market in year t ; and

τ is the ad valorem tariff rate and landing charge.

Note that this modification allows for P_t^W to be endogenous, i.e. to change so as to "clear" the market in response to, for example, a change in trade policy.

50. The United States first notes that the current modelling framework accepted by both parties is extensively used in the economic literature to quantify the effect of trade barriers, including import bans, and to estimate the trade impacts of removing these measures. The model uses available data to capture the effect of a change in trade policy, along with relevant market factors, by making reasonable assumptions. The modifications suggested by the Arbitrator's question appear to require additional variables and assumptions that are both unnecessary and not feasible given data limitations.

²⁹ Exhibit US-49.

51. Regardless, the United States does not believe it is appropriate to include data from the rest of the world in this calculation. The proposed modification assumes that there are other CLQ exporters that could compete with the United States to supply processed poultry to India. As outlined in response to Question 2, no other major poultry exporter would be able to compete with the United States in the India processed poultry market. Because those countries are currently free to sell CLQs to India, their trade would not be affected if the ban were removed. Therefore, for the purposes of estimating the level of nullification or impairment to the United States due to the ban, this modification is unnecessary.

52. The modification also is not feasible due to data limitations. Specifically, modifying the model as proposed would require much more information than is currently available. As discussed above, the United States is one of the few countries that reports disaggregated CLQ exports. The other major producing countries (*e.g.*, Brazil and Thailand) do not report CLQ exports. Therefore it is not possible to measure ROW_t .

53. Nor should the model be modified to allow the world price to be endogenous; this assumption is unnecessary and, in any event, data limitations make this modification nearly impossible. In order to endogenize world prices, the model must fully specify the demand and supply of the product in each national market in the world economy. This, in turn, would require complete information on global CLQ trade, which, as discussed elsewhere, is not available for the majority of countries.

54. The modification also is not necessary because the assumption of endogenous world prices is unlikely to affect significantly the level of nullification or impairment that would otherwise be calculated. As discussed, without the import ban, no other major CLQ exporter would be able to compete with the United States. Therefore, the fixed world price assumption in the Methodology Paper is reasonable. In addition, even if it were assumed (incorrectly) that additional imports by India did put upward pressure on U.S. prices, the resulting price adjustment effect would be at best ambiguous. The higher prices could lead to a slight decline, in volume terms, of CLQs imported by India but would be offset by higher prices in the Indian market, which could result in a larger total value of imports of CLQs by India.

Follow-up Question b: Would the parties please provide estimates of the elasticities of U.S. and rest of the world export supplies of processed/frozen chicken from the economic literature?

55. As far as the United States is aware, the only export supply elasticity estimates available for U.S. processed/frozen chicken products is a study done by Li, Gunter, and Epperson. The study found very high elasticities for U.S. leg exports. The authors note that “excess supply of [U.S.] legs for the China market appears to be very elastic with respect to own-price across all specifications ranging from an estimate of 4.5 for real prices with a seasonal dummy to 9.3 for

nominal prices with no seasonality of demand.”³⁰ These very high supply elasticities suggest that the U.S. exporters are well positioned to meet increased demand from India.

56. The United States is not aware of an academic study that estimates the supply elasticity of processed/frozen chicken for all non-U.S. countries.

³⁰ Exhibit US-58.