

UNITED STATES – CERTAIN COUNTRY OF ORIGIN
LABELLING (COOL) REQUIREMENTS

Recourse to Article 22.6 of the DSU by the United States

(WT/DS386/ARB)



Executive Summary of the United Mexican States

15 October 2015

1. Mexico's Methodology Paper demonstrates that the COOL measure has reduced the prices paid for Mexican cattle in the United States, reduced Mexican export sales and suppressed the prices of feeder cattle in the Mexican domestic market. Because the United States has not taken any steps to bring the COOL measure into conformity with its obligations, Mexico is seeking authorization to suspend concessions in the amount of USD 713.4 million.

2. In the present case, the Arbitrator's mandate under Articles 22.6 and 22.7 of the DSU is to determine whether the proposed level of the suspension of concessions requested by Mexico is equivalent to the level of the nullification or impairment of benefits accruing to Mexico as a result of the United States' failure to bring its WTO-inconsistent COOL measure into compliance. The level of the nullification or impairment that Mexico has suffered is the difference between the actual level of benefits accruing to Mexico at the time of expiry of the reasonable period of time (RPT) to comply as a result of the adverse effects of the COOL measure and the level of benefits that would have accrued to Mexico in a counterfactual scenario in which the COOL measure had never been adopted. This approach properly measures the full extent of the nullification or impairment caused by the COOL measure because it measures its adverse effect against the level of benefits that the parties negotiated under the covered agreements — i.e., benefits that prohibit the COOL measure from ever existing.

3. Mexico's methodology uses an approach that combines detailed econometric estimates and simulations to accurately calculate the level of nullification and impairment. First, an econometric model using observed data is employed to estimate the adverse effects of the COOL measure on the price of Mexican feeder cattle exported to the United States. Second, this estimated export price impact is then used to simulate a consistent reduction in exports of Mexican feeder cattle. Third, the estimated export price impact is used to measure the corresponding price impact in Mexico's domestic market. Export losses and price suppression losses are then calculated based on the adverse effects of the COOL measure.

4. In response, the United States proposes a novel simulation that builds on the currently observed market equilibrium and removes the costs associated with the COOL measure. The approach used by the United States is flawed in many ways. First, instead of using the available pre- and post-COOL data to directly estimate the adverse effects of the COOL measure, the United States purports to measure the impact of removing the COOL measure through a complicated theoretical model that is inconsistent with the actual effect of the COOL measure as found in the WTO rulings. Second, the United States' concept of calculating losses based on market outcomes with the COOL measure in place is fundamentally flawed as it assumes, *inter alia*, that the impact of imposing a measure is equivalent to that of removing it. Importantly, under the approach proposed by the United States, if the harms caused by a measure are not fully reversible, then the amount of nullification or impairment would inevitably be understated.

5. In *US – Upland Cotton (Article 22.6 – US)*, the Arbitrator confirmed that the party objecting to the proposed countermeasures bears the initial burden of establishing a *prima facie* case that the proposed countermeasures are not in accordance with the requirements of the relevant WTO provisions; if this initial burden is discharged, then it falls to the party proposing the countermeasures to rebut such a presumption.¹ This standard is consistent

¹ Decision by the Arbitrator, *US – Upland Cotton (Article 22.5 – US I)*, paras. 4.21-4.22.

with the burden of proof applied in other arbitrations, including *EC – Hormones (US)* (Article 22.6 – EC), *EC – Bananas III (Ecuador)* (Article 22.6 – EC) and *US – 1916 Act (EC)* (Article 22.6 – US). Similarly, the arbitrator in *US – Gambling* (Article 22.6 – US) confirmed that the burden rested upon the United States, as the objecting party, to demonstrate that the level of suspension proposed by Antigua was not equivalent to the level of nullification or impairment resulting from the continued application of the WTO-inconsistent measure. For the purpose of discharging this burden, the Arbitrator emphasized that the United States must successfully challenge the accuracy of the level of the nullification or impairment reflected in the counterfactual scenario proposed by Antigua, rather than merely proposing alternative scenarios of its own.²

6. Thus, the United States bears the initial burden of establishing a *prima facie* case that the level of suspension of benefits requested by Mexico is not in accordance with the requirements of the DSU. The United States has failed to discharge its burden. There are significant legal and conceptual errors in the United States' criticisms of Mexico's methodology and also in the alternative methodology that the United States proposes. Mexico's comprehensive analysis is the correct approach under the circumstances, and it has been properly applied to accurately estimate the level of nullification and impairment caused by the amended COOL measure. The United States' inaccurate criticisms and flawed alternative "Equilibrium Displacement Model" (EDM) are therefore insufficient to establish a *prima facie* case the Mexico's methodology is inconsistent with DSU Article 22.4.

7. In the event that the Arbitrator disagrees and finds instead that the United States has established a *prima facie* case, in whole or in part, then Mexico submits that its methodology remains the most appropriate approach to assessing the level of the nullification or impairment of the benefits that would accrue to Mexico but for the adverse effects of the amended COOL measure, subject to any adjustments that the Arbitrator determines are required.

8. Mexico emphasizes that, although Canada's approach is very similar to Mexico's, the Canadian methodology is not identical to that of Mexico. In particular, Mexico is able to rely on pricing data for Mexican cattle from sales within the United States, and that eliminates the relevance of certain variables discussed by the United States. For this reason, Mexico's analysis must be reviewed independently and evaluated on its own merits. The United States has not even attempted to explain how any alleged errors, omissions or defects would materially affect the outcome of Mexico's model if "corrected". Rather, the United States' approach is to avoid engaging with Mexico's proposed methodology altogether.

Mexico's estimation of export losses from the impact on prices for Mexican cattle in the U.S. market

9. Mexico's Methodology Paper uses regression analysis to estimate the economic impact of the COOL measure on the price of Mexican feeder cattle imported into the United States. The price of Mexican feeder cattle is measured in New Mexico and Texas and is compared to the price of U.S. feeder cattle measured at the same locations. Since prices are measured at the same locations, a limited number of factors explain their difference. Mexico's Methodology Paper found that the COOL measure depressed exported feeder cattle price by \$0.187/lb.

² Decision by the Arbitrator, *US – Gambling* (Article 22.6 – US), paras. 3.23-3.24.

10. The prices used in the Mexican regression model are measured in the United States. Once Mexican feeder cattle have crossed the U.S. border and are at their selling points in the United States, transportation costs and exchange rates do not matter as these costs are already sunk. Given that these costs have already been incurred, the price of Mexican feeder cattle is determined solely by the valuation for feeder cattle by U.S. buyers.

11. Before the COOL measure, U.S. and Mexican born feeder cattle of the same weight were perfect substitutes. Prices for animals of either origin at selling points in the United States were essentially the same, as animals of both origins were physically identical and because animals were not differentiated by origin in the U.S. supply chain.

12. The COOL measure caused differential treatment of feeder cattle across origins in the U.S. cattle supply chain. Since the price of Mexican fed cattle in the United States, which were imported from Mexico as feeder cattle, is discounted compared to fed cattle of U.S. origin, the prices of Mexican feeder cattle are discounted. In other words, the discount is passed back from transactions for fed cattle to transactions for feeder cattle.

13. Mexico's regression model estimates the impact of the COOL measure as revealed by the price basis. It is well-established in economics that prices summarize all the information in a competitive market setting. In a supply chain, this means that a shock at any stage of a supply chain is distributed through the entire supply chain. Thus all demand and supply shifters that affect the U.S. cattle and beef industry are summarized in the prices for feeder cattle. The regression model does not attempt to explain a price-in level but instead seeks to explain the price basis. Given that both the prices of U.S. feeder cattle and Mexican feeder cattle summarize the supply and demand shifters that impact the U.S. beef and cattle supply chain, the price basis measures what differentially impacts these prices. Because U.S. feeder cattle and Mexican feeder cattle are identical except for their differential treatment because of the COOL measure, the price basis regression is able to measure the total impact of the COOL measure that is distributed down the supply chain onto the price paid for Mexican feeder cattle. Thus, the relevant variables to include in the regression model are those that explain the differential value to U.S. buyers that is distributed down the supply chain rather than all the variables that explain individual feeder cattle prices. The equations are not "truncated," as the United States alleges; rather they include the relevant factors and exclude those that are not relevant. Accordingly, Mexico's price basis equation reflects the difference between the price paid for Mexican feeder cattle and U.S. feeder cattle rather than the "difference between the U.S. price and the Canadian price" as stated by the United States.

14. The objective of Mexico's regression model is to explain how the differential treatment of cattle in the United States according to their origin affected the price paid for Mexico feeder cattle. As explained in the Methodology Paper and above, Mexico's regression model measures how the COOL measure differentially impacted the price paid for U.S. and Mexico feeder cattle as revealed by the price basis. With prices measured in the same locations, the number of variables that affect the basis is limited. A regression of the price paid for Mexico feeder cattle in the United States as a dependent variable with the U.S. price for feeder cattle would require the same set of explanatory variables as the basis regression presented in Mexico's Methodology Paper. However, such a regression model would be plagued with problems that the basis regression does not have. For example, the price of Mexican feeder cattle exported to the United States contains a unit-root as shown in Table 1 of Mexico's Methodology Paper. Thus, a conventional linear regression model would yield biased coefficients unless it is possible to find a cointegration relationship. The basis does not have a unit-root and thus can be used as a dependent variable in a linear model.

15. Contrary to the argument of the United States,³ the Pouliot and Sumner (2014) study does not undermine Mexico's methodology. Pouliot and Sumner (2014) are correct in stating that it is theoretically possible that imposing the COOL measure would result in higher prices in the importing country and lower prices in the exporting country.⁴ The increase in the domestic U.S. price, however, would be small in practice because the market share of imported cattle is small relative compared to the total size of the U.S. domestic cattle and beef industry. Moreover, the relevant import volumes change caused by the COOL measure is an even smaller share of the U.S. market. Further, there is a limited amount of commingling in the U.S. market, and thus most of the U.S. livestock supply chain handles single origin animals or meat, keeping costs of compliance with the COOL measure to a minimum.

16. In fact, a significant increase in prices for products of U.S. origin in the U.S. livestock supply chain would indicate large compliance costs and the regulation would not have been adopted if it imposed significant costs on U.S. firms. Arbitrage between animals of different origins would cause these prices to differ only by the difference in cost from the differential treatment associated with the COOL measure. Thus, even though the U.S. domestic price may marginally increase and the price of the imported animal decrease, the difference between the two prices reflects exactly the costs associated with the COOL measure that is passed on to Mexican feeder cattle. Note that even though the United States' EDM is wrongly specified in many ways, it yields results that are consistent with Pouliot and Sumner (2014) with the finding that the removal of COOL measure has a small impact on US domestic prices.

17. The United States' criticisms of Mexico's pricing data are also unfounded. Mexico's Methodology Paper uses price data collected by the U.S. Department of Agriculture's Agricultural Marketing Service (AMS). These data offer an unbiased measure of the price paid for Mexican feeder cattle exported to the United States and for the U.S. price of feeder cattle in New Mexico and Texas. The data provided by the AMS are appropriate for this analysis and in fact the United States used the same data source to calibrate its own EDM.

18. The United States claims that the reports of the U.S. Department of Agriculture on which Mexico relies for pricing data are from auctions, and should be considered unrepresentative of Mexican exports. But Mexico did not use reports from auctions. Rather, it used the Department of Agriculture's reports on its daily survey of the prices of Mexican cattle sold in direct sales after crossing the border in New Mexico and Texas. The quantities of cattle covered by those reports comprise over 70 percent of all U.S. imports of Mexican cattle. Exhibit MEX-26 contains a statement by the Mexican industry explaining that Mexican cattle are sold immediately after they have been transferred to the U.S. side of the border.

19. Also importantly, Mexico's price basis analysis compares prices for Mexican cattle from Department of Agriculture reports with the prices for U.S. cattle from Department of Agriculture reports. Mexico's comparisons also control for the weight and muscle categories available from the Department of Agriculture reports. This results in the "apples to apples" comparison that the United States says is so important.

20. Remarkably, the United States criticizes Mexico's model for relying on actual market data for the relevant period. In fact, Mexico's Methodology Paper uses a careful, thorough

³ United States' written submission, para. 78.

⁴ Exhibit US-35.

and state-of-the-art approach. The econometric models include the relevant sets of control variables to measure the causal impacts of the COOL measure on prices and quantities.

21. Econometric modeling is not only a tool for forecasting as the United States asserts, but is also a well-accepted approach in economics to find causal relationships. A correctly specified regression controls for the relevant set of variables that affect a dependent variable. The inclusion of variables that do not pertain to the economic model and that are correlated with the variables of interest (dummies for the COOL measure in this specific case) biases the coefficients. Mexico's Methodology Paper uses a careful approach to include only the variables that are economically relevant in the regression models.

22. Mexico's regression model includes monthly dummy variables and a dummy variable for the drought to control for weather effects on the quality of feeder cattle. For instance, higher temperatures can cause more significant weight loss over the long distance.

23. Macro-economic variables (e.g. unemployment and GDP) and input cost variables are not relevant because the regression model compares the price of two substitute goods for which demands are affected by the same shocks. Input costs previously incurred are not relevant as they are already sunk costs at the moment when feeder cattle are sold.

24. Changes in quantities are not relevant in the regression model because the model compares prices for two substitute goods measured at the same locations that are impacted by the same demand-side variables. U.S. production volumes and Mexican export volumes of feeder cattle have nothing to do with how U.S. feeder cattle buyers differentiate the value of feeder cattle of different origins.

25. Increase in Mexican beef processing and beef exports are irrelevant to the difference in the U.S. prices paid for U.S. born feeder cattle and Mexican born feeder cattle. The decision to export Mexican feeder cattle has already been made once feeder cattle cross the U.S. border. As the regression model compares prices for feeder cattle of two origins at the same locations, it is their relative values to U.S. buyers that determine the difference in their prices. Mexican beef processing and beef exports have nothing to do with how U.S. feeder cattle buyers differentially value feeder cattle of different origins.

26. Mexican feeder cattle exported to the United States meet all animal disease requirements for exports to the United States. Although in the past animal diseases have had market impacts, they do not affect U.S. feeder cattle buyers' differential valuation of feeder cattle of different origins and thus should not be included in the regression model.

27. The data used in Mexico's Methodology Paper are monthly, and monthly dummy variables control for the effect of U.S. holidays, if any.

28. Including variables that do not have a causal effect on the relative price of U.S. and Mexican feeder cattle prices would bias the coefficients for the COOL variables if these variables are correlated with the COOL variables. Thus, the regression model used in Mexico's Methodology Paper includes only the variables that are relevant to explain the difference between the price for U.S. feeder cattle and the price of Mexican feeder cattle, both measured by sales within the United States.

29. Contrary to the argument of the United States, all the variables to explain the difference in the valuation of U.S. buyers of feeder cattle from the United States and Mexico are included in the regression model. As explained in the Methodology Paper and above, macro-economic variables and other variables that can impact the livestock industry have nothing to do with the difference in value that U.S. buyers assign to feeder cattle of different origins. The United States asserts that other variables are relevant, but does not explain why.

Impact of the COOL Measure on Export Volumes

30. To estimate the impact of the COOL measure on the export of feeder cattle, Mexico's methodology uses a small simulation model. A simulation is the most appropriate approach to estimate the loss in export volume because there are causal variables that are missing to explain the export of feeder cattle. Notably, a variable to measure expectations about the drought does not exist. The model found that the COOL measure suppressed export volumes of Mexican feeder cattle by 342,476 for 2014.

31. The simulation is based on the estimated impact of the COOL measure on the price that is estimated econometrically. Given that the export price for Mexican feeder cattle is suppressed, there is a corresponding decline in the export volume of feeder cattle. This decline in the export quantity is measure based on calculated export supply elasticity that is based on elasticity estimates from the literature and a carefully measured export share of Mexican feeder cattle.

32. The United States attacks Mexico's export supply elasticity. But the export supply elasticity for feeder cattle exported to the United States is derived based on observed data in a transparent way in Mexico's Methodology Paper. The value of 4.0 for the export elasticity is very reasonable given the size of Mexican cattle market, the structure of Mexican cattle market and empirical evidence on supply and demand elasticities provided in Marsh (2003), among others. An elasticity of 4.0 is a conservative estimate that is consistent with observed data, the presented empirical evidence and the length of run over which the market adjusts to the introduction or the removal of COOL measures. The approach employed by Mexico is transparent and consistent with economic theory, unlike the elasticity employed by the United States in its EDM which considers the wrong length of run and employs an elasticity estimated for a completely different product, wholesale meat.

33. The United States also criticizes Mexico's suggested level of nullification or impairment based on its relative size compared to the current value of Mexican feeder cattle exports to the United States. The large relative value is not surprising given that the basis used to calculate the relative value, trade volumes and prices are depressed under the COOL measure. As an example of why the comparison offered by the United States is incorrect, if the volumes of trade under COOL had fallen to zero, then the relative size would have been infinite. Mexico notes that the United States alleges that it is incredible that Mexico could export 30 percent more feeder cattle. But Mexico's 2014 exports were 1,115,855 head, while its exports previously have been as high as 1,653,408 in 1995 and more recently in 2012 – before the amended COOL measure was implemented – were 1,468,189. It is therefore completely realistic that the Mexican industry can increase the quantity of its exports by 30% over the 2014 figures.

34. The United States' criticisms of Mexico's calculation of the impact of the COOL measure on Mexican exports of feeder cattle to the United States are both superficial and illogical. Equation (5) in Mexico's Methodology Paper (relating to the quantity of exported cattle) is the same as equation (31) in Exhibit US-4 that describes the United States' EDM. The single equation is sufficient and does not need to account for the complexity of the feeder cattle market in Mexico and the United States because, as explained previously, this is accounted for in the estimated coefficient of the impact of the COOL measure on the price of Mexican feeder cattle exported to the United States in the price basis regression. The United States attempts to mix the different analyzes together in a confusing and incorrect manner.

35. Exports of livestock from Mexico and Canada to the United States are significant but nonetheless represent a small share of the total U.S. livestock market (2013 Final Rule, 78

Fed. Reg. at 31367). Changes in export volumes from Mexico and Canada would thus have a small impact on U.S. livestock prices. Furthermore, the United States is a very large country and exports of cattle from Mexico are made to a very different area than the exports from Canada, thus limiting direct competition between Mexican and Canadian cattle.

The United States' EDM is Unreliable

36. The United States argues that only an EDM is appropriate for use in evaluating the impact of the COOL measure on Mexico, but that is incorrect. The relevant economic literature – e.g., peer-reviewed economic journals that focus on applied economics – confirms that econometric analysis is the standard approach for *ex post* evaluation of policy programs. Importantly, the U.S. government itself has collected and published most of the relevant data needed to estimate the impact of the COOL measure as used in Mexico's Methodology Paper. Therefore, there is no lack of reliable data needed to estimate the impacts of the COOL measure and no reason not to use it.

37. The United States also argues that econometric analyzes are not favored in WTO disputes, but overlooks that the Panel in *US – COOL* found that an econometric model provided robust evidence that the COOL measure had a negative and significant impact on Canadian imports shares and price basis.

38. The United States' EDM suffers from a number of deficiencies. In particular, the U.S. EDM is calibrated using short-run elasticities, while the full impact of the COOL measure can only be measured with a long-run economic analysis. The use of a short-run analysis grossly underestimates the impact of the COOL measure.

39. Also, the structure of the U.S. EDM is fundamentally flawed. Mexico's Exhibit MEX-29 provides a schematic of the structure of the U.S. model. The U.S. analysis assumes that all cattle in the United States are identical, so that the same costs of the COOL measure are incurred as products move through the supply chain regardless of the country of origin. The model ignores costs from segregating livestock and meat according to the country of origin which have been recognized by the panel in earlier rulings.

40. For the correct application of the labels at retail, cattle and meat must be segregated according to their origin. A correct structure for an EDM requires taking into account that cattle of different origins be kept separated and with different costs of the COOL measure according to the cattle's country of origin. An illustration of such a structure is provided on page 4 of Exhibit MEX-29.

30. Moreover, the United States bases its calculation on export prices and volumes that are suppressed by the COOL measure. A correct calculation of impairment is one where the baseline is the situation where the COOL measure has not yet been implemented and then the COOL measure is introduced. Mexico's methodology follows this correct approach.

41. Instead of using the available data to directly estimate the impact of the COOL measure on the export of Mexican feeder cattle to the United States, the United States proposed a fictional world that is examined within an EDM and proposes to use this fictional world for the calculation of nullification and impairment. The modeling assumptions in the EDM presented by the United States assume that there has been no denial of equal competitive opportunities for Mexican cattle, which conflicts with the findings of the Panel and the Appellate Body.

42. Specifically, a complex EDM such as the one proposed by the United States relies on a large number of assumptions that result in a poor approximation of the causal effects of policy changes. In particular, the United States' EDM ignores the specifics of the segregation

technology utilized by firms to comply with the COOL measure and ignores corner solutions, while assuming there is perfect competition in the US livestock industry. These modeling flaws cause the United States' EDM to grossly underestimate the impacts of the COOL measure. The United States' EDM oversimplifies market conditions and is inconsistent with market realities with respect to the path that the U.S. livestock industry has taken to comply with the COOL measure.

43. An EDM cannot be an appropriate substitute for econometric analysis to evaluate the impact of policy changes *ex post*. Actual changes in market prices and quantities reveal the true impact of policy changes given existing market realities. Unlike a supply chain model such as the one offered by the United States, econometric analysis does not rely on assumptions about market structure and model calibration and instead allows the data itself to reveal impacts on prices and quantities. Data to evaluate the market impacts of the COOL measure, as demonstrated in Mexico's Methodology Paper, are readily available and can be used to estimate the causal impacts of the COOL measures.

44. Even if one were to accept that an EDM is appropriate to apply in these circumstances (*ex post*), there are a number of specific problems with the United States' EDM. Tonsor et al. (2015) made a proper use of an EDM in their *ex ante* analysis of the costs of the COOL measure.⁵ This is the type of analysis that is typically performed using EDMs, unlike the United States *ex post* analysis. The EDM of Tonsor et al. (2015) does not specifically consider imports but does account for the segregation costs as described in the report prepared by Informa Economics on the impact of the COOL measure by using the weighted average of the costs associated with the COOL measures for firms that source animals from a single origin and firms that source animals from multiple origins.

45. The United States' EDM is inconsistent with the fact that processing plants accepting imported animals pass the cost of the COOL measure onto the price they pay for animals that were previously imported as feeder cattle. The Panel in the underlying proceedings made findings on this issue:

In fact, there is direct evidence of major slaughterhouses applying a considerable COOL discount of USD 40-60 per head for imported livestock. This proves that major processors are passing on at least some of the additional costs of the COOL measure upstream to suppliers of imported livestock. We have no evidence of a similar discount being applied to suppliers of domestic livestock, nor has the United States responded to the evidence submitted by Canada and Mexico in this respect.⁶

46. Also in the original proceedings, the Panel undertook a detailed examination of the impact of the COOL measure on imported livestock, and found that competitive opportunities were reduced in at least sixteen significant ways, namely:

- a) a considerable COOL discount being applied by several major processors to imported livestock and the absence of a similar discount being applied to domestic livestock,
- b) plants and companies simply refusing to process any imported livestock,

⁵ Appendix 15 to Exhibit MEX-2.

⁶ Panel Reports, *US – COOL*, para. 7.356. See also Panel Reports, *US – COOL (Article 21.5 – Canada and Mexico)*, paras. 7.170 and 7.176.

- c) fewer processing plants accepting imported livestock,
- d) certain suppliers having to transport imported livestock longer distances,
- e) plants processing imported livestock at specific limited times, namely on specific days of the week or only after specific hours of the day,
- f) additional logistical problems and additional costs for certain imported livestock suppliers,
- g) due to congestion resulting from limited specific-time deliveries, certain imported livestock suppliers faced increased difficulty in obtaining delivery trucks or using trucks in the most efficient way,
- h) transportation delays for certain suppliers of imported livestock,
- i) increased transportation costs for certain suppliers of imported livestock,
- j) less efficient transportation for certain suppliers of imported livestock because of fewer deliveries due to the longer distance and less turn-around time,
- k) changes to contractual terms for suppliers of imported livestock to incorporate a COOL opt-out clause to allow processors to unilaterally terminate or amend their contracts with suppliers of imported livestock,
- l) cancellation, termination or non-renewal of supply contracts for imported livestock,
- m) replacement of long-term contracts with spot contracts at lower purchase prices,
- n) 14 days advance notice being required for suppliers of Mexican cattle at various U.S. processing facilities,
- o) certain suppliers of domestic livestock suffered significant financial disadvantages due to price discounts for imported livestock as a result of the COOL Measure, and also due to the refusal of financial institutions to provide credits and loans to Canadian livestock producers because of the risks resulting from the COOL Measure, and
- p) exclusion of imported cattle from premium beef programs which are particularly profitable for livestock suppliers.⁷

47. In addition, the Informa Study clearly describes that firms that handle single origin animals/meat incur substantially smaller costs of compliance with COOL than firms that deal with animal/meat from multiple origins. The United States' EDM is therefore inconsistent with the actual cost structure and impact of the COOL measure.

48. Moreover, equations (18) to (23) of the United States' EDM in Exhibit US-3 are based on an implausible assumption that removal of the COOL measure will have the same impact on the prices of imported livestock as on the prices of U.S. livestock of the same weight categories. This is inconsistent with the pattern of discrimination found to exist under the COOL measure. Under the COOL measure, animals of different origins are imperfect substitutes. The COOL measure requires that feeder cattle imported from Mexico be differentiated from U.S. born cattle at later stages of the supply chain, so that the meat from these animals can be correctly labeled according to their origins as specified by the COOL measure. The requirement to differentiate animals according to their origins impose

⁷ Panel Reports, *US – COOL*, paras. 7.373-7.381.

additional costs that can be averted by using animals of a single origin, which is precisely why the COOL measure has a differential impact in the price of imported Mexican cattle. Equations (18) to (23) simply assume away this reality.

49. The United States' EDM is set up in such a manner that the results regarding livestock prices are given by what the United States calls the "import wedge." For instance, in tab 16 (Complete Results) of Exhibit US-3, the change in the imported Mexican feeder cattle price in the United States is USD 12.63 while the change in the Imported Mexican feeder calf price in Mexico is USD 14.88. The difference between these two values is USD 2.25, which is the value of what the United States calls the "import wedge" for "farrowing and cow calf calves from Mexico" in tab 13 (COOL costs) in Exhibit US-3. This feature of the EDM is inconsistent with the fundamental economic theory that the costs of a policy program are distributed through the whole supply chain. It is also inconsistent with established facts that all the cost of the COOL measure for the entire supply chain are passed onto the price of imported animals, not just the cost of the COOL measure associated with the imported animals. Moreover, it is inconsistent with the evidence established during the proceedings that, even before the implementation of the amended COOL measure, processors were imposing a much higher "COOL discount" of up to USD 40 to 60 per head. Indeed, the Panel in the original proceedings observed that "[i]n the absence of a large share of US consumers willing to pay a price premium for country of origin labelling, the cheapest way to comply with the COOL measure is to process only US-origin livestock, all other things being equal", that the "other possibility is to continue processing imported livestock through segregation, which entails additional costs in virtually all cases" and that "[e]ither process configuration is likely to cause a decrease in the volume and price of imported livestock".⁸

50. Another problem with the United States' EDM is that the set of elasticities utilized are inappropriate to measure the full impacts of withdrawing the COOL measure. Incorrect elasticities values contribute to a severe underestimation of the impacts of the COOL measure on imported feeder cattle from Mexico. The United States uses elasticities from previously published works, but those studies had a very different objective than measuring nullification or impairment and a different length of run. In some cases, the United States uses elasticities for a completely different product. The United States' model uses some of the elasticities reported in Tonsor, et al. (2015) to derive short-run estimates (one-year). But complete removal of the COOL measure would require a period of adjustment that exceeds one year. The inappropriate length of run of the United States' model causes underestimation of the market impacts of the COOL measure.

51. Moreover, the United States' EDM uses the same elasticity of supply for U.S. fed and U.S. feeder cattle. There is no economic rationale for this assumption and this is not supported by the work of Tonsor et al. (2015).

52. The United States set the export supply elasticity of Mexican feeder cattle at 1.83 to equal the supply elasticity for U.S. imports of wholesale meat. However, there is no economic rationale to set the export supply elasticity of feeder cattle to be the same as for wholesale meat. The Mexican feeder cattle export supply elasticity depends on the Mexican domestic demand and supply elasticities and the export share. There is no economic rationale for the export supply elasticity of feeder cattle to equal the export supply elasticity of meat. The supply and demand conditions for these two products are significantly different.

⁸ Panel Reports, *US – COOL*, para. 7.506.

53. In its EDM in Exhibit US-3, the United States uses cost estimates from the Regulatory Impact Analysis (RIA) prepared by the Agricultural Marketing Service of the U.S. Department of Agriculture, which were prepared in connection with the 2009 and 2013 versions of the COOL regulations (Exhibit US-1 and Exhibit US-2). The RIA is a costs and benefits analysis that is concerned with regulatory impacts on the United States' economy. The 2009 and the 2013 RIA therefore mainly focus on labelling and completely ignore segregation costs that are the source of the differential treatment of imported livestock. The United States accordingly ignores in its model a significant source of costs, which leads to severe underestimation of the amount of nullification and impairment. As an alternative, the United States could have used the Informa Study as an objective and unbiased source of information about the costs of the COOL measure. The estimated costs in the Informa Study are substantially higher than those in the RIA, in particular for firms that source livestock from more than one country of origin. The EDM presented by the United States fails to account for the cost of segregation and segmentation described in the Informa Study.

54. The United States' EDM also includes an adjustment for the United States' assertion that costs should be reduced to account for the exemptions from the COOL measure, such as for processed products. But the Panel in the underlying proceedings found that the burdens of the COOL measure were imposed on all imports of Mexican cattle, because at the time of importation the purchasers do not know their ultimate use. The United States pursued this argument with the Appellate Body and it was rejected. Accordingly, there is no justifiable basis for including such an adjustment in the United States' model.

Impact on Mexican Domestic Market Prices

55. Mexico's Methodology Paper established that the COOL measure's impact on Mexico's exports of cattle has had effects not only on Mexican exports, but also on sales of cattle in Mexico's domestic market. The impact of the domestic price suppression is calculated to be USD 198 million. Like the export price and volume effects, this domestic price suppression effect is directly related to the nullification or impairment at issue. In simple terms, the relevant benefit accruing to Mexico is the right of not having to face a measure like the COOL measure. By virtue of the nullification or impairment of this benefit by the COOL measure, Mexican domestic prices have been suppressed. It would fundamentally undermine the balance of concessions in the WTO Agreements if the full extent of the benefits accruing to WTO Members were not recognized in this arbitration. The COOL measure has disrupted the previously integrated North American cattle market. The price suppression in the Mexican market is a direct result of this disruption. In legal terms, the price suppression is the direct effect of the nullification or impairment of the benefits accruing to Mexico under the WTO Agreements.

56. The United States argues that, as a matter of law, the harmful economic effects of price suppression in the Mexican domestic market for cattle cannot be considered at all. It claims that prior arbitrators have found that they must only consider trade flows, and seeks to characterize Mexico's quantification of the harm from domestic price suppression as "some broader, subjective measure of the overall economic impacts supposedly related to non-compliance."⁹ But Mexico has not claimed that it should be compensated for general effects in its domestic economy; rather, it has shown the causal effects of the COOL measure specifically on the Mexican cattle industry. Moreover, the covered agreements

⁹ United States' written submission, para. 120.

contemplate that nullification and impairment can have indirect effects, and prior arbitrators have not excluded the possibility that effects in domestic markets can be taken into account. These points are explained in detail below.

57. In evaluating claims for economic harm, arbitrators in prior disputes have focused on whether there was a sufficient "causal link" between the measure at issue and the alleged harm, such as in *EC – Hormones (US) (Article 22.6 – EC)*. The requirement of a causal link between benefits being nullified and impaired and the measure at issue derives from the language of GATT Article XXIII:1, which establishes that a nullification or impairment must arise "as the result of ... the failure of another contracting party to carry out its obligations".

58. The concept of "causal link" has been discussed in cases arising under other agreements. For example, in *US – Steel Safeguards*, the Appellate Body, in the context of examining the term "as a result of" in Article XIX:1(a), found that there is a need to establish a causal link between increased imports and unforeseen developments when imposing a safeguard measure:

Turning to the term "as a result of" that is also found in Article XIX:1(a), we note that the ordinary meaning of "result" is, as defined in the dictionary, "an effect, issue, or outcome *from* some action, process or design". The increased imports to which this provision refers must therefore be an "effect, or outcome" of the "unforeseen developments". Put differently, the "unforeseen developments" must "result" in increased imports of the product ("such product") that is subject to a safeguard measure.¹⁰

59. Similarly, in *US – Wheat Gluten*, the Appellate Body stated:

The word "causal" means "relating to a cause or causes" while the word "cause", in turn, denotes a relationship between, at least, two elements, whereby the first element has, in some way, "brought about", "produced" or "induced" the existence of the second element. The word "link" indicates simply that increased imports have played a part in, or contributed to, bringing about serious injury so that there is a causal "connection" or "nexus" between these two elements.¹¹

60. This case does not involve a situation in which economic harm is based on speculation and/or is not capable of quantification. Mexico has demonstrated an extremely close causal link between the COOL measure and price suppression in the Mexican domestic market. In particular, it is undisputed that the Mexican and U.S. markets for cattle are tightly integrated. The Mexican cow-calf industry was structured over one hundred years ago to supply the U.S. market. There are no export markets for Mexican cattle other than the United States. Mexico's methodology takes into account the loss of exports caused by the COOL measure, to avoid double-counting.

61. The only criticism the United States makes of the methodology is to state, vaguely, that "Mexico does not account for other factors impacting its domestic sale of livestock that are completely unrelated to the impact of the amended COOL measure on export volumes. For instance, Mexico does not account for the drought's impact on the quality or life span of

¹⁰ Appellate Body Report, *US – Steel Safeguards*, para. 315.

¹¹ Appellate Body Report, *US – Wheat Gluten*, para. 67.

Mexican cattle."¹² To the contrary, Mexico's methodology isolates the impact of the COOL measure, and measures the impact in terms of lowered prices in the Mexican market.

62. The calculation of the price suppression in the Mexican domestic cattle market builds on the estimate of the impact of the COOL measure on the price of Mexican feeder cattle exported to the United States. The U.S. and Mexican cattle industries are highly integrated and it is a natural outcome of economic forces that a shock on the price of Mexican feeder cattle exported to the United States to be transferred onto prices in the domestic Mexican cattle market. The approach in Mexico's Methodology Paper is to estimate a price transmission regression to measure price linkage between the U.S. feeder cattle market and the Mexican feeder cattle market. It is found that in the long run, \$0.678/lb of a \$1/lb increase in the price of feeder cattle exported to the United States is transmitted to the Mexican domestic price of feeder cattle. Thus, given that the COOL measure depressed exported feeder cattle price by \$0.187/lb, the corresponding price suppression to the Mexican domestic price is -\$0.127/lb. Applying the price suppression to the Mexican domestic feeder cattle market yields a total prices suppression loss to Mexico of \$198,628,204.

63. The calculations of the price suppression loss to Mexico focus on the feeder cattle market. The losses however certainly extend to the whole Mexican domestic cattle market. On a per pound basis, the losses to other cattle categories are smaller and more difficult to measure. However, applied to the whole Mexican cattle industry, these losses are certainly substantial. Hence, the calculations offered by Mexico, which focus on the feeder cattle market, should be understood as a lower bound of the total damage caused to the Mexican cattle industry by the COOL measure.

64. In Mexico's view, the price suppression in the Mexican market is a direct effect of the COOL measure. However, to the extent it might not be direct, it would fundamentally undermine the balance of concessions in the WTO Agreements if the full extent of the benefits accruing to WTO Members were not recognized in this arbitration. Thus, when examining the nullification or impairment of benefits under the provisions of all of the WTO Agreements including under Article 22 of the DSU, it is essential to interpret those benefits broadly so that they include obvious direct benefits but also benefits that are less direct but are nonetheless real. In this instance, the price suppression in the Mexican market is undoubtedly real and the benefits accruing to Mexico under the WTO Agreements should have prevented this price suppression from occurring but have not because they have been nullified or impaired.

65. For both violations of the TBT Agreement and the GATT 1994, a Member may bring a dispute if it considers "any benefit" accruing to it "directly or indirectly" is being nullified or impaired "as the result of" a violation by another Member of its WTO obligations. The "nullification or impairment" referred to in DSU Article 22.4 is the nullification or impairment of "benefits" accruing to a member in the sense of GATT Article XXIII:1. In other words, the benefits may be direct or indirect benefits.

66. The United States nonetheless argues that the Arbitrator may only consider "trade flows," claiming that arbitrators in past cases have found that the level of nullification and impairment must be based exclusively on the impact on trade flows. It cites to the *EC – Hormones*, *US – Gambling*, and *EC – Bananas* cases in support of this claim. However, the United States is wrong to suggest that the arbitrators in prior disputes have found that the

¹² United States' written submission, para. 129.

effects of measures on domestic markets are excluded from consideration. For example, the arbitrator in *US – Byrd Amendment* stated:

We do not agree with the United States that nullification or impairment is to be limited in all instances to the direct trade loss resulting from the violation. We agree with the Requesting Parties that the term "trade effect" is found neither in Article XXIII of GATT 1994, nor in Article 22 of the DSU. Previous arbitrators' decisions based on direct trade impact are not binding precedents.¹³

67. The arbitrator in that case further commented that "[t]he use of direct trade effect in most cases reflects the fact that trade loss is generally more directly identifiable and quantifiable and that, in such a context, arbitrators preferred to rely on verifiable figures",¹⁴ and also stated that "... the 'trade effect' approach has been regularly applied in other Article 22.6 arbitrations and seems to be generally accepted by Members as a correct application of Article 22 of the DSU" (emphasis original).¹⁵ In other words, it is not the only correct application of Article 22.

68. The United States also cites to *EC – Bananas (US) (Article 22.6 – EC)*. In that case, the United States included a claim for economic harm arising from lost exports to third countries of inputs, such as fertilizer, for the third countries' production of bananas. The arbitrator rejected this claim, stating "[t]o the extent the US assessment of nullification or impairment includes *lost US exports* defined as *US content incorporated in Latin American bananas* (e.g. US fertilizer, pesticides and machinery shipped to Latin America and US capital or management services used in banana cultivation), we do not consider such *lost US exports* for calculating nullification or impairment in the present arbitration proceeding between the European Communities and the United States".¹⁶ (emphasis original)

69. In this regard, the key point for the Panel was its view that the third countries could make their own claims for nullification or impairment based on effects on their own exports of bananas to the EU, and that it was inappropriate for the United States to make, in effect, a claim of harm based on the harm to those other countries' exports. Mexico is not claiming harm from loss of exports to third countries. Furthermore, third countries could not make claims for nullification or impairment based on the price suppression effects caused by the COOL measure on Mexican cattle in the Mexican domestic market. Thus, the arbitrator's findings in *EC – Bananas* do not support the United States' argument that indirect effects can never be considered.

70. In *US – Gambling*, Antigua argued that losses to the Antiguan remote gambling industry led to additional losses in other sectors of the economy, including lower income and government revenues. It characterized these as indirect effects that should be taken into account in addition to direct trade effects. To compensate for those effects, it proposed to apply a "multiplier" to its calculation of the trade effects to arrive at an approximation of the indirect effects. The arbitrator rejected the multiplier, finding that "the use of a multiplier reflecting the aggregate change in output for a unit change in demand would be contrary to

¹³ Decision by the Arbitrator, *US – Offset Act (Byrd Amendment) (EC) (Article 22.6 – US)*, para. 3.70.

¹⁴ Decision by the Arbitrator, *US – Offset Act (Byrd Amendment) (EC) (Article 22.6 – US)*, para. 3.39.

¹⁵ *Ibid.*, para. 3.71.

¹⁶ Decision by the Arbitrator, *EC – Bananas III (US) (Article 22.6 – EC)*, para. 6.12.

some of Antigua's other arguments concerning the limited impact of remote gambling revenues on GDP.¹⁷ Unlike Antigua in the *US – Gambling* case, Mexico has not made a claim of harm from negative effects to its general economy but rather has identified concrete effects on the Mexican cattle industry arising from the COOL measure. Mexico has not made other arguments that are contrary to its position.

71. In the *EC – Hormones (Canada) (Article 22.6 – EC)* determination cited by the United States, Canada did not propose to include any economic harm except that to trade flows, so it is unclear why the United States believes that determination is a relevant precedent. In *EC – Hormones (United States) (Article 22.6 – EC)*, the arbitrator rejected a U.S. effort to include an estimated amount for additional exports of edible beef offal that would have been made as a result of U.S. marketing and promotional efforts that would have taken place but for the hormone ban. In other words, there had been no such marketing efforts. The arbitrator declined to take those projected exports into account on the basis that they were too speculative. The effects on the Mexican domestic market for cattle, in contrast, are not speculative; they are quantifiable and have a close causal connection to the COOL measure.

72. The United States cites to a recent proposal to amend the DSU as evidence that the DSU currently prohibits the inclusion of domestic price suppression. The proposal, contained in TN/DS/26, is to amend the DSU to expressly allow the level of nullification and impairment to include an estimate of the effect of the inconsistent measure on a country's economy as a whole. Mexico has not proposed to include in the level of nullification and impairment the impact of the COOL measure on Mexico's economy as a whole; rather, Mexico has included the effects of the inconsistent measure on the Mexican market for cattle – effects that have a close causal link to the U.S. measure. Accordingly, TN/DS/26 is not relevant to this dispute.

73. The United States also puts forth an argument that there is a requirement to evaluate the effect of Mexico's proposed suspension of benefits on the U.S. economy as a whole, claiming that "[t]he corresponding level of suspension would need to be decreased by an appropriate calculation of the broader economic effects on the U.S. economy of the suspended trade."¹⁸ The United States cites no provision of the covered agreements or any prior arbitration ruling in support of this argument, because there is none. The level of nullification and impairment is not measured in terms of its impact on the country that maintains the inconsistent measure. The appropriate measure is the value of the denial of benefits, direct and indirect, to the complaining member.

¹⁷ Decision by the Arbitrator, *US – Gambling (Article 22.6)*, para. 3.123.

¹⁸ United States' written submission, para. 127.