

**Law, Knowledge, and  
National Interests  
in Trade Disputes:  
The Softwood Lumber Case**

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## Abstract

The impact of international trade agreements on domestic policy autonomy will depend in larger part on the operation of the dispute settlement mechanisms established by these agreements. This paper examines the implications of dispute settlement mechanisms for Canada's domestic policy sovereignty by analyzing one extremely high-profile case: the softwood lumber dispute with the United States. The methodology is based on disentangling and then reintegrating the legal, normative, and factual bases for decisions. The paper describes the dispute settlement procedures, provides an overview of the softwood lumber controversy, and then examines the substantive aspects of the panels' decisions in detail. Particular attention is paid to the relative importance of legal standards, the factual evidence, and the nationality of the panel members.

The case demonstrates that panel members can be convinced by evidence to take positions at odds with their government. Even the US minority supported a number of Canadian arguments on one key matter, stumpage rates, and the Canadian majority, in response to the redetermination by Commerce, changed its view from the first panel on the other central issue at stake in the case, log export restraints. But despite this relative consensus on the factual disputes, there was intense disagreement on the legal standards in question.

Overall, the dispute resolution process had the potential to provide some protection for Canada, but ultimately was trumped by legislative changes in the US. The potential institutionalization of the dispute settlement process is limited by the terms of the free trade agreements that continue to apply the subsidy laws of the importing country. In this case, Canadian sovereignty has been challenged not because of the transfer of authority to supranational institutions, but precisely because supranational institutions were not strong enough.

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## I. Introduction<sup>1</sup>

For trade-dependent nations like Canada, international trade agreements pose a challenging trade-off. On the one hand, these agreements hold the potential to advance Canadian interests by providing a defence against protectionist actions of other governments. On the other hand, such agreements pose significant challenges to domestic policy sovereignty by imposing a number of constraints on national governments. The balance of these costs and benefits of trade agreements depends in part on the operation of the dispute settlement mechanisms established by these agreements. This paper examines the implications of dispute settlement mechanisms for Canada's domestic policy sovereignty by analyzing one extremely high-profile case: the softwood lumber dispute with the United States.

Are dispute settlement panels likely to threaten Canadian sovereignty? This will depend on the way they operate. One possibility is that members of the panels will exhibit national bias, with individual members of the panels adopting viewpoints favoured by their own government. The panels will thus become a forum where disputes between two governments are played out among opposing experts.

Another possibility is that panel members will be more influenced by shared values, legal standards, norms of evidence, or causal theories, and tend to adopt more uniform positions in their rulings. This proposition is consistent with the "epistemic community" literature, which suggests that experts in a given field typically share norms as well as a body of scientific knowledge, which leads them to adopt common positions on any given issue.<sup>2</sup> In the case of trade law, this would involve a general commitment to the principles of free trade, common interpretation of applicable legal standards and methods of analysis and measurement. By this view, no national bias enters into play when experts deliberate. If the panels do in fact operate this way, they may protect Canada's sovereignty when law and science are "on Canada's side." When law and science go against Canada, the implications are obviously different.

Sophisticated studies have been made of the institutional design of these dispute settlement mechanisms, their aggregate results, and the implications of their actions for domestic trade bureaucracies.<sup>3</sup> There are two detailed examinations of internal decision-making processes of early panel decisions, but those analyses provide relatively little attention to the contested knowledge basis for the decisions.<sup>4</sup> There has not been a significant amount of work on the question of national bias in dispute settlement panels, but the one study that does exist shows a relatively high degree of unanimity. Of the 35 completed cases surveyed, 24 of them, or nearly 70%, ended in unanimous decisions. In most, but not all, of the cases where there was dissent, the dissenting party sided with their own country. While there was thus some evidence of national bias, it certainly had not overwhelmed the process in the cases completed through 1994.<sup>5</sup>

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<sup>1</sup> Research for this study was supported by the Hampton Fund at the University of British Columbia. An earlier version of this paper was presented at the *Globalization and Its Discontents* conference, Simon Fraser University, July 23-24, 1998.

<sup>2</sup> Peter Haas, "Knowledge, Power, and International Policy Coordination," *International Organization* 46 (1993) (special issue).

<sup>3</sup> Judith Goldstein, "International Law and Domestic Institutions: Reconciling North American 'Unfair' Trade Laws," *International Organization* 50 (1996), pp.541-64; Kenneth B. Woodside, "Institutions for Settlement of Trade Disputes: The Case of the Canada-United States Free Trade Agreement," in David Weimer, ed., *Institutional Design*, (Boston, MA: Kluwer, 1995).

<sup>4</sup> Thomas Boddez and Michael J. Trebilcock, *Unfinished Business: Reforming Trade Remedy Laws in North America*, (Toronto, ON: CD Howe, 1993); Andrew Anderson, *Seeking Common Ground: Canada-US Trade Dispute Settlement Policies in the Nineties*, (Boulder, CO: Westview Press, 1995).

<sup>5</sup> Charles Doran, "Objectivity and Neutrality of Binational Trade Dispute Resolution in North America," Center of Canadian Studies, School of Advanced International Affairs, Johns Hopkins University, August 1996.

This paper applies the basic approach employed in earlier work to deconstruct decisions in knowledge-intensive risk management controversies.<sup>6</sup> The methodology is based on disentangling and then reintegrating the legal, normative, and factual bases for decisions. Particular attention will be paid to the relative importance of legal standards, the factual evidence, and the nationality of the panel members.

To evaluate the relevant importance of these three factors, we consider the softwood lumber dispute between Canada and the United States. Specifically, we examine the internal decision-making dynamics of the binational panels that ruled on this case in the early 1990s. At first blush, it appears there was considerable division of opinion along national lines in the panel rulings. A closer examination of individual elements of the decision, however, suggests that in some cases panel members were persuaded by legal standards and factual evidence to adopt positions at odds with the views of their respective governments. We argue that a crucial variable underlying the propensity of experts to allow national bias to enter into play is the degree of ambiguity in the legal standards or factual evidence involved. In those elements of the softwood lumber decision where the legal or factual reasoning was ambiguous, the panel did split on national lines. But where the reasoning was more clear-cut, the panelists adopted a common viewpoint.

Thus, the impact of free trade panels on Canadian sovereignty will vary from case to case. In cases where the evidence is clear-cut, national bias is unlikely to be a factor and the impact on Canadian domestic policy sovereignty will hinge on whether Canada is in the right or wrong. But where ambiguity prevails, national bias may well creep in and the panels are unlikely to afford Canada much protection - other than as a forum where Canadian experts can defend Canada's viewpoint and national interests. The paper concludes by outlining a strategy to develop a more systematic understanding of the role of dispute settlement panels through the examination of a broader range of cases.

## II. Overview of Dispute Settlement Mechanisms

The establishment of an effective dispute resolution mechanism was one of the core objectives of Canadian negotiators in free trade negotiations, and initial analyses suggested that Canada achieved most of what it wanted.<sup>7</sup> The dispute settlement mechanism created a binational panel process to review trade determinations by domestic agencies. The panels would not create or apply new law, but apply the law of the importing country. Decisions of the panels would be binding. In the case of US attacks on Canada's policies, this meant that the panel would review the US action for its consistency with US trade law, and that the binational panel would replace judicial review by US courts. Panel members would be chosen from a register of fifty people (half from each country). For any given panel, each country chooses two members, and both countries mutually agree on the fifth. The agreement stated that the candidates "shall be chosen strictly on the basis of objectivity, reliability and judgement, and general familiarity with international trade law." There was room for non-lawyers to be selected, but the rules required that a majority of panel members, and the chair, be lawyers.<sup>8</sup>

The substantive US law in question is the language of the Tariff Act of 1930 defining countervailable subsidies. The law contains three tests. The first, performed by the International Trade Commission (ITC), is *material injury*. The ITC must determine that the industry seeking relief has been materially injured or is threatened with material injury. The second test - performed by the International Trade Administration (ITA) of the US Department of Commerce - is *specificity*, whether the subsidy is provided "to a specific enterprise or industry, or a group of enterprises or industries."<sup>9</sup> This test is

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<sup>6</sup> Kathryn Harrison and George Hoberg, *Risk, Science, and Politics: Regulating Toxic Substances in Canada and the United States*, (Montreal, QC and Kingston, ON: McGill-Queen's University Press, 1994).

<sup>7</sup> For example, see G. Bruce Doern and Brian Tomlin, *Faith and Fear: The Free Trade Story*, (Toronto, ON: Stoddart, 1991), esp. chapter 11.

<sup>8</sup> Andrew Anderson, *Seeking Common Ground*, p.125

<sup>9</sup> Quoted in *Certain Softwood Lumber Products*, (May 6, 1993), p. 46.

designed to distinguish government programs targeted to benefit specific firms or industrial sectors from those that apply more generally, such as road building or unemployment insurance. The third test - also carried out by the ITA - is *preferentiality*, whether the good or service is provided at a “preferential rate.”

In terms of the degree of scrutiny applied to government decisions, panels are charged with applying the standards of review established by the relevant statutes and “the general legal principles that a court of the importing Party would otherwise apply.” Following the applicable principle of administrative law in the US, the panel can reject any determination it finds “to be unsupported by substantial evidence on the record or otherwise not in accordance with law.”<sup>10</sup> Thus, there is a test based on the factual elements of the decision and one based on legal standard. The substantial evidence test is defined as “such relevant evidence a reasonable mind might accept as adequate to support a conclusion.”<sup>11</sup> As to review of the legal standard, the guiding principles have been articulated by the US Supreme Court in its influential *Chevron* decision: “If the intent of Congress is clear, that is the end of the matter... If however, the court determines Congress has not directly addressed the precise question at issue... the question for the court is based on a permissible construction of the statute.”<sup>12</sup>

The standard of review is very important in allocating advantages and disadvantages to different parties in the dispute. The more rigorous the standard of review, the stronger the independent role for binational panels in challenging trade agencies can be. In this case, the substantial evidence test is a relatively stringent one, more so than a simple “arbitrary and capricious” test applicable to other areas of US administrative law. The principles for interpretation of legal standards enunciated in *Chevron* are quite deferential, but there continues to be extremely inconsistent application of the principles even in US federal courts.

The standards in both the substantive trade law and the standard of review are vague and leave a great deal of room for interpretation and argument over definition and measurement. As we shall see, the softwood lumber case involved intense disagreements over the application of the substantive law in question, and both the evidentiary and legal aspects of the standard of review.

### III. Overview of the Dispute

Before proceeding to an intensive scrutiny of the economic reasoning involved in the binational panel decisions, an overview of the softwood lumber dispute is in order.<sup>13</sup> The dispute first began in 1982 when the US Department of Commerce (DOC) investigated complaints from US logging companies about the alleged subsidizing effect of Canadian stumpage rates (the fees paid by logging companies to the provinces for the right to harvest trees). At that time, the DOC ruled in favour of Canada. A second DOC investigation in 1986 found that Canadian stumpage rates did represent a subsidy. Faced with the imminent imposition of duties, Canada agreed in the 1986 Memorandum of Understanding (MOU) to place a 15% export tax on all softwood lumber exports to the US. But in 1991, the Canadian government announced it was terminating the MOU, arguing that stumpage rate increases since 1986 had rendered the

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<sup>10</sup> *Certain Softwood Lumber Products from Canada*, United States-Canada Free Trade Agreement Article 1904 Binational Review, USA.-92-1904-01, Decision of the Panel (May 6, 1993), p.21.

<sup>11</sup> *Ibid.*, p.22.

<sup>12</sup> *Chevron v. Natural Resources Defense Council*, 457 US 837 (1984).

<sup>13</sup> For overviews of the case, see Charles Doran, “Trade Dispute Resolution on Trial: Softwood Lumber,” *International Journal* 51, no.4 (Autumn 1996), pp.710-733; T.M. Apsey and J.C. Thomas, *Lessons of the Softwood Lumber Dispute: Politics, Protectionism, and the Panel Process*, manuscript, January 2, 1997; Benjamin Cashore, “Flights of the Phoenix: Explaining the Durability of the Canada-US Softwood Lumber Dispute,” *Canadian-American Public Policy* 32 (December 1997); Robert Howse, *Settling Trade Remedy Disputes: When the WTO Forum is Better than the NAFTA*, C.D. Howe Institute Commentary 111, (Toronto, ON: C.D. Howe Institute, June 1998).

export tax superfluous. In response, the DOC immediately took the unusual step of self-initiating another countervailing duty investigation against Canada, thus marking the start of Softwood Lumber III.

This third round was more protracted and complex than the first two, going through several stages before its final resolution. Both Canadian and American parties with a stake in this dispute invested considerable energy and resources in defending their position. The American side was led by the Coalition for Fair Lumber Imports (CFLI), a coalition of American forestry companies formed in 1983. On the Canadian side, a coordinated defence was undertaken by several provincial governments - the targets of the investigation - along with the federal government and Canadian forestry companies. The third round also saw a new issue added to the mix. In addition to investigating the alleged subsidizing effect of Canadian stumpage rates, the DOC targeted another Canadian forestry practice: the log export restraints (LERs) in place in British Columbia.<sup>14</sup> The claim was that these restraints served to lower domestic log prices in BC, which provided a subsidy to BC lumber producers and other firms using unprocessed logs as an input to their manufacturing processes.

The Department of Commerce ruled in May 1992 that both Canadian stumpage rates and LERs represented countervailable subsidies, and set the countervailing duty at 6.51% (2.91% for stumpage, 3.6% for LERs). Canada requested that a binational panel be established under the Free Trade Agreement to review this decision. The panel, composed of two Americans and three Canadians, ruled unanimously in favour of Canada in May 1993. Most elements of DOC's decision were remanded to the Department, which either had to come up with more empirical evidence or sounder economic reasoning - or reverse its decision.

The DOC issued its "Redetermination Pursuant to Binational Panel Remand" in September 1993. It ruled again that both stumpage pricing and LERs conferred subsidies on Canadian softwood lumber exports, and upped the countervailing duty to 11.54% (based on certain technical calculation adjustments). In December 1993, the binational panel issued its second ruling. The panel ruled by a three to two margin against the DOC, with the three Canadian panelists forming the majority and the two Americans the minority; all the panelists, in other words, ruled in favour of their own government's position. This was not the case, however, for all the specific issues involved. The US then appealed the panel decision, turning to the so-called Extraordinary Challenge Committee (ECC) provided for under the agreement, which allows challenges to panel decisions in the event of conflict of interest of panel members or if the panel exceeds its mandate. In an August, 1994 decision, the ECC turned back the US challenge, with the two Canadian judges voting in favour of Canada and the US judge voting in favour of the US.

This did not, however, end the dispute. Having been frustrated at every turn in the dispute resolution panel process, US lumber interests went back to Congress to change the applicable law. They were able to get Congress to agree to insert language into the implementing legislation for its adoption of the World Trade Organization that changed the legal standards for subsidies in such a way as to undercut the reasoning of the dispute resolution panel. Fearing a loss in the inevitable next round, Canada agreed to enter negotiations with the US. The result was the 1996 Softwood Lumber Agreement, which established fixed quotas for Canadian market access in the US. Amounts exported over the quotas would be taxed, at progressively higher rates as the amount increased.

Thus, because the dispute resolution panels are charged with implementing the legislation of the importing country, the legislative changes trumped the panel decisions, diminishing the significance of the panel process. Comparing the content of the 1996 agreement to the 1986 agreement, however, it does seem that the panel process did significantly strengthen Canada's bargaining position.<sup>15</sup> Whereas the 1986 agreement required taxes on all exports, the 1996 agreement allowed a significant amount of lumber to enter the US duty free.

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<sup>14</sup> The DOC also investigated log export restraints in other provinces, but only targeted BC in its ruling.

<sup>15</sup> Gordon Ritchie, *Wrestling with the Elephant: The Inside Story of the Canada-US Trade Wars*, (Toronto, ON: Macfarlane Walter & Ross, 1997), p.212.

The complexity of this multi-stage process requires that we be selective about which aspects of the dispute to concentrate on. We have chosen to focus on what we believe to be the most significant decision in the panel process, the second panel decision in December 1993. For each of the two targeted practices - stumpage rates and log export restraints - several questions had to be answered. These are summarized in Figure 1, along with the positions taken by the Canadian and American panelists on the second binational panel. As Figure 1 indicates, there were two basic issues, common to all CVD investigations, that had to be addressed for both stumpage pricing and LERs. It was first necessary to determine whether the government action in question was specific: was it targeted at a specific industry or group of industries or was it generally available? It was then necessary to determine whether the practice actually had a subsidizing effect. (Although it also involved a protracted process, we do not consider the third issue of material injury here).

The specificity question was basically a matter of interpretation of legal standard, and we only mention it in passing. The second question - the subsidizing effect - is the focus of our analysis here. On the second FTA panel, there were two distinct matters to be addressed in determining if stumpage pricing had a subsidizing effect: whether “market distortion analysis” was required; and the evidence of market distortion.<sup>16</sup> The first was a legal question, the second a factual question. As Figure 1 shows, there was a national split on both of these questions, but the difference was far sharper on the legal issue. The analysis below, however, focuses on the factual issue highlighted in bold in Figure 1.

As in the case of stumpage rates, log export restraints (LERs) had to be examined on both the question of specificity and subsidizing, and again our focus is the latter. In the case of LERs, there were two distinct steps required to demonstrate a subsidizing effect: determining whether LERS had a downward effect on BC log prices; and measuring the size of that effect.<sup>17</sup>

The former issue (again highlighted in bold in Figure 1) is the other element of the dispute examined in our comparison.

As Figure 1 indicates, the second binational panel produced a split along national lines on the “evidence of market distortion” issue. While the American and Canadian panelists were not wholly at odds, the Americans were more sympathetic to the DOC’s arguments and willing to remand the matter to the Department again to give it an opportunity to provide further evidence for its conclusions. There was, however, no such split on the price effect of LERs, as the Canadian panelists sided with their American counterparts and accepted the DOC’s reasoning. As demonstrated below, this difference can be attributed, at least in part, to the economic science brought to bear on the two issues. Both the American and Canadian sides presented strong arguments on the market distortion issue, which seems to have allowed a certain amount of national bias to enter into play. On the LER issue, the arguments were less ambiguous and appeared to favour the American position. Thus, the Canadian panelists rejected the Canadian position and sided with their American counterparts.

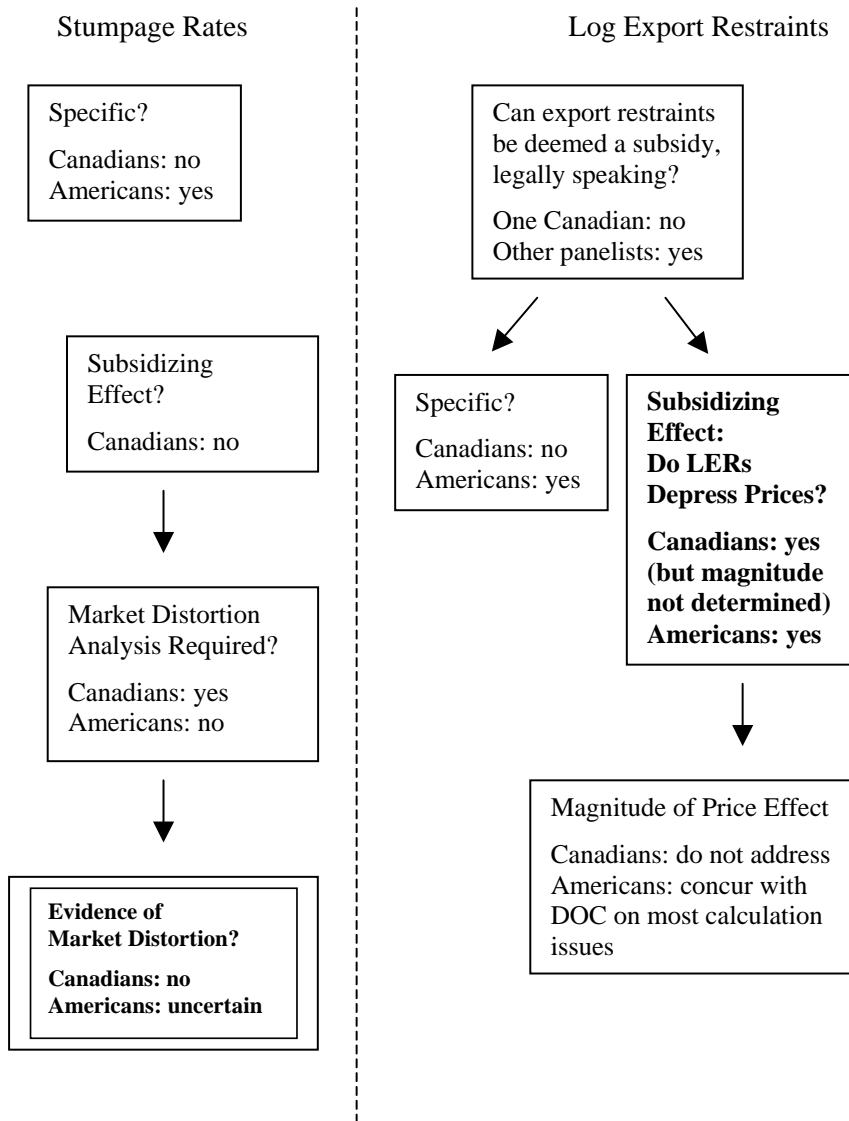
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<sup>16</sup> A DOC assessment of a subsidizing effect typically involves comparing the price of the good or service under investigation to the price of a comparable good or service, referred to as the “benchmark.” If the price of a good or service provided by government is lower than the benchmark, the difference represents a subsidy. But in the case of stumpage pricing, the Canadian side argued that an alternative methodology was required (“market distortion analysis”) and the first binational panel agreed. The DOC disputed this, but nevertheless applied the Canadian methodology in its “Redetermination Pursuant to Binational Panel Remand.” Hence the two issues for the second binational panel to consider: the requirement of market distortion analysis and the evidence of market distortion.

<sup>17</sup> Usually, the identification and measurement of a subsidizing effect involves a single step: the price of the good in question is compared to the benchmark and the difference represents the subsidy. But the implicit benchmark in this case was something that could not be readily measured - the domestic price of logs in the absence of LERs. It is because of this added complication, that the economic reasoning presented by the various parties involved the two distinct steps.



**Figure 1: Elements of Softwood Lumber III  
and Decision of Panelists in Second Binational Panel**



While we do not focus on the various legal questions in the dispute, it is important to note that the national division on these issues was greater than on either of the factual issues. On the specificity of Canadian stumpage rates, the requirement of market distortion analysis and the specificity of LERs - all principally legal matters - the panel split sharply on national lines. We return to this pattern of decision-making in the conclusion, where we draw some general assessments about the relationship between national bias in trade panels and the ambiguity of economic law and science.

## IV. Stumpage Pricing

The first major issue involved in the third round of the softwood lumber dispute was stumpage pricing. Stumpage fees are paid by logging companies to the owners of timber land for the right to harvest trees. The American claim was that the stumpage fees charged logging companies by Canadian provinces (who own the bulk of timberland in Canada) were too low, and therefore represented a subsidy to softwood lumber exporters. When a government charges too little for an input that ends up in exported products, it is referred to as “preferential” pricing. Thus, this part of the dispute was sometimes referred to simply as the “stumpage preferentiality” issue.

Both theoretical and empirical evidence was brought to bear on the stumpage preferentiality question. While a wide variety of arguments was put forth, we focus only on those that were most central.

### *Price Comparisons*

The Department of Commerce had an established methodology for determining preferentiality. This involved comparing the price of the good or service under investigation to the price of a comparable good or service, referred to as the “benchmark.” In this case, the DOC used a different benchmark for each of BC, Alberta, Ontario and Quebec. It determined that the stumpage prices charged by the provinces were lower than the benchmarks and were therefore preferential.

### *The Canadian Reply: The Nordhaus Theory of Market Distortion*

To counter this claim, one Canadian tactic was to dispute the DOC’s price comparison methodology, arguing that an alternative benchmark should have been used. But the main strategy was more bold. The Canadian side rejected the methodology used by the DOC outright, claiming that preferential pricing is only relevant if it results in “market distortion” - a change, that is, in the output or price of the final exported product under consideration. Often this can simply be assumed, but not in this case the Canadians claimed. They provided a market distortion analysis which indicated that the stumpage prices charged by the provinces did not affect either the price or output of logs or softwood lumber, and therefore should not be deemed a countervailable subsidy. Preferential stumpage rates may have reduced costs for logging companies, but this was immaterial because it did not affect the output or prices of softwood lumber. It was a strong claim that, if accepted, would wholly trump the argument presented by the DOC.

In making its case concerning market distortion, the Canadians relied on economic analysis provided by Yale economist William Nordhaus.<sup>18</sup> In his initial theoretical analysis, Nordhaus<sup>19</sup> argued that there are three distinct levels of stumpage charges:

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<sup>18</sup> Nordhaus provided numerous documents outlining his arguments. One key report was a theoretical paper (William D. Nordhaus, “The Impact of Stumpage Charges on Prices and Trade Flows in Forest Products,” February 18, 1992. Appendix A in “Memorandum Concerning Alleged Stumpage Subsidies and Preferentiality,” submitted on behalf of the Government of Canada *et al.* University of British Columbia,

1. Stumpage charges so low that governments are actually providing more in benefits to logging companies (through services such as road-building) than they are charging in stumpage fees represent the case of “net benefits.”<sup>20</sup> Such stumpage charges do increase the output of logs and therefore constitute a subsidy.
2. Stumpage charges “so high as to raise the marginal cost of harvesting timber above the market price of the timber” represent the case of “excessive stumpage.”<sup>21</sup> Stumpage prices in this range reduce the output of logs and therefore do not represent a subsidy, but rather a tax.
3. Finally, “in between net benefits and the excessive stumpage levels” is the case of “normal stumpage charges.”<sup>22</sup> Such charges have no impact on the output of logs or their price and therefore do not constitute a subsidy.

Nordhaus claimed that Canadian stumpage prices lay either in this normal range or the excessive stumpage range and therefore did not confer a subsidy. In this initial formulation, the notion that the volume of timber on a given lot was fixed seemed to be essential to the Nordhaus argument. “The fundamental result - that within the normal range the level of stumpage has no impact on output or prices - is a standard result in economics known as the *theory of economic rent*. ‘Rent’ is an economic term that refers to the return to any factor of production that is fixed in supply. For an enterprise leasing timber rights, the volume of standing timber is fixed in supply. As long as...the stumpage charge for harvesting the trees, is less than the net price of the timber, there will be no impact on output.”<sup>23</sup> Nordhaus recognized that variations in stumpage rates within the normal range affect the way in which revenue is divided between government and logger, but claimed that because the supply of logs is fixed, output is unaffected.

A rebuttal to the Nordhaus analysis was provided by a consultant to the American side, professor William McKillop.<sup>24</sup> McKillop argued that the application of economic rent theory to the harvesting of timber is not apposite because “the volume of harvestable timber in a given stand is not fixed.”<sup>25</sup> For this reason, “marginal cost” theory should be used instead. As McKillop explained, “within each stand, there are certain categories of trees or logs that cannot be profitably logged at a given stumpage price. If stumpage charges are levied per cubic metre (as they are in most of Canada) and the stumpage charge per

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Special Collections and University Archives Division, “Mike Aspey, Canada-US Lumber Trade” collection [hereinafter “Aspey Collection”], Box 31, Tab 3). Another important Nordhaus document contained empirical analysis (William D. Nordhaus and Robert E. Litan, “Empirical Analysis of the Effect of Stumpage on Timber Harvesting: A British Columbia Case Study,” March 5, 1992. Attachment B in “Supplemental Submission” submitted on behalf of the Government of Canada *et al.*, March 5, 1992. Aspey Collection, Box 32, Tab 3).

<sup>19</sup> Nordhaus, who has been on the Yale faculty since 1967, has served as an economic adviser to President Carter and as Provost of Yale University. He is not a specialist in forestry economics, but has expertise in the economics of natural resources, in particular energy resources.

<sup>20</sup> Nordhaus, “The Impact of Stumpage Charges on Prices and Trade Flows in Forest Products,” February 18, 1992, p. 10.

<sup>21</sup> *Ibid.*, p.11.

<sup>22</sup> *Ibid.*, p.11.

<sup>23</sup> *Ibid.*, p.21.

<sup>24</sup> Professor of Forest Economics, University of California, Berkeley. McKillop is an expert in forest economics specifically. In his report criticizing the Canadian arguments, McKillop suggested that Nordhaus lacked essential sector-specific knowledge: “the obscure and misconceived nature of [Nordhaus’s] argument stems from the fact that, understandably, he does not have adequate technical knowledge of the economic sector with which he is trying to deal” (William McKillop, “Critique of the Theory of Timber Supply Put Forward by William D. Nordhaus and Robert E. Litan,” April 16, 1992, p.4. Attachment B in “Pre-Hearing Brief,” April 21, 1992, submitted by the Coalition for Fair Lumber Imports. Aspey Collection, Box 34, Tab 2).

<sup>25</sup> *Ibid.*, p.11.

cubic meter is lowered...formerly unutilizable trees or logs can be profitably harvested and processed.”<sup>26</sup> Thus, changes in stumpage charges, even within the normal range, do affect output, and low Canadian stumpage charges would lead to high output levels of logs and softwood lumber - that is, market distortion.

In response to McKillop’s criticisms, Nordhaus modified his arguments. He contended that his theory could accommodate the notion of heterogeneous plots and a timber supply responsive to changes in stumpage prices. Such phenomena were still consistent with his broader contention that stumpage charges in the normal range do not represent a disruption of competitive markets. When a government reduces stumpage fees - but keeps them above the net benefits level - the trees that are harvested are ones that would be harvested in a competitive system. In a later supplementary report, Nordhaus offered an example that makes his reasoning clear:

Say that at existing stumpage of \$10 per cubic meter (PCM), it is profitable to harvest timber up to 15 miles from a sawmill. For trees at, say, the 16-mile point, the net revenue (price minus cost minus stumpage) is negative, say minus \$2 PCM. This is a case of excessive stumpage. If the stumpage at the 16-mile point were between \$0 and \$8 PCM, this would constitute normal stumpage; for this range, the net revenue would be positive and those trees would be harvested.... In a competitive market, the stumpage for timber at the 16-mile point would be at or less than \$8 PCM, and this timber would be harvested.... the production response simply increases output to the level it would attain in an undistorted competitive market.<sup>27</sup>

This reasoning rests, of course, on the supposition that in a competitive system stumpage fees for stands, and even for individual trees, are adjusted as necessary to reflect the marginal cost of harvesting. In other words, if a stand of trees is highly heterogeneous, stumpage fees would be highly varied to reflect the wide range of marginal costs involved in harvesting. In practice, there may be private sellers who charge uniform stumpage fees for heterogeneous lots, with the result that some trees and stands, which would be harvested if stumpage fees were reduced, are left standing. But this, by Nordhaus’ reasoning, represents market failure - a failure to adjust stumpage prices when such would be beneficial to both buyer and seller of timber harvesting rights and result in higher output.

The DOC, in its Final Determination of May 1992, did not address the Nordhaus arguments at great length. It focused instead on its preferred method of analysis, stumpage price comparisons; it did, however, briefly recite McKillop’s criticisms of the market distortion theory along with some other short rebuttals. But the first FTA panel ruled that market distortion analysis was a suitable, indeed necessary, methodology. Thus, in its Determination on Remand of September 1993, the DOC addressed the market distortion argument at greater length.

As the DOC took up the market distortion issue, a fundamental disagreement emerged. The nature of this disagreement was somewhat obscured, as the parties continued to present the issue largely as a dispute about the relative merits of “economic rent” theory versus “marginal cost” theory. But Nordhaus and the Canadian side, in allowing that stumpage price changes can affect timber output, had accepted that marginal cost theory was relevant. The essence of the Canadian position was that any changes in output were no different from what would occur in a competitive market.

What the DOC really took issue with was Nordhaus’ understanding of a competitive market. Nordhaus, in the revised version of his theory, had implicitly compared the Canadian stumpage system to an *ideal* perfect market, where stumpage fees would be finely-tuned to the marginal cost of harvesting different trees. The DOC, on the other hand, argued in favour of comparing the Canadian system to *real-world* competitive timber markets, where uniform stumpage fees are often charged for heterogeneous lots. That the DOC believed real-world competitive markets to be the appropriate benchmark for measuring market distortion was apparent at various points in its Determination on Remand: “Economically, Dr.

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<sup>26</sup> *Ibid.*, pp.9-10.

<sup>27</sup> William D. Nordhaus, “Reply to Coalition for Fair Lumber Imports Pre-Hearing Brief of April 21, 1992,” footnote 12, pp.6-7. Attachment A in Section 3, “Respondents’ Rebuttal Brief,” April 27, 1992, submitted on behalf of the Government of Canada *et al.* *Apsey* Collection, Box 35, Tab 1.

Nordhaus' view is flawed because the tenure agreements are for entire stands of trees, with the fee based primarily on a per cubic meter basis"<sup>28</sup>; "The realistic question is - given that tenure arrangements are for *entire stands* of trees, how many trees...will be harvested and sent to the saw mill at a given stumpage price?"<sup>29</sup> If Canadian stumpage rates resulted in more timber being harvested than a real-world competitive market would produce, this represented, the DOC contended, market distortion.

There was then an axiomatic issue underlying this aspect of the stumpage preferentiality debate: should alleged market distortion be measured against real-world competitive markets or ideal competitive markets? The answer is by no means obvious. Hence this aspect of the stumpage debate was an important source of scientific ambiguity.

In its ruling on the preferentiality issue, the first FTA panel unanimously accepted the Nordhaus viewpoint. The panel noted that "provincial government prices that allow [unharvested stands] to be harvested are actually market perfecting rather than market distorting, in line with what one would expect in a competitive market."<sup>30</sup> Implicitly, the panel was accepting Nordhaus' benchmark of an ideal competitive market. The three Canadians on the second panel, in their majority ruling, took the same position, maintaining that changes in log output brought about by lower stumpage rates are market perfecting.<sup>31</sup> On this issue, it is hard to determine the views of the two Americans on the second panel, because they did not directly address the issue. The differences in judgement on the evidence for preferentiality is clarified by considering empirical evidence underlying the dispute over the Nordhaus theory.

### *Empirical Evidence*

In addition to the theoretical arguments, empirical evidence pertaining to the stumpage preferentiality issue was also presented. This evidence came, in the first instance, from the Canadian side and was used to corroborate Nordhaus' initial theoretical formulation: that changes in stumpage prices - within the "normal range" - do not affect the output of logs. The study, conducted by Nordhaus and Robert Litan,<sup>32</sup> drew upon data for British Columbia in the 1984 to 1989 period.<sup>33</sup> During these years, stumpage rates had risen significantly. Nordhaus and Litan examined data for the six major species of timber for eight regions of British Columbia. For each region-species combination, they compared the percentage change in timber output to the percentage change in stumpage prices over the study period, i.e. they measured the "stumpage elasticity." The results showed that a 100% increase in stumpage rates was associated with only a 2.8% decrease in timber output. Based on these data, the null hypothesis that the timber supply was completely inelastic could not be rejected.<sup>34</sup> Thus, Nordhaus and Litan concluded that the "impact of changes in stumpage charges on output is insignificantly different from zero."<sup>35</sup>

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<sup>28</sup> Department of Commerce, International Trade Administration, "Redetermination Pursuant to Binational Panel Remand," September 17, 1993, p.102. Apsey Collection, Box 40, Tab 3.

<sup>29</sup> *Ibid.*, p. 100 [emphasis in original].

<sup>30</sup> "In the Matter of Certain Softwood Lumber Products from Canada, Decision of the Panel," May 6, 1993, p. 56. Apsey Collection, Box 40, Tab 2.

<sup>31</sup> "In the Matter of Certain Softwood Lumber Products from Canada, Decision of the Panel on Remand," December 17, 1993, Majority Decision, pp. 56-60. Apsey Collection, Box 41, Tab 3.

<sup>32</sup> Senior Fellow in the Economics Studies Program of the Brookings Institution and Director of the Institution's Center for Law, Economics and Politics. Litan received his law and Ph.D. degrees from Yale University and was the regulatory and energy specialist for President Carter's Council of Economic Advisers.

<sup>33</sup> Nordhaus and Litan, "Empirical Analysis of the Effect of Stumpage on Timber Harvesting: A British Columbia Case Study," March 5, 1992.

<sup>34</sup> Based on a 95% confidence interval.

<sup>35</sup> Nordhaus and Litan, "Empirical Analysis of the Effect of Stumpage on Timber Harvesting: A British Columbia Case Study," March 5, 1992, p. 11.

The Nordhaus-Litan study was addressed only briefly in the first DOC ruling of May 1992. In its “Redetermination Pursuant to Binational Panel Remand,” the DOC focused on this empirical analysis more closely and made certain adjustments to the data. Specifically, the DOC made corrections for the heteroscedasticity it said was present in the original calculations. This produced a statistically significant estimate of negative stumpage elasticity.<sup>36</sup> This reworking of the numbers prompted a reply from the Canadian side, which provided its own reworking of the data and discussion of the best way to deal with heteroscedasticity.<sup>37</sup>

This debate over heteroscedasticity involved complex econometric reasoning. The panelists seemed to admit that this aspect of the dispute was beyond them; the majority on the second panel noted in its decision, for example, that “heteroscedasticity is *apparently* a kind of distortion that is sometimes present in a regression analysis.”<sup>38</sup> With the two sides offering conflicting expert opinion on this complex technical issue, the empirical analysis became another potential source of scientific ambiguity.

In the end, this ambiguity was more important to the minority’s ruling on the second panel than the majority’s. The majority indicated that while the DOC’s recalculations did require further justification, they were inclined to defer to the department’s expertise on complex econometric issues of this type.<sup>39</sup> But they determined that further justification was in fact unnecessary because the DOC’s reworking of the Nordhaus-Litan study was irrelevant to the modified version of the Nordhaus theory, which allowed for some stumpage elasticity (i.e., some response of log output to changes in stumpage prices). The majority states:

...Commerce simply has no economic theory that moves, step by step, from the assumption of elasticity to a standard or test for market distortion. In the absence of such a theory, the presence of elasticity - *however supported by empirical work* - is in itself not probative for purposes of answering the panel’s remand.<sup>40</sup>

For the minority, on the other hand, the heteroscedasticity issue created a window of ambiguity that made it possible for them to take a stand more favourable to the DOC. Recall that the most important national difference on the second panel on the stumpage question was the *legal* question of whether or not Commerce was required to perform a market distortion test. However, the American minority also addresses the factual issues. Their opinion, while supportive of the majority viewpoint on some issues, did differ in one important way:

...unlike the Majority, we would remand to Commerce to give the agency an opportunity to explain its recalculation assumptions. The majority avoids this result by arguing that even if one accept the validity of Commerce’s recalculations *arguendo*, the log output elasticity Commerce found (.08) is too small to reach an affirmative conclusion on preferentiality. We do not believe that the Majority is entitled to go so far. How much log output elasticity is enough to support Commerce’s reservation price theory is a question of fact for Commerce to find and for this panel to review for substantial evidence on the record.<sup>41</sup>

In essence, the minority was not as convinced by Nordhaus’ causal theory as the majority was.

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<sup>36</sup> Department of Commerce, International Trade Administration, “Redetermination Pursuant to Binational Panel Remand,” September 17, 1993, pp. 113-117.

<sup>37</sup> “Canadian Complainants’ Joint Brief In Opposition to the Determination on Remand,” Oct. 12, 1993, pp. C46-C71.

<sup>38</sup> “In the Matter of Certain Softwood Lumber Products from Canada, Decision of the Panel on Remand,” Dec. 17, 1993, Majority Decision, p.60 [emphasis added].

<sup>39</sup> *Ibid.*, p.63.

<sup>40</sup> *Ibid.*, p.64 [emphasis in original].

<sup>41</sup> “In the Matter of Certain Softwood Lumber Products from Canada, Decision of the Panel on Remand,” Dec. 17, 1993, Minority Decision, pp.58-9.

### *Stumpage Pricing: Summary*

The principal arguments used to address the stumpage preferentiality issue were characterized by both legal and scientific ambiguity. The DOC felt that its initial price comparison was sufficient to establish preferentiality. The Canadians countered that market distortion analysis was required. This had the potential to trump the DOC's reasoning: Canadian stumpage prices might be lower than some benchmark, but - because of the logic of the economic theory espoused by Nordhaus - this was a moot point if it produced no market distortion. As the market distortion debate unfolded, it became clear that there were two standards against which said distortion could be measured: ideal competitive markets and real-world competitive markets. It is not immediately clear which is the more appropriate. Other highly technical and uncertain issues arose, such as the dispute over heteroscedasticity. Because neither the American nor Canadian side managed to marshal incontrovertible evidence to support their viewpoint, there was room for national bias to enter into play in the panel decisions. This bias was apparent in the second panel decision when the three Canadians ruled that Canadian stumpage rates were not preferential, whereas the two Americans allowed that they might be but remanded the issue to DOC to see if it could provide a better justification. In sum, scientific ambiguity led to a certain division of opinion on national lines. Yet at the same time, these factual disputes were not as substantial as the legal dispute that drove the wedge between panelists on national lines: whether or not a market distortion test was required.

## **V. The Price Impact of Log Export Restraints**

The second major issue involved in the third round of the softwood lumber dispute was the log export restraints (LERs) the BC government had in place. These restraints, it was charged, served to increase the supply of logs in BC, which in turn tended to depress domestic log prices in the province. This represented a subsidy to BC lumber producers and other firms using unprocessed logs as an input to their manufacturing processes.

As with the stumpage pricing issue, there were several other matters that had to be addressed in order to demonstrate that the LERs represented a countervailable subsidy (see Figure 1 above). In particular, there was a major national split on the question of whether LERs met the specificity test. But we focus on the price effect question: did LERs actually lead to lower domestic prices for BC logs?

### *Theory*

The American side claimed LERs did depress BC log prices and presented some basic economic theory in support of their position. Export restraints ensure that goods which might otherwise be sold abroad remain within a country for domestic sale. This artificially increases the domestic supply of those goods, putting downward pressure on domestic prices.

The failure of the Canadian side to adequately rebut this basic theoretical proposition is perhaps the most significant contrast between the LER issue and stumpage pricing. In the case of stumpage pricing, the Canadians provided an alternative economic theory - the Nordhaus theory - that, if accepted, wholly undermined the American case. On the LER issue, the Canadians did not offer an alternative theory of the same sweep. They did present a series of arguments that chipped away at the American position - arguments that principally questioned the magnitude of the LER price effect and the difficulties involved in isolating its impact - but did not trump the American theory with a compelling alternative.

One Canadian argument, for example, was that there would actually be few exports in the absence of log export restraints. Relying on a report written by economist Joseph Kalt,<sup>42</sup> the Canadians argued that mills tend to be located close to logging sites. The distance between BC logging sites and

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<sup>42</sup> Professor of Political Economy at the John F. Kennedy School of Government, Harvard University.

American mills means that few unprocessed logs, and especially those located in the BC interior, would cross the border in the absence of LERs.<sup>43</sup> In effect, Canada argued that BC's LERs were superfluous.

In response to this reasoning, the American side asked a pertinent question: why keep LERs in place if they are not needed to block the flow of logs over the border?<sup>44</sup> Their existence suggests they serve a purpose. This argument was supported by statements from Canadian forestry officials (culled from news reports and official documents) indicating that the intent and perceived effect of LERs was to keep unprocessed logs, and consequently log processing jobs, in Canada. These American rebuttals weakened Kalt's argument. Moreover, his analysis only really provided a caveat to the basic American proposition: there would be additional exports if LERs were lifted, but fewer than might be anticipated. Furthermore, the DOC did take Kalt's criticism into account. In carrying out its LER subsidy calculations, some portions of the BC interior were excluded.<sup>45</sup> Thus, Kalt's argument was effectively absorbed and did not undercut the basic American theory.

Another argument advanced by the Canadians, again drawn from Kalt's report, highlighted Japanese and American restrictions on timber trade. Japan's tariffs on processed log products served to artificially increase Japanese demand for unprocessed logs. At the same time, restrictions on log exports in the United States meant that this inflated demand was only partially filled by American exports. Thus, foreign demand for Canadian logs - and consequently export prices - was inflated above the level that would obtain in a wholly unrestricted international market in both logs and log products. "Log export policies for BC...counteract artificially increased offshore (primarily Japanese) demand for BC logs."<sup>46</sup> In other words, Canadian LERs could be seen as an attempt to compensate for market distortions elsewhere.

However, the DOC argued that this second Canadian argument had no legal standing<sup>47</sup> and the FTA panelists agreed. As the Canadians on the second panel noted, "the effects of other countries policies are irrelevant to this proceeding as a matter of law."<sup>48</sup>

A third line of reasoning pursued by Canada concerned "feedback effects." If the removal of BC's LERs did result in an increased demand for BC logs, other countries would then be in a position to produce more finished log products - i.e., lumber - which would reduce their demand for B.C lumber, which in turn would reduce domestic demand for BC logs and put downward pressure on prices.

This Canadian argument did win some sympathy from Canadian FTA panelists. Specifically, the two Canadians who formed the dissenting minority on the first panel indicated that feedback effects need to be taken into account to measure the precise effect of log export restraints.<sup>49</sup> However, the bulk of their dissenting opinion focussed on the legal question of whether export restraints could be considered a countervailable subsidy - their review of the economic evidence was cursory and occupied only a couple of pages of their dissenting opinion. The merits of the economic arguments pertaining to LERs were examined at greater length by the three Canadians on the second FTA panel in their majority ruling. They

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<sup>43</sup> Joseph P. Kalt, "Economic Analysis of Canadian Log Export Policy," February 21, 1992, pp.31-36 and 41-51. Attachment to "Memorandum Concerning the Non-Countervailability of Canadian Log Export Regulations," February 21, 1992, submitted on behalf of the Government of Canada *et al.* Apsey Collection, Box 31, Tab 3.

<sup>44</sup> "Memorandum Concerning the Canadian Log Export Restrictions Subsidy," February 21, 1992, submitted on behalf of the Coalition for Fair Lumber Imports, p.19. Apsey Collection, Box 31, Tab 3.

<sup>45</sup> Department of Commerce, International Trade Administration, "Final Affirmative Countervailing Duty Determination: Certain Softwood Lumber Products from Canada," *Federal Register* 57 (103), May 28, 1992, p.22612.

<sup>46</sup> Kalt, "Economic Analysis of Canadian Log Export Policy," February 21, 1992, p.1.

<sup>47</sup> Department of Commerce, International Trade Administration, "Final Affirmative Countervailing Duty Determination: Certain Softwood Lumber Products from Canada," May 28, 1992, p.22614.

<sup>48</sup> "In the Matter of Certain Softwood Lumber Products from Canada, Decision of the Panel on Remand," Dec. 17, 1993, Majority Decision, p.94.

<sup>49</sup> "In the Matter of Certain Softwood Lumber Products from Canada, Decision of the Panel," May 6, 1993, pp.166-67.



took a different view from the dissenting Canadians on the first panel<sup>50</sup> and accepted the DOC's feedback reasoning on all counts: that, from a legal standpoint, feedback effects do not have to be taken into account; that any such effects would reduce, but not wholly offset, any price increase induced by the removal of LERs; and that the empirical studies provided by Commerce did take feedback effects into account.<sup>51</sup>

While other arguments were also proffered, these were the principal theoretical points the Canadian side raised, as it tried to undermine the American claim that export restraints lead to lower domestic prices for logs. For the most part, they only represented qualifications to the basic American theory, and two of the arguments were deemed irrelevant on legal grounds. Thus, the theoretical evidence seemed to weigh strongly in the Americans' favour and the Canadian panelists - after some initial reservations expressed by the dissenting minority on the first panel - accepted their position.

### ***Empirical / Simulation Studies***

The empirical aspect of the LER issue represents another significant contrast with the stumpage issue. In the case of stumpage pricing, it was possible to carry out regression analysis to measure the relationship between stumpage pricing and log output (as Nordhaus and Litan did). This was so because of the substantial variation in stumpage prices in the latter half of the 1980s. In the LER case, the same sort of analysis could not be conducted. As the DOC noted, "regression analysis would be impossible given that the BC log export restrictions have been in place continuously, with no significant changes, since 1906."<sup>52</sup>

In view of this limitation, the Americans took the position that regression analysis was not required to substantiate their claim about the price effect of LERs. Consequently, the "empirical" studies they provided were of a more speculative nature. Rather than measuring the relationship between two variables based on data from the past, the three key studies cited by the Americans attempted to model what would happen to BC log prices if log export restraints were lifted in the future.<sup>53</sup> Though the precise estimate of the price impact of removing BC's LERs varied across the three studies, they were generally in the neighbourhood of 20%.

One Canadian tactic was to try to undermine the validity of these studies. A consultant to the Canadian side, Dr. William Finan,<sup>54</sup> wrote reports in which he argued that the empirical studies provided by the Americans had numerous shortcomings. One key problem was that they were merely simulation exercises that assumed what they ostensibly proved: that there is a causal link between log export restraints and lower domestic BC log prices.<sup>55</sup> There was some sympathy for this argument from the dissenting Canadian panelists on the first panel, but their consideration of the economic evidence was

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<sup>50</sup> Only one of the two Canadian dissenters from the first panel was on the second panel as well. Thus, only one Canadian panelist actually changed his mind from the first to second panel - though he still maintained, in the second panel ruling, his legal objection to expanding the definition of subsidy to include export restraints (see "In the Matter of Certain Softwood Lumber Products from Canada, Decision of the Panel on Remand," Dec. 17, 1993, Majority Decision, p.99, footnote 300).

<sup>51</sup> *Ibid.*, pp.88-92.

<sup>52</sup> Department of Commerce, International Trade Administration, "Redetermination Pursuant to Binational Panel Remand," September 17, 1993, p.130.

<sup>53</sup> See Exhibit J (M.B. Percy, excerpt from *Forest Management and Economic Growth in British Columbia*), Exhibit O (M. Margolick and R. Uhler, "The Economic Impact of Removing Log Export Restrictions in British Columbia") and Exhibit Q (R. Haynes and D. Adams, "Opening Up Canadian Markets: The Lifting of Export Restrictions") in "Memorandum Concerning the Countervailability of British Columbia Log Export Restrictions," December 3, 1991, submitted on behalf of the Coalition for Fair Lumber Imports. Apsey Collection, Box 25, Tab 3.

<sup>54</sup> Law and Economics Consulting Group, Washington, DC.

<sup>55</sup> For a summary, see "Memorandum Concerning the Non-Countervailability of Canadian Log Export Regulations," February 21, 1992, pp.62-66.

cursory, and the Canadian viewpoint changed on the second FTA panel. The majority allowed in their ruling that the cited studies, while not proving a causal link, nevertheless did offer significant support for the American argument.<sup>56</sup>

As well as criticizing the studies cited by the Americans, the Canadian side also offered its own empirical analysis. This, unlike the studies provided by the Americans, did involve regression analysis on actual data. Although LERs had been in place for many years without major changes, there had been certain minor variations that, the Canadians claimed, made it possible to assess the price effect of LERs. Two pieces of analysis were presented, one by Joseph Kalt,<sup>57</sup> the other by William Finan.<sup>58</sup> In both cases, the consultants concluded that LERs did not affect domestic prices.

The response from the American side was that these studies were largely irrelevant to the question at hand. Both dealt with very small changes - in Kalt's analysis, for example, exports dropped from 3% to 1% of BC's total log harvest from 1986 to 1989 - and could not be used to assess what would happen to domestic log prices if LERs were removed completely.<sup>59</sup>

Again, the panelists from Canada on the first FTA panel were sympathetic to the Canadian viewpoint. But on the second panel, the Canadians accepted the American criticism of the Kalt and Finan studies, conceding that the small range of variation in the observed variables rendered the studies' conclusions unreliable.

Thus, the empirical evidence on the LER issue seemed to favour the Americans. They provided several studies, all of which suggested that log prices in BC would rise significantly if LERs were completely removed. Given the inherent limitations surrounding the LER issue - i.e. the lack of variation in BC's LER policies over time - these simulation studies seemed to represent the only type of empirical analysis that could be performed. The Canadians, for their part, did not provide a simulation analysis, choosing instead to criticize those provided by the Americans. And while they did offer two pieces of empirical analysis based on actual data, these did not, and could not, assess the impact of completely removing BC's LERs. The Americans did not provide incontrovertible empirical evidence to back up their theoretical reasoning on the LER issue, but on balance their arguments were more persuasive. Consequently, the Canadian panelists - on the second FTA panel anyway - ruled in their favour.

### ***The Price Impact of Log Export Restraints: Summary***

It would appear that the theoretical and empirical evidence advanced by the American side in support of their contention that BC's LERs have a downward effect on domestic log prices was compelling. The Canadian side failed to provide the strong rebuttal that might have created ambiguity in the minds of the FTA panelists and led to a sharper division of opinion on national lines. While there was some sympathy for the Canadian arguments from the two dissenting Canadians on the first panel, their review of the economic evidence was cursory, and on the second panel the Canadian majority backed the American position. This outcome differs from the stumpage pricing issue, where the Canadian side countered the DOC's economic reasoning with a compelling alternative theory, backed by empirical data. This strong counter-attack created considerable ambiguity - there was merit in both points of view - which allowed apparent national bias to enter into play, as all FTA panelists adopted positions more sympathetic to their own government.

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<sup>56</sup> "In the Matter of Certain Softwood Lumber Products from Canada, Decision of the Panel on Remand," Dec. 17, 1993, Majority Decision, p 93.

<sup>57</sup> Kalt, "Economic Analysis of Canadian Log Export Policy," February 21, 1992, p.26.

<sup>58</sup> Dr. William F. Finan, "Evaluation of the Relationship Between Log Exports and Prices in British Columbia," April 27, 1992. Attachment A in Section 4 of "Respondents' Rebuttal Brief," April 27, 1992, submitted on behalf of the Government of Canada *et al.* Apsy Collection, Box 35, Tab 1.

<sup>59</sup> Department of Commerce, International Trade Administration, "Final Affirmative Countervailing Duty Determination: Certain Softwood Lumber Products from Canada," May 28, 1992, p.22613.

## VI. Conclusion

The two cases, stumpage and log export restraints, produce an interesting pattern of results. Returning to Figure 1, there were several issues where there was a clear and unqualified division of opinion on national lines. This division was especially striking for several issues we have not focussed on in this paper. For both stumpage rates and LERs, there was clear national division on the issue of specificity: the Canadian majority ruled that both programs failed the specificity tests and were therefore not countervailable; the American minority supported Commerce's position that they were specific. In the case of stumpage, there was also a clear national division on the issue of whether a market distortion analysis was required. The American panelists agreed with the Canadians on the first panel, but as a result of an intervening US court case, they changed their position. Thus, on questions that were primarily legal, there were strong national divisions.

On the questions that were primarily factual, the focus of our analysis, there was generally more agreement. There was virtual unanimity on the factual questions underlying the log export restraints. There was greater disagreement on the factual questions on the stumpage issue. Canadians were convinced of the Nordhaus version of economic rent theory and its application to the case, whereas the American minority remained somewhat skeptical. It is essential not to overstate the difference though. Despite the protracted, intensely political proceedings, the American minority still would have supported a remand, for *the second time*, on the factual questions, had they not rejected the need for a market distortion requirement.

The case shows that binational panels treat knowledge-intensive disputes like other decision making forums. Certain evidence constrains decision makers - if it is ignored, decisions will lack legitimacy. Uncertainty means there are multiple plausible arguments. Given the opportunity, different actors tend to adopt the arguments most supportive of their interests - in this case interests tend to break down on national lines. Generally, the greater the degree of uncertainty, the more one would expect political interests to divide decision makers, a proposition borne out by our examination of the softwood lumber case.

Through the fog of intractable conflict, the softwood lumber case does leave some room for hope. The case demonstrates that panel members can be convinced by evidence to take positions at odds with their government. Even the US minority supported a number of Canadian arguments on stumpage, and the Canadian majority changed its view on log export restraints from the first panel in response to the redetermination by Commerce.

While the willingness to consider factual evidence impartially is cause for hope, the remainder of the case does not provide grounds for optimism. In cases of such profound conflict, consensual knowledge is insufficient. An intriguing result of this case is that despite intense conflict over factual arguments by the parties to the dispute, there was much greater consensus on the panels on facts than there was on legal interpretations. On the major legal issues, the national divisions were intense. Significantly, however, this was not the case for all aspects of the legal disputes. For instance, in the case of log export restraints, Canadian parties to the dispute argued that the export limitations of the US needed to be considered. Despite the powerful national stakes in the issue, and a certain amount of common sense justice supporting the Canadian position, the Canadian panelists rejected their government's argument because the law on the question was well established. As in the case of factual uncertainty, the degree of legal ambiguity is the important variable. This case clearly shows there are still significant remaining ambiguities in both the US trade and administrative law the panels are asked to apply. With that much conflict over legal interpretation, it is clearly premature to suggest that an epistemic community has emerged among binational trade lawyers.

We also need to recall the larger political context within which this dispute occurred. When Americans lost the second panel decision, they appealed to an Extraordinary Challenge Committee, and lost again. The industry then returned to the legislative arena and, through amendments to the law implementing the US approval of the World Trade Organization, changed the US law to be applied by

panels in the future. In particular, they amended the law, with specific reference to the softwood lumber case, to explicitly state that market distortion tests are not required, and they clarified the specificity test to preclude the requirements the Canadian majority on the panel attempts to impose on Commerce.<sup>60</sup> Unwilling to risk another countervailing duty process with this new statutory language, Canadians agreed to negotiations which limited their free access to the US market.

The biggest threat to Canadian sovereignty arising in the softwood lumber case is Canada's reliance on the American market. Because Canada depends on softwood exports to the US for its economic vitality, it makes itself vulnerable to trade actions by the US industry. These actions have a long history, and clearly predated the US-Canada Free Trade Agreement. They have posed a formidable challenge to domestic policy sovereignty: the price set by provincial governments for crown timber has been strongly influenced by the actions of the US softwood lumber industry and the US federal government. The dispute resolution process has provided some protection for Canada, but ultimately was trumped by legislative changes in the US. The potential institutionalization of the dispute settlement process is limited by the terms of the free trade agreements which continue to apply the subsidy laws of the importing country. In this case, Canadian sovereignty has been challenged not because of the transfer of authority to supranational institutions, but precisely because supranational institutions were not strong enough.

Softwood lumber is by far the most economically important, and the most protracted, trade conflict between Canada and the United States. Nonetheless, developing a more general understanding of the behaviour of dispute resolution panels and their implications for sovereignty and other concerns requires going beyond this particular dispute to the analysis of other cases. This paper is intended as a pilot project for a potential larger analysis of dispute resolution panels. Relatively little is known about the universe of cases, even just in the US-Canada context. There has been some analysis of national divisions within panels up through 1994, but that analysis is now dated, and it does not address the full range of variables affecting outcomes.<sup>61</sup> This case does suggest that the general approach to analyzing knowledge-intensive disputes developed elsewhere is applicable. The greater the uncertainty, the more room there is for personal judgment or national bias to enter into panel decision making. In the softwood lumber case, legal ambiguity created much greater division than factual ambiguity did. Whether or not this conclusion can be generalized depends on the outcome of analysis of other cases.

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<sup>60</sup> Apsey and Thomas, *Lessons of the Softwood Lumber Dispute*, pp.81-3.

<sup>61</sup> Doran, "Objectivity and Neutrality of Binational Trade Dispute Resolution in North America."