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A STUDY OF THE EFFECTS OF THE CANADA-US
SOFTWOOD LUMBER AGREEMENT

Jun Fukuda

February 2001

Center for International Trade in Forest Products
University of Washington
College of Forest Resources
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EXECUTIVE SUMMARY

The trade of softwood lumber between the United States and Canada is one of the major forest products trade flows in the world. Since 1996, exports from the four major softwood lumber producing provinces in Canada (British Columbia, Alberta, Ontario, and Quebec) into the US have been regulated by the voluntary export restraint (VER) as defined within the “Softwood Lumber Agreement between the Government of Canada and the Government of the United States of America” (SLA). The SLA allows Canadian producers to export up to 14.7 billion board feet (bbf) of softwood lumber without export fee and imposes high export fees on volumes exceeding the limit. The SLA is a temporary resolution of the trade dispute between the two countries that has lasted for more than fifteen years and is set to expire on March 31st, 2001.

The objective of this study is to determine if the expected effects of the SLA on the US softwood lumber market during the period 1996-1999 have actually occurred. The study discussed four possible direct effects and five possible indirect effects that the SLA might have had on the US softwood lumber market from a simple economic model and a review of the literature. The expected direct effects include: 1) a regulated volume of softwood lumber imports into the US from the four major provinces in Canada, 2) an increase in the price of softwood lumber in the US, 3) an increase in US softwood lumber production, and 4) a decrease in US softwood lumber consumption. The expected indirect effects of the SLA include: 1) a shift in the composition of countries exporting softwood lumber into the US, 2) an upgrade in the quality of softwood lumber exported from the four major Canadian provinces into the US, 3) an increase in the volume of softwood logs and value-added wood products exported from Canada into the US, 4) some attempts by Canadian manufacturers to avoid the export permit requirement under the SLA, and 5) an increase in the use of alternative products (both wood and non-wood) as substitutes for softwood lumber in the US. The study also provides a discussion of the alternative solutions that might be implemented upon the expiration of the SLA on March 31st, 2001 and a discussion of desirability/undesirability of the SLA based upon future softwood resource availability in the US.

DIRECT EFFECTS

Since the implementation of the SLA, softwood lumber exports from the four major provinces into the US have been restricted below the volume imported before the implementation of the SLA in 1995. While the two fixed bases (the “established base” without export fee, and the “lower fee base” with a $50/thousand board feet (mbf) export fee) were mostly filled, the exported volume under the “upper fee base,” with a $100/mbf export fee, appeared to fluctuate in response to price changes in the US. In spite of the shift of softwood lumber production from western to eastern Canada, the composition of exported volume among the four major provinces has been consistent.

An analysis of the price data shows that the SLA has increased the price of softwood lumber products in the US relative to Canada. A comparison of the price trends of identical softwood lumber products (i.e., eastern SPF 2x4s, KD, #1&2) in two closely located markets (i.e., Toronto and Boston) demonstrates this two-tiered price structure. The price trends show that since the implementation of the SLA, the price for softwood lumber in Boston has been nearly 15% higher than for the identical product sold in Toronto. However, there was virtually no difference in the price of softwood lumber in these two markets during the period leading up to the implementation of the SLA (August 1994 – March 1996).

Despite the relative price increase in the US, softwood lumber consumption in the US has substantially increased throughout the period due to strong economic growth. Domestic softwood lumber production has also increased slightly faster than consumption during the implementation of the SLA. As a result, the market share of imported softwood lumber declined from 36.4% of total US softwood lumber consumption in 1995 to 35.2% in 1999.

INDIRECT EFFECTS

In addition to the direct effects that the SLA has had on the softwood lumber market in the US, it has also had several indirect, and unintended, effects as well. Strong demand for softwood lumber in the US, coupled with restricted exports from the four major provinces in Canada, provided other foreign suppliers with an opportunity
to enter and compete in the US market. While softwood lumber exports from the four major provinces have been relatively stable, the SLA-exempt provinces (New Brunswick, Nova Scotia, Saskatchewan, and Manitoba) took advantage of their position to increase their softwood lumber exports into the US from 1.4 bbf during the first year of the SLA to 2.9 bbf during the fourth year. As a result, the share of the SLA-exempt provinces in total Canadian softwood lumber exports to the US jumped from 7.9% during the first year of the SLA to 15.6% during the fourth year. Similarly, exports from non-Canadian countries have jumped from 389 million board feet (mmbf) to 912 mmbf during the same period. As a result, the share of other countries in US softwood lumber imports has increased from 2.3% to 4.8%.

In spite of a report by industry analysts that Canadian forest products companies in the four provinces have shifted their softwood lumber exports to higher-grade products, no upward trend of Canadian products price relative to domestic products in the US was observed. Imports of value-added lumber such as siding and flooring, which are covered by the SLA, seemed to increase only marginally.

To avoid the voluntary export restrictions specified in the SLA, some Canadian producers appear to have responded to the SLA by increasing their exports of softwood logs and value-added wood products to the US. US imports of softwood logs from Canada have increased substantially since the implementation of the SLA, increasing from 148,000 m³ in 1995 to almost 1.1 million m³ in 1999. In addition, imports of value-added wood products, such as windows, doors, and roof trusses, have also increased dramatically, although this increase can be partly attributed to the strong US housing market.

In addition, some Canadian producers have attempted to have their lumber products reclassified as remanufactured lumber products by making slight product modifications, since remanufactured lumber products are exempt from the export permit requirement under the SLA. The main product modifications have been to pre-drill, notch, or rougher-head the studs. As a result, exports of products under HS code 4418.90 (builders’ joinery and carpentry of wood), which include these modified studs, increased substantially. However, these products are generally used as ordinary studs after trimming or planing the modified parts. The US Coalition for Fair Lumber Imports (CFLI) has appealed the classification of these products to the US Customs Office as an illegal attempt to circumvent the SLA. While the appeals by the CFLI were successful in having rougher-headed studs reclassified as softwood lumber, the other appeals are still being considered at this time.

Finally, by increasing the price and price volatility of softwood lumber in the US, the SLA may have contributed to the ongoing process of substitution of softwood lumber by wood and non-wood alternative materials. However, the extent to which the SLA has contributed to the process of material substitution is difficult to evaluate.

**FUTURE PROSPECTS FOR THE US-CANADA SOFTWOOD LUMBER TRADE**

There are four possible options that might be implemented at the expiration of the SLA on March 31st, 2001. These options include: 1) an extension of the current agreement, 2) the imposition of a countervailing duty by the US, 3) “fair trade” with major changes in the stumpage pricing system employed in Canada, or 4) “free trade” and the elimination of the SLA. Recent events in both Canada (with regards to the recent lowering of stumpage prices in BC) and the US (with regards to the position of the CFLI) suggest that the implementation of options 3) and 4) are unlikely. Given the current political situation in both countries, with presidential elections occurring in early November 2000 in the US and national elections occurring in late November in Canada, it is possible that the two governments might decide to extend the SLA for a short period of time. However, the CFLI insists that it will seek some type of countervailing action if Canada fails to address the stumpage price issue appropriately following the expiration of the SLA. Given the inequities that some Canadian lumber manufacturers perceive with the existing SLA, it is likely that at least some producers in Canada would prefer to see the SLA expire and be replaced with a countervailing duty, since this would impose no limit on the volume of softwood lumber that they could export to the US. Considering the restrained domestic timber supply and the uncertain future availability of Canadian softwood lumber, it is important for the US to build a cooperative relationship with Canada in order to provide secure softwood lumber supply.
I would like to acknowledge the valuable supervision of Ivan Eastin for his strong encouragement, insightful suggestions, detailed comments, and proofreading for this study. I have to admit that this study would not have been accomplished without his help. I would also like to thank Paul Boardman and John Perez-Garcia for their critical comments on the draft of this study. I am also grateful to Gerard Shreuder and Hikojiro Katsuhisa with the Japan Wood Product Information and Research Center’s branch office in Seattle for their advice at the initial stage of this study. Finally, I owe heavily to the Japanese Government which provided me with time and funds for my graduate study at the University of Washington through the Japanese Government Long-Term Fellowship Program.
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1 INTRODUCTION

The international trade of softwood lumber between the United States and Canada is one of the major forest products trade flows in the world. These two countries are not only the world’s largest producers of softwood lumber, but also the world’s largest importer and exporter respectively. In 1999, the US share of world softwood lumber imports was 45%, while Canada supplied 48% of world exports (FAO 2000). Almost all US softwood lumber imports originate from Canada. Since the international trade of softwood lumber represents 13% of the total value of world forest products trade (FAO 2000), any change in this trade flow would have a significant influence on the global trade of forest products.

Since 1996, softwood lumber exports from Canada to the US have been subject to a voluntary export restraint (VER), as defined by the “Softwood Lumber Agreement between the Government of Canada and the Government of the United States of America” (SLA). The SLA allows Canadian producers to export up to 14.7 billion board feet (bbf) of softwood lumber without export fees but it imposes high export fees on volumes exceeding the limit. The SLA is a temporary resolution of a trade dispute between the two countries that has lasted more than fifteen years. The dispute was initiated by the US softwood lumber industry in response to the rapid growth of Canadian softwood lumber exports into the US during the early 1980s. The main focus of the dispute has been the stumpage pricing system employed in Canadian provincial forests. The US sawmill industry charges that Canadian softwood lumber producers are subsidized by low stumpage prices and that these subsidies have injured the US industry. Currently, the dispute is settled and the bilateral trade in softwood lumber is regulated by the SLA. However, there will be a significant discussion of this issue when the SLA expires on March 31, 2001.

Due to the importance of forest products trade for both countries, and given the complexity of the dispute, a lot of work has been done on this bilateral trade dispute. Most of the literature has focused on the political process of the dispute resolution, the legal issues of the countervailing actions, the forest policies in the two countries, or analyses of the alleged stumpage subsidies (e.g., Cashore 1997,1998; Fox 1992; Gagné 1999; Percy and Yoder 1987; Pierson 1994; Uhler ed. 1991; Waggener 1990). In addition, some studies have applied econometric analyses using model-building techniques (e.g., Adams and Haynes 1981; Boyd and Krutilla 1987; Kalt 1988; Myneni et al. 1994; Sarker 1996; Wear and Lee 1993).

The objective of this study is neither to analyze the dispute itself nor to perform an econometric analysis of US softwood lumber imports, but rather to provide a preliminary analysis of the effects of the SLA on the US softwood lumber market during the period 1996-1999, and assess if the expected effects of the SLA have occurred. The study identifies four possible direct effects and five possible indirect effects that the SLA might have had on the US softwood lumber market from a simple economic model and a review of the literature.

Based on economic theory, we would expect the direct effects of the SLA to include:

1. a regulated volume of softwood lumber imports into the US from the four major provinces in Canada,
2. an increase in the price of softwood lumber in the US,
3. an increase in US softwood lumber production, and
4. a decrease in US softwood lumber consumption.

Additionally, we would expect the indirect effects of the SLA to include:

1. a shift in the composition of countries exporting softwood lumber into the US,
2. an upgrade in the quality of softwood lumber exported from the four major provinces in Canada into the US,
3. an increase in the volume of softwood logs and value-added wood products exported from Canada into the US,
4. some attempts by Canadian manufacturers to avoid the export permit requirement under the SLA, and
5. an increase in the use of alternative products (both wood and non-wood) as substitutes for softwood lumber in the US.

This study also provides a discussion of the alternative solutions that might be implemented upon the expiration of the SLA on March 31, 2001 and a discussion of the desirability/undesirability of the SLA based upon future softwood resource availability in the US.
The remainder of this paper is organized as follows. Chapter two provides a general overview of the US softwood lumber market. Chapter three explains the historical background, and the contents, of the Canada-US Softwood Lumber Agreement. Chapter four identifies the potential effects of the voluntary export restraint (VER) based upon economic theory and a review of the literature. Chapter five discusses the four expected direct effects and the five expected indirect effects of the SLA on the US softwood lumber market. Finally, chapter six discusses possible solutions to the Canada-US softwood lumber dispute from both the political and market perspectives.
2 US SOFTWOOD LUMBER MARKET PRIOR TO THE SLA

The US is a large importer of softwood lumber in two senses. First, it is the world’s largest importer of softwood lumber, importing 19 bbf of softwood lumber in 1999, substantially more than Japan’s annual consumption of softwood lumber (11 bbf). As a result, the US has a dominant position in the global trade of softwood lumber with the share of 45% (FAO 2000). Second, the US relies heavily on imports to satisfy its domestic demand for softwood lumber. In 1999, the share of imported softwood lumber as a percentage of total domestic consumption reached 35% (AF&PA 2000). Because of its dominance in both international and domestic markets, US imports have a strong influence on both markets.

Before exploring the effects of the Softwood Lumber Agreement on the US softwood lumber market, it is helpful to provide an overview of the US softwood lumber market prior to the implementation of the SLA. Since import demand is defined as the difference between domestic consumption and domestic production (minus exports), the remainder of this chapter will describe the general relationship between consumption, production, and imports of softwood lumber in the US.

2.1 US SOFTWOOD LUMBER CONSUMPTION

US softwood lumber consumption has been increasing since 1991 due to the growing US economy. In 1995, softwood lumber consumption was 47.7 bbf, up from 42.2 bbf during the recession year of 1991 (AF&PA 2000).

This demand increase is mainly attributed to an increase in housing demand. According to the Western Wood Products Association (1999), softwood lumber consumption in the US can be segmented into five sectors; ‘residential construction’ (single-family; low rise and high-rise multifamily; and mobile homes), “repair & remodeling”, ‘non-residential construction’ (commercial, industrial and other buildings; public utilities; sewer and water systems; highway construction; conservation and development projects; and non-residential farm construction), “materials handling” (boxes, crates, and packaging; wood pallets; and dunnage), and “all other” (railroads and mining, products made for sale, including furniture; and miscellaneous uses not included elsewhere). In 1995, the share of each sector was 37% for residential construction, 30% for repair & remodeling, 14% for non-residential construction, 9% for materials handling, and 9% for all other. While the total consumption of softwood lumber increased by 13% from 1991 to 1995, the residential construction sector has grown by 32%. In other words, nearly 80% of the total demand growth can be attributed to residential construction. Because of its dominant share and strong growth, the residential construction sector has been the driving force behind the increased consumption of softwood lumber in the US.

The trend of the residential construction sector is strongly related to the number of housing starts, which is in turn affected by macro-economic activity through mortgage rates and financing trends. During a recession, housing starts decrease due to higher interest rates and negative financial factors, while during a period of economic growth, housing starts increase due to lower interest rates and positive financial factors (Sharpe et al. 1995: 379). Because of this volatility in the housing market, softwood lumber consumption fluctuates sharply (Figure 2.1). Since 1991, the number of housing starts has been increasing due to strong economic growth in the US, reaching 1.35 million units in 1995.

In addition to the residential construction sector, the repair and remodeling (R&R) sector has a significant share in total consumption. The R&R sector emerged in the 1980s and has been consistently consuming almost 15 bbf annually. This expansion of the R&R sector is attributed to several factors including: higher home prices that have stimulated the sales of existing homes, growth of the middle-aged population who have a higher likelihood to do home improvement projects, an increase in disposable income, and an aging stock of houses in the US (Sinclair 1992: 169-172). The steady demand in the R&R sector has partially offset the volatility of the residential construction sector, and made the US consumption of softwood lumber more stable since the 1980s (Figure 2.1).
2.2 US SOFTWOOD LUMBER PRODUCTION

The domestic production of softwood lumber began to decline after 1987 mainly due to federal timber supply reductions in the PNW region. US softwood lumber production declined from 38.2 bbf in 1987 to 32.2 bbf in 1995 (Figure 2.2).

The dominant lumber producing regions are the West and the South, both representing nearly half of the total production. In 1995, the West (including Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, South Dakota, Utah, Washington, and Wyoming) produced 15.3 bbf of softwood lumber while the South (including Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia) produced 14.7 bbf. While the West has been producing less softwood lumber due to the federal harvest reductions in the PNW region, the South has been producing more. The West has reduced its softwood lumber production from 23.9 bbf in 1987 to 15.3 bbf in 1995, lowering its share of the total US softwood lumber production from 62.6% to 50.6% during this period. In contrast, the South increased its production from 12.5 bbf in 1987 to 14.7 bbf in 1995, increasing its share of US production from 32.6% to 46.3% during the same period (AF&PA 2000). Douglas-fir and hemlock is the most prominent species in the West, while the southern pine (e.g., shortleaf, longleaf, slash, and loblolly pines) are dominant in the South.

In the PNW region, timber harvests in the federal forests were dramatically reduced following 1989. In Washington and Oregon, timber harvests from the National Forests and the BLM dropped nearly 90% from 6.4 bbf in 1988 to 0.8 bbf in 1995. The share of federal forest timber in the total harvest in the two states dropped to just 9.2% in 1995 (Warren 2000). The timber harvest in the West may shrink further as new environmental regulations, such as the Forest and Fish Regulations in Washington state, constrain the timber supply from private, as well as public, forests in the near future.
Although timber production in the South has been increasing for more than thirty years, it is unlikely that the region will continue to produce an increasing volume of softwood lumber. Cubbage et al. (1995) note that it will be difficult to continue harvesting high levels of timber in the South, reflecting excessive removals of softwood timber and other factors such as environmental protection, urbanization, fragmentation, and landowner preferences. Thus, the timber harvests in the South may begin to fall, resulting in an increasing gap between the domestic consumption and the domestic production of softwood lumber in the US.

2.3 US SOFTWOOD LUMBER IMPORTS

Import demand is defined as a residual: the gap between domestic consumption and domestic production (less exports). While domestic production of softwood lumber was declining in the early 1990s, domestic consumption was increasing due to the strong growth of the US economy and housing starts. As a result, US softwood lumber imports grew substantially from 1991-1995. In 1995, the total volume of softwood lumber imports was 17.4 bbf, up significantly from 11.7 bbf in 1991 (AF&PA 2000).

The most striking feature of US softwood lumber imports is that virtually all imports originate from Canada. In 1995, the Canadian share of US softwood lumber imports was as high as 98%. This trade flow from Canada to the US is one of three major forest products trade flows in the world (the other two being from Scandinavia and the former Soviet Union countries to western Europe and from the Pacific Rim to East Asia (Laarman and Sedjo 1992: 166)). In 1995, the share of the US in world softwood lumber imports (by volume) was 46%, while the share of Canada in world exports was 50% (FAO 2000). Thus, US softwood lumber imports from Canada have an influential position in the international trade of softwood lumber. (It is important to note that the US also exports a substantial volume of softwood lumber as well. In 1995, the total volume of softwood lumber exports from the US was 2.0 bbf, nearly 6% of total production. This simultaneous import/export is attributed to the quality difference between lumber products. In general, higher-value lumber is exported overseas to gain price premiums while lower-quality dimension lumber is imported to satisfy domestic demand.)
Softwood lumber imports have a significant share of the US domestic market. In 1995, over 35% of the softwood lumber consumed in the US was imported from other countries, primarily Canada (AF&PA 2000). Given the constrained domestic supply, it is reasonable to say that the US would not be able to satisfy its domestic demand for softwood lumber without imports, unless demand were to decline substantially. Because of the importance of imports in the US domestic market for softwood lumber, any change in this trade flow could have a significant impact on the market. Indeed, since 1996, softwood lumber exports from Canada to the US have been under the control of a voluntary export restraint (VER) as defined within the Canada-US Softwood Lumber Agreement (SLA). It is expected that significant changes have occurred in the US softwood lumber market as a result of the SLA.

Before exploring its effects on the US softwood lumber market, the historical background and the contents of the SLA will be discussed in the following chapter.
3 THE CANADA-US SOFTWOOD LUMBER AGREEMENT

3.1 HISTORICAL BACKGROUND

Before the Softwood Lumber Agreement was signed by the United States and Canada in May 1996, there was a long history of dispute between the two countries regarding Canada’s exports of softwood lumber into the US. In this section, the initial situation and the three countervail stages will be discussed. (The information presented in this chapter draws heavily upon the research of Cashore (1997, 1998), Fujiwara (1999), and Gagné (1999)).

3.1.1 The Situation Prior to the First Countervail

During the last half of the 1970s, the US softwood lumber industry, particularly in the Pacific Northwest, was confronted with a turbulent market environment: a declining demand for wood products in the US and increasing lumber imports from Canada.

In 1979, the US economy had entered a period of economic recession. In 1981, President Reagan and the US Congress implemented a program to promote economic recovery by reducing both taxes and government expenditures. They expected that reduced taxes would lead to higher levels of economic activity, thereby resulting in higher tax revenues. But the increased tax revenues did not develop as expected and the federal budget cuts were not enough to compensate for the loss in tax revenues. The increasing federal deficit resulted in higher interest rates and further weakened economic activity. As a result, the number of the new housing starts declined from 2.0 million units in 1978 to 1.1 million in 1982, substantially reducing the demand for softwood lumber. Consumption of softwood lumber decreased by more than 25% during this period from 44 bbf to 32 bbf (Figure 2.1).

The increasing US budget deficit and rising US interest rates also caused the appreciation of the US dollar (and a corresponding depreciation of the Canadian dollar). Due to the low domestic savings rate and high interest rates, foreign capital was attracted into the US money market, further strengthening the US dollar. This strengthening of the US dollar, probably coupled with favorable stumpage prices and processing costs in Canada, gave Canadian producers an opportunity to further penetrate the US softwood lumber market (Adams et al. 1986). As shown in Figure 3.1, the Canadian share of the US softwood lumber market closely followed the decline in the value of the Canadian dollar relative to the US dollar following 1975.

During this period, the countervailing process described in the Tariff Act of 1930 was amended so as to make the legal process more readily available to US industries. In 1974, the process for a countervail determination was clarified so as to reduce the bureaucratic discretion required to initiate the process. In 1979, the administration of antidumping and countervailing duty was transferred from the free-trade-biased Department of the Treasury to the new International Trade Administration (ITA) located in the more protectionist Department of Commerce. At the same time, the criteria for imposing a countervailing duty were defined as preferentiality and specificity. As a result, the US forest products industry decided to access the countervailing process, attributing their economic hardships to the increasing imports of softwood lumber from Canada.

3.1.2 The First Countervail

In January 1982, the International Trade Commission (ITC) began an investigation into alleged subsidies to the Canadian lumber industry in response to a complaint by the Northwest Independent Forest Manufacturers (NIFM). In Canada, stumpage prices are determined by the provincial government while in the US they are determined through a competitive bidding process. NIFM alleged in their complaint that the low stumpage prices in Canada were essentially a subsidy to the processing industry, enabling manufacturers to export lower cost softwood lumber into the US market. In April 1982, the ITC reported that it did not recognize any injury to US manufacturers as a result of the alleged subsidies.
Figure 3.1. The Relationship between Exchange Rates and the Canadian Share of the US Softwood Lumber Market, 1971-1999.


In countervailing duty cases, two US government agencies investigate the alleged subsidy in response to a request by an industry. The International Trade Commission (ITC) investigates the extent of the “injury” incurred by the US industry from the imported products, while the International Trade Administration (ITA) investigates the “specificity” and “preferentiality” of the alleged subsidies. A countervailing action is initiated only when all of these criteria are found to exist.

The ITC is an independent agency composed of six commissioners appointed by the president. It investigates antidumping and countervailing duty claims and determines if the requisite criteria are satisfied. It also develops studies, reports, and recommendations with regard to international trade and tariffs for the president, Congress, and government agencies. The ITA, in contrast, is a division of the Department of Commerce, whose mission is to strengthen the US position in international trade and investment. Its responsibilities include import administration, trade development, and the nonagricultural trade operations of the US government. As for antidumping and countervailing duty cases, the ITA administers their investigative aspects (Lash 1998: 119-122).

In October 1982, the Coalition for Fair Canadian Lumber Imports (CFCLI), a new organization derived from the NIFM, formally submitted a new countervailing duty petition, again claiming that low Canadian stumpage rates subsidized the industry and materially injured US lumber producers. In May, 1983, the ITA again rejected the claim based on the argument that the Canadian stumpage program did not have specificity and preferentiality.

3.1.3 The Second Countervail

In May 1986, the Coalition of Fair Lumber Imports (CFLI), a new organization derived from the CFCLI, submitted another petition requesting the imposition of a countervailing duty on softwood lumber imports from Canada. The claim was again about Canadian stumpage subsidies to the lumber industry, but in this instance the ITC recognized the injury of the US softwood lumber industry by the alleged subsidies and the ITA preliminarily ruled that Canada had subsidized the softwood lumber industry with specificity and preferentiality, equivalent to a 15% subsidy. The change in the ITA ruling was caused by a recent amendment of the Tariff Act, and the
correction of errors made in the 1983 ruling, which expanded the extent of countervailable subsidies and the
definition of a “specific” industry respectively. However, before the final determination to impose a 15%
countervailing duty on softwood lumber imports was made, the US and Canada reached a compromise. The two
countries signed a memorandum of understanding (MOU) in December 1986, stating that Canadian government
would collect a 15% tax on softwood lumber exports to the US under the provision that the US would withdraw
the countervailing duty petition. The MOU also mentioned that the export tax might be reduced or eliminated in
the event that increased stumpage or other charges were imposed in Canada, as long as there was an agreement
between the two governments. (For the text of the MOU, see Percy and Yoder 1987:157-175.)

Subsequently, several provincial governments in Canada did increase their stumpage fees in order to replace the
export tax in accordance with the provisions of the MOU. For example, British Columbia changed the stumpage
pricing system in 1987 and asked the US government to agree to the elimination of the export tax, while Quebec
also changed stumpage prices, allowing the province to reduce the export tax to 3.1%.

3.1.4 The Third Countervail

In October 1991, Canada unilaterally declared the termination of the MOU, claiming that it had sufficiently
increased stumpage fees to eliminate the export tax. Canada expected that the US would agree with its decision,
or alternatively, that it could utilize the new bi-national dispute resolution process contained within the 1989
Canada-US Free Trade Agreement (FTA) to its advantage and effectively exclude political influences from the
dispute resolution process. In response, the US government immediately self-initiated the countervailing duty
process (without a petition from industry) and imposed an interim bonding requirement on Canadian lumber
imports under Section 301 of the 1974 Trade Act. In December 1991, the ITC recognized the injury to the US
softwood lumber industry by Canadian softwood lumber imports. In March 1992, the ITA ruled that the
Canadian provincial stumpage programs, and British Columbia’s log export ban, were specific and preferential,
being equivalent to a 14.48% subsidy (stumpage programs: 6.25%, log export ban: 8.23%). Finally, in May
1992, the ITA reached a final affirmative injury ruling concluding that both programs were equivalent to a 6.51%
subsidy (stumpage programs 2.91%, log export bans: 3.60%), and imposed a 6.51% countervailing duty on

Canada immediately responded to these rulings by appealing to the FTA bi-national panels. The panels
remanded the rulings back to the ITC and ITA for using inappropriate data to reach their countervailing
determinations. The two agencies quickly responded to the FTA panel’s decision, but their decisions were again
remanded back to them for the same reason. In April 1994, the US appealed to an extraordinary challenge
committee (ECC) under the FTA, only to have the appeal rejected in August 1994. Following this rejection, the
bonds and cash deposits collected from the Canadian softwood lumber producers were reimbursed. In response,
the US government introduced a “Statement on Administrative Action” (SAA) which reduced the specificity
criteria for imposing a countervailing action (c.f. Castle and Castel 1996: 878-879), threatening the Canadian
government and industry with the possibility of another countervailing action. Accordingly, Canada sought a
compromise with the US, holding a number of formal and informal meetings, and in May 1996, the US and
Canada signed the “Softwood Lumber Agreement between the Government of Canada and the Government of
the United States of America.”

3.2 THE SOFTWOOD LUMBER AGREEMENT

The “Softwood Lumber Agreement between the Government of Canada and the Government of the United States
of America” (SLA) was signed on May 29, 1996 and went into effect retroactively from April 1, 1996. In the
first sentence of Article I, the intention of the SLA is stated as being “to ensure that there is no material injury or
threat thereof to an industry in the United States from imports of softwood lumber from Canada.” The SLA
consists of ten articles including “Actions by the United States,” “Canadian Export Permit,” and “Dispute
Resolution.” Before discussing the details of the SLA, there are two points that should be explicitly noted. First,
the SLA is not an import restriction imposed by the US but a voluntary export restraint (VER) agreed upon by the
Canadian government. Only Canada imposes a governmental regulation on softwood lumber exports, while the
US does nothing but agree to refrain from retaliation. Second, there is no limitation imposed on the volume of
softwood lumber exported from Canada. Canadian producers can export as much softwood lumber as they like
into the US, as long as they are willing to pay the export fees for the quantity that exceeds the base volume. The
details of the important articles of the SLA will be discussed in the following paragraphs. (For the text of the SLA, see Appendix A.)

3.2.1 Actions by the United States

Article I of the SLA states that no retaliatory action, including investigations, will be taken by the US. These actions include Title VII of the Tariff Act of 1930, sections 201-204 of the Trade Act of 1974, section 204 of the Agricultural Act of 1956, and sections 301-305 of the Trade Act of 1974.

Each of these legislations authorizes regulatory actions that the US may impose on international trade. Title VII of the Tariff Act (USC Title 19, Sec. 1671-1677) provides for the imposition of “Countervailing and Antidumping Duties.” Countervailing duties can be imposed on imports to offset the advantage of subsidies provided by an exporting country government, while antidumping duties are imposed against foreign products that are sold at less than their “normal” value in the US. Sections 201-204 of the Trade Act of 1974 (USC Title 19, Sec. 2251-2254) establish “Relief from Injury Caused by Import Competition,” which is commonly referred to as an “escape clause.” This escape clause is invoked to impose tariffs or quotas, or negotiate with foreign countries, when the increase in fairly traded imports seriously injures a domestic industry. Section 204 of the Agricultural Act of 1956 (USC Title 7, Sec. 624) authorizes the imposition of a “Limitation on Imports” of agricultural products. Under this provision, import tariffs or quotas can be imposed on imported agricultural products which are found to interfere with USDA agricultural programs. Sections 301-305 of the Trade Act of 1974 (USC Title 19, Sec. 2411-2415) provide for the “Enforcement of United States Rights under Trade Agreements and Response to Certain Foreign Trade Practices.” These sections provide for retaliatory actions against foreign countries that unjustifiably burden or restrict US commerce or deny US rights under trade agreements. The US can suspend or withdraw trade agreements, or impose retaliatory tariffs or quotas (Lash 1998).

As described earlier, the US softwood lumber industry has repeatedly appealed to the countervailing duty process, alleging that Canada has subsidized softwood lumber producers through the stumpage pricing system, in an effort to limit imports of less expensive Canadian softwood lumber. Article I of the SLA clearly states that the US cannot take any regulatory action, including countervailing duties, regardless of requests from any parties, as long as Canada follows the agreement.

3.2.2 Canadian Export Permit

Article II, “Canadian Export Permit,” establishes the regulatory scheme for softwood lumber exports from Canada. This export regulation is imposed on softwood lumber originating from the four major softwood lumber producing provinces in Canada: British Columbia, Alberta, Ontario, and Quebec. Softwood lumber exports from the other provinces, including New Brunswick, Nova Scotia, Saskatchewan, and Manitoba, are exempt from the SLA. In addition, any Canadian softwood lumber manufacturer whose production was less than 10 million board feet (mmbf) in the previous year is also excluded from the export permit requirement. Finally, softwood lumber manufacturers whose production of lumber was reduced by at least 25% relative to the same quarter of the previous year, due to a worker strike, mill fire, forest fire, or other unexpected disaster, are exempt from the SLA.

Article II also establishes the export permit fees based on export volume, according to the following schedule:

a) For export volumes up to 14.7 bbf (referred to as the “established base”), no export fee will be imposed,

b) For export volumes between 14.7 bbf and 15.35 bbf (referred to as the “lower fee base”), an export fee of US$50 per thousand board feet (mbf) will be imposed, and

c) For export volumes in excess of 15.35 bbf (referred to as “the upper fee base”), an export fee of US$100/mbf will be imposed.

The volume of the established base, 14.7 bbf, is about 1.5 bbf less than the volume of softwood lumber exported by the four major provinces into the US in 1995, although it exceeds the volume of exports from those provinces in all years prior to 1995 (Random Lengths 1996c). Export volumes for the established base and the lower fee base are allocated to individual Canadian exporters each year by the Canadian government. (‘Exporters” are defined as “primary producers and remanufacturers, including new entrants” in Department of Foreign Affairs
and International Trade (1997).) The export fee levels are adjusted for inflation every year according to consumer price indexes. As of April 1996, the fee of $50 and $100/mbf were equivalent to roughly 13 and 26% ad valorem, based on the price of $382/mbf (April 5, 1996) for the standard product, defined in the SLA as being SPF, Eastern, Kiln Dried, 2x4 random length, Standard & Better, Great Lakes delivered. The volume covered by the lower fee base, 650 mmbf, is equivalent to 4.4% of the established base. The sum of the established base and the lower fee base, 15.35 bbf, is still less than the 16.2 bbf of softwood lumber that the four provinces exported to the US in 1995.

In addition to the established base, there is a “bonus” quantity described in Article III, “Trigger Price.” Article III states that if the average price of the standard product in the US in a quarter equals or exceeds $405/mbf during the first two years of the SLA, and $410/mbf for the subsequent years, an additional 92 mmbf of softwood lumber may be exported without an export fee during the following four quarters. On a yearly basis, the bonus volume would total 368 mmbf (2.5% of the established base) if the average price exceeded the trigger price continuously.

3.2.3 Dispute Resolution

Article V, “Dispute Resolution”, describes the dispute resolution process to be followed in the case of an alleged breach of the SLA. Article V provides two steps for dispute resolution: direct consultations, followed by referral to arbitration or referral to auditor. In the case of a dispute, both countries would first try to resolve the dispute by consulting in writing with each other. If the dispute could not be resolved by consultation within a certain period of time, then the requesting country can appeal for referral of the dispute to an arbitral panel or an auditor, either of which would investigate the allegation and render a decision. Based on the final decision, the requesting country could suspend the SLA, that is, the collection of export fees by Canada or the initiation of retaliatory actions by the US. This dispute resolution scheme was used to resolve the dispute over the customs classification of modified studs as well as the dispute over the stumpage price reduction in British Columbia, both of which will be discussed later.

3.2.4 Other Issues

In Article IX, “Definitions”, softwood lumber is defined as tariff items 4407.10 (coniferous wood sawn or chipped lengthwise, sliced or peeled of a thickness exceeding 6mm) and 4409.10.10, 4409.10.20, and 4409.10.90 (coniferous wood continuously shaped along any of its edges or faces excluding wood moldings and wood dowel rods), in the Harmonized Tariff Schedule of the United States. This product definition became a controversial issue in the cases of drilled, notched, and rougher-headed studs, which will be discussed later.

Finally, Article X, “Entry into Force”, states that the SLA will remain in effect for five years following the implementation date of April 1, 1996. Thus, the SLA is scheduled to expire on March 31, 2001. Article X also mentions that the agreement may be extended on the written agreement of both countries.
The export permit scheme under the Softwood Lumber Agreement is called the voluntary export restraint (VER), or voluntary restraint agreement (VRA). The VER has been used as a protective trade policy instrument by the US for a variety of products, including textiles and apparels in 1957, steel in 1968, color televisions in 1977, footwear in 1977, automobiles in 1981, and machine tools in 1986 (Yoffie 1981: 96; Feenstra 1984; Dinopoulos and Kreinin 1991). A VER is defined as “a quota on trade imposed from the exporting country’s side instead of the importer’s” (Krugman and Obstfeld 2000: 203). However, since the SLA allows Canadian producers to export more than the “established base” quantity as long as they pay the export fees for the excess quantity, it is more accurately a quasi-VER that is similar to a tariff rate quota (referred to as a “TRQ-VER” for convenience). A tariff rate quota (TRQ) is a system under which imports with licenses are permitted with no, or lower, import tariffs while imports without licenses are subject to a higher tariff rate. The TRQ has been applied to agricultural products in many countries, including the US, after the Uruguay Round Agreement prohibited the use of import quotas for agricultural products. In this chapter, the underlying economic theory of the TRQ-VER is explained and possible effects of the TRQ-VER with respect to the SLA are discussed.

4.1 ECONOMICS OF THE TRQ-VER

The TRQ-VER under the SLA is similar to the tariff rate quota (TRQ) system. TRQ is an import regulation system under which a specified quantity of imports (quota volume) is permitted with no, or lower, import tariffs while imports exceeding the quota volume are subject to a higher import tariff. The quota volume is generally allocated to individual importers, with import permits issued by the government. The difference between the TRQ and the TRQ-VER under the SLA is the process for allocating licenses and collecting tariffs. Under the TRQ system, import licenses are allocated to importers in the importing country, while under the TRQ-VER system, export licenses are allocated to exporters in the exporting country. Similarly, import tariffs under the TRQ system are collected by the government in the importing country, while export fees under the TRQ-VER system are collected by the government in the exporting country.

A conceptual model of the TRQ-VER is presented in Figure 4.1. Since we are going to focus on only the softwood lumber sector, a “partial equilibrium model” is employed, and we will neglect the impact of changes in other sectors of the economy. In addition, we will examine the effects of the TRQ-VER in the manner of comparative statics, that is, keeping all other conditions the same (ceteris paribus).
In Figure 4.1, there are three markets for a certain product: an import market, an export market, and an international market. Each market has a demand curve and a supply curve: $D_m$ and $S_m$ for the import market, $D_x$ and $S_x$ for the export market, and $X_D$ and $X_S$ for the international market. The excess demand curve ($X_D$) in the international market is derived by horizontally subtracting $S_m$ from $D_m$ in the import market. Similarly, the excess supply curve ($X_S$) is derived by horizontally subtracting $D_x$ from $S_x$ in the export market. The equilibrium of international trade occurs where $X_D$ crosses $X_S$, at the point of A, with the price $P_o$ and the volume $Q_o$ in the absence of trade regulation.

When the TRQ-VER is applied on the product, the excess supply curve in the international market become ‘S’-shaped with a “cliff” at the volume $Q_q$ shown as $X_S'$. Since the TRQ-VER imposes no, or lower, export fees on exports up until the specified volume ($Q_q$), and higher export fees on those exceeding that volume, $X_S$ beyond the volume of $Q_q$ shifts up by the amount of the export fees. (In the case shown in Figure 4.1, no export fee is imposed within the quota volume from $O$ to $Q_q$.) As $X_S$ shifts up to $X_S'$, the equilibrium point moves from A to B. As a result, the volume of trade is determined at the lower level of $Q'$, and the import market price increases to $P_m$ while the export market price decreases to $P_x$. (However, if the import market is not large enough to influence the international market, only the import market price will increase.)

As the price changes in both the import and export markets, the production and consumption of the product will also change. In the import market, production increases from $S_1$ to $S_1'$ while consumption decreases from $D_1$ to $D_1'$, as the price increases from $P_o$ to $P_m$. Similarly, in the export market, consumption increases from $D_2$ to $D_2'$, while production decreases from $S_2$ to $S_2'$, as the price decreases from $P_o$ to $P_x$. As shown in Figure 4.1, the price difference between the import market and the export market ($P_m - P_x$) is equivalent to the amount of the export fee imposed on exports exceeding the quota volume ($Q_q$).

### 4.2 POSSIBLE EFFECTS OF THE TRQ-VER

In this section, first, the direct effects of the TRQ-VER described in the economic model are discussed. Then, possible indirect effects caused by the TRQ-VER are summarized based on past experience with other trade regulation programs. These indirect effects include shifts in exporting country distribution, changes in product quality, shifts in the degree of processing, regulation avoidance, and material substitution.

#### 4.2.1 Direct Effects

As discussed in the previous section, under the assumption of the partial equilibrium model, the expected effects of the TRQ-VER in the importing country are summarized as:

- a decrease in the volume of imports from the regulated country,
- an increase in domestic prices,
- an increase in domestic production, and
- a decrease in domestic consumption.

Since the objective of the TRQ-VER is to reduce competition for domestic producers in the domestic market, it would be reasonable to say that the most important effect is a decrease in the volume of imports.

It is important to note that the expected direct effects are subject to the assumption that all other conditions except for the import regulation are the same (ceteris paribus). If the structure of demand or supply changes (i.e., the demand curve or supply curve shifts due to changes in other factors such as production costs, inventory levels, economic growth, or consumers preferences), these effects may not occur.

#### 4.2.2 Indirect Effects

In addition to the possible direct effects predicted by the partial equilibrium model, there are some indirect, even unintended, effects of the TRQ-VER in the import market. Particularly under a country-specific (Canada) and product-specific (softwood lumber) measure like the SLA, various “spill-over” effects might be expected to occur; or as Baldwin (1982: 3) stated; “the less comprehensive a trade-policy measure is in its commodity and country coverage, the less effective is it likely to be.” In this section, five possible indirect effects: shifts in exporting country distribution, changes in product quality, shifts in the degree of processing, regulation
avoidance, and material substitution, are described. In order to discuss these indirect effects, the past experiences of other trade regulation programs will be referred to. (For a more complete discussion of the conditions under which trade policies may be ineffective, see Baldwin (1982).)

**Shifts in Exporting Country Distribution**

When a trade restriction is imposed on specific exporting countries, imports from uncontrolled countries can be expected to increase. This shift in the composition of exporting countries is attributed to a domestic price increase which allows marginal producers with relatively high production costs to penetrate the import market under limited exports from the specific countries.

This shift in the composition of exporting countries was observed in several previous VERs. When the US and Japan agreed on a VER of textiles in 1956, importers turned to other suppliers, resulting in more imports from Hong Kong and other countries to the US (Yoffie 1981: 98, cited from Husburger 1964). Similarly, the US negotiated an orderly marketing agreement (OMA) for color television receivers and subassemblies with Japan in 1977, but the US then had to renegotiate a similar contract with Taiwan and Korea because imports from both countries increased substantially during the implementation of the OMA with Japan (Baldwin and Green 1988: 209). (An OMA is identical to a VER, except for the legal interpretation. An OMA is usually a formal arrangement between governments, while a VER usually refers to an informal agreement between industries or governments (Yoffie 1981: 97).) Furthermore, under the OMA for footwear between the US and Taiwan and Korea, US imports from uncontrolled countries, including Italy, Brazil, Spain, Hong Kong, and the Philippines, increased by 60% in 1978 (Yoffie 1981: 116).

Since the SLA limits only the exports from the major four provinces in Canada: BC, Alberta, Ontario, and Quebec, it would be expected that US imports from the SLA-exempt Canadian provinces, as well as other countries, would increase.

**Changes in Product Quality**

When a quota limits the physical volume of imports, exporters often shift the composition of their exports from low-quality products to high-quality products within the restricted products coverage. It is reasonable to expect that exporters will look to maximize their profits within the restricted trade volume by exporting a higher proportion of high-quality products with higher profit margins. Theoretically, this shift can be attributed to the difference in relative price changes between products with different qualities (Falvey 1979; Feenstra 1984).

Feenstra (1984) examined the quality of Japanese automobiles imported into the US under the VER, taking into consideration vehicle length, weight, horsepower, gas mileage, and other variables. He found that two-thirds of the relative price increase in Japanese imports could be attributed to product quality improvements. In addition, a similar relationship between quality upgrading and unit value increase was observed in the case of the VER for footwear (Aw and Roberts 1986; Yoffie 1981: 116-117).

Since the SLA covers both standard softwood lumber (4407.10) and value-added softwood lumber (4409.10.10, 4409.10.20, and 4409.10.90), it might be expected that Canadian lumber producers in the four major provinces would export a higher proportion of higher-quality standard lumber and value-added lumber into the US.

**Shifts in the Degree of Processing**

When a trade regulation covers only a portion of products in an industry rather than all products, exporters might be expected to shift their exports to uncontrolled products in a more or less processed form. This shift is because the imported finished products are often less expensive than domestic products manufactured using the regulated import materials that are subject to the import tariff, or *vice versa* (Baldwin 1982: 5-9).

When the US imposed import quota on stainless steel and alloy tool steel in the 1970s, imports of regulation-exempt steel wire produced from stainless steel increased. Since the price of US steel wire increased because of the higher cost of imported stainless steel, the US wire producing industry was damaged by the increased imports of steel wire (Baldwin and Green 1987: 211-212).
While the SLA covers softwood lumber defined as tariff items 4407.10, and a part of 4409.10, in the Harmonized System, value-added softwood products and softwood logs are exempt from regulation. As the price of softwood lumber increases in the US as a result of the SLA, it may become more profitable to export value-added products or softwood logs from Canada, because their prices would also increase in the US in response to an increase in softwood lumber prices. Thus, we might expect to see an increase in Canadian exports of value-added softwood products and softwood logs into the US as a result of the SLA.

**Regulation Avoidance**

Even if every product in an industry is subject to export regulation, there are still ways to avoid trade regulation. Yoffie (1981: 101) suggests several strategies for regulation avoidance “from simple transshipment to changing packaging, mixing products and slightly varying the raw materials to change classifications.” With the higher profit margins made possible by the domestic price increase, both importers and exporters may be induced to evade the trade regulation.

Under the footwear OMA, mentioned previously, exporters shifted their products to similar but uncontrolled products. Since rubber footwear was excluded from the OMA coverage, and non-rubber footwear could be reclassified to rubber footwear through minor modifications, the Koreans and Taiwanese exported more rubber footwear into the US (Yoffie 1981: 115-116; Baldwin and Green 1987: 210).

Although it would be difficult to identify avoidance strategies in actual trade activities, there may be some attempts in the softwood lumber trade such as the diversion of exports from the four major provinces through the other provinces in Canada or the modification of lumber products by Canadian producers for customs reclassification.

**Material Substitution**

As the price of regulated products increases, consumers may be encouraged to use substitute products with similar characteristics manufactured in other industrial sectors. This substitution can be explained by the cross-price elasticity of demand between two products (that is, the percent change in demand for one good in response to the percent change in price of the other good). If the cross price elasticity of two goods is positive, they are referred to as substitute products; if it is negative, they are referred to as complimentary products. Besides a price increase, changes in other factors such as price volatility, physical properties, or product designs may also influence consumers’ preferences.

Although not a case of import regulations, Baldwin (1982: 12) notes that the increased target price for feedgrains under the EC’s Common Agricultural Policy shifted the consumption of domestic feedgrains toward imported oilseed meals as well as nontraditional nutrients (such as tapioca, beet pulp, and citrus pulp) whose tariffs were zero or near-zero.

As the price of softwood lumber increases in the US under the SLA, US demand for softwood lumber may shift towards other products with similar characteristics, such as engineered wood products, plastics, steel, or concrete.

All of these indirect effects undermine the primary objective of the VER: to keep domestic producers competitive in the domestic market. Shifts in country distribution increase imports from other regions and countries, changes in product quality damage the higher-value products sector, shifts in the degree of processing increase imports of value-added products and raw materials, regulation avoidance undermines the credibility of the trade regulation itself, and material substitution reduces domestic demand for the product. It is important to note that, although the partial equilibrium model shows that domestic producers would be able to benefit from the TQR-VER through higher domestic prices, increased domestic production, and reduced imports, the unintended indirect effects could very well undermine or overwhelm the positive effects of the trade regulation.
5 EFFECTS OF THE SOFTWOOD LUMBER AGREEMENT

The Softwood Lumber Agreement has been in effect during the past four years (1996-2000). Since 1996, various changes and problems have occurred due to the trade regulation under the SLA. Since the SLA is a voluntary export restraint which limits the volume of softwood lumber exported from the four major provinces in Canada, the SLA had a greater impact on the US softwood lumber market than its predecessor, the MOU agreement, which imposed export taxes without quantitative limitations. In this section, the direct and indirect effects of the TRQ-VER will be discussed within the context of the SLA.

5.1 DIRECT EFFECTS

As discussed in Chapter 4, under the assumptions of the partial equilibrium model the SLA would be expected to cause a decrease in the volume of imports from the regulated country, an increase in domestic prices, an increase in domestic production, and a decrease in domestic consumption in the US. These possible effects are examined in the following sections using statistical data from the US.

5.1.1 Softwood Lumber Exports from the Four Provinces

The volume of softwood lumber exported from the four major Canadian provinces into the US over the past four years (1996-2000), by export permit categories, is summarized in Table 5.1. Overall, the total exported volume is slightly more than the sum of the established base and the lower fee base (15.35 bbf) for each year. The two fixed bases are mostly filled, while the upper fee base shows considerable fluctuation over the four-year period. The low volumes in the upper fee base during the period April 1, 1997 - March 31, 1999 can be attributed to the low softwood lumber prices in the US, while the subsequent high lumber prices in 1999 contributed to a significant increase in the volume of softwood lumber exported (Random Lengths 1998a, 1999b). (See Figure 5.2 for price movement.) Bonus export volumes were earned in ten of the 16 quarters: from the first quarter of year one to the second quarter of year two and all four quarters in year four. The total volume of softwood lumber exports credited under the bonus program was 920 mmbf, although only 699 mmbf of the bonus volume was actually exported into the US.

| Table 5.1 Canadian Softwood Lumber Exports to the US under the SLA, by Category (mbf). |
|---------------------------------|----------------|----------------|----------------|----------------|----------------|
|                                | Established    | Lower Fee      | Upper Fee       | Bonus           | Total           |
| Apr. 1, 1996- Mar. 31 1997     | 14,674,091     | 559,717        | 509,324         | 166,565         | 15,909,700      |
| Apr. 1, 1998- Mar. 31 1999     | 14,581,955     | 617,278        | 186,039         | 38,175          | 15,423,448      |

| Base Volume (maximum)          | 14,700,000     | 650,000        | -               | -               | 15,679,465      |

<table>
<thead>
<tr>
<th>Fill rates</th>
<th>Established</th>
<th>Lower Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apr. 1, 1996- Mar. 31 1997</td>
<td>99.8%</td>
<td>86.1%</td>
</tr>
<tr>
<td>Apr. 1, 1997- Mar. 31 1998</td>
<td>99.0%</td>
<td>83.2%</td>
</tr>
<tr>
<td>Apr. 1, 1998- Mar. 31 1999</td>
<td>99.2%</td>
<td>95.0%</td>
</tr>
<tr>
<td>Apr. 1, 1999- Mar. 31 2000</td>
<td>99.2%</td>
<td>92.0%</td>
</tr>
</tbody>
</table>

Source: Department of Foreign Affairs and International Trade (2000a)

The low fill rate for the bonus volume, in spite of its exemption from the export fee, can probably be attributed to the delay of Canadian manufacturers in using credits. As discussed in section 3.2.2, the bonus volume gained in any quarter can be used in the subsequent four quarters. Thus, the remaining bonus gained in the four quarters of the fourth year would still be available in the fifth year. If one considers the bonus volume gained in the first six
quarters of the SLA, which had to be used by the second quarter of the third year, as much as 95% (or 524 out of 552 mmbf) was used by Canadian exporters.

A breakdown of Canadian softwood lumber exports by the four major provinces shows that British Columbia exported more than half (55%) of the total volume, followed by Quebec (25%), Ontario (11%), and Alberta (8%) (Table 5.2). The provincial shares were relatively consistent over the four-year period, primarily because of the export permit allocation system which allocates the established base and the lower fee base to individual companies based on their volume of softwood lumber exports during the previous year.

Since the volume of softwood lumber exports from the four provinces was 16.2 bbf in 1995 (Random Lengths 1996c), it can be concluded that the SLA was effective in limiting the volume of softwood lumber exports from the four provinces.

Table 5.2  Canadian Softwood Lumber Exports to the US under the SLA, by Province (mbf).

<table>
<thead>
<tr>
<th></th>
<th>British Columbia</th>
<th>Alberta</th>
<th>Ontario</th>
<th>Quebec</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apr. 1, 1996- Mar. 31, 1997</td>
<td>8,858,275</td>
<td>1,209,841</td>
<td>1,821,716</td>
<td>4,019,866</td>
<td>15,909,700</td>
</tr>
<tr>
<td>Apr. 1, 1998- Mar. 31, 1999</td>
<td>8,579,010</td>
<td>1,203,022</td>
<td>1,719,746</td>
<td>3,921,669</td>
<td>15,423,448</td>
</tr>
<tr>
<td>Apr. 1, 1999- Mar. 31, 2000</td>
<td>8,681,546</td>
<td>1,324,227</td>
<td>1,728,025</td>
<td>3,945,664</td>
<td>15,679,465</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(Share)</th>
<th>British Columbia</th>
<th>Alberta</th>
<th>Ontario</th>
<th>Quebec</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apr. 1, 1996- Mar. 31, 1997</td>
<td>55.6%</td>
<td>7.6%</td>
<td>11.5%</td>
<td>25.3%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Apr. 1, 1997- Mar. 31, 1998</td>
<td>56.2%</td>
<td>7.8%</td>
<td>10.7%</td>
<td>25.3%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Apr. 1, 1998- Mar. 31, 1999</td>
<td>55.6%</td>
<td>7.8%</td>
<td>11.2%</td>
<td>25.4%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Apr. 1, 1999- Mar. 31, 2000</td>
<td>55.4%</td>
<td>8.4%</td>
<td>11.0%</td>
<td>25.2%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Source: Department of Foreign Affairs and International Trade (2000a)

Since the implementation of the SLA, the distribution of softwood lumber production in Canada has changed substantially (Figure 5.1). The total production of softwood lumber in Canada increased from 26.1 bbf in 1995 to 29.0 bbf in 1999. While British Columbia reduced its production of softwood lumber, production in the other provinces has increased. In BC, softwood lumber production decreased from 13.8 bbf in 1995 to 12.8 bbf in 1998. Although production increased to 13.5 bbf in 1999, it was still below the 1995 volume. As a result, the share of BC in total Canadian softwood lumber production dropped from 61% in 1995 to 52% in 1999. This decline is most likely due to weak demand for coastal BC lumber in Japan, as well as a limited quota volume that could be exported from BC to the US. On the other hand, softwood lumber production in the other major provinces increased over the period 1995-1999. In Quebec, softwood lumber production increased by 25% from 5.8 bbf in 1995 to 7.3 bbf in 1999. Similarly, the increase in Ontario was 18% (from 2.4 bbf to 2.8 bbf), and in Alberta it was 13% (from 2.3 bbf to 2.6 bbf). Clearly, softwood lumber production in Canada has been shifting from the West to the East. Overall, softwood lumber production volume in the four major provinces increased by 7.3% from 24.4 bbf in 1995 to 26.2 bbf in 1999.
5.1.2 Softwood Lumber Price

The price of softwood lumber in the US has fluctuated substantially over the past four years. Overall, the average price of the standard product defined in the SLA (Eastern SPF, KD, 2x4, #1&2, random lengths, Great Lakes) peaked at $529/mbf in November 1996, followed by a continuous decline until May 1998 when it reached $357/mbf. In July 1999, it peaked again at $513/mbf before entering a period of decline that extended into the summer of 2000 (Figure 5.2).

It is difficult to ascertain the absolute effect of the SLA on the price of softwood lumber in the US. Lindey et al. (2000) concluded that real lumber prices increased by $50 to $80/mbf due to the trade restriction after 1986 (when the MOU took effect), based on regression analyses for the period of 1977 to 1998. However, since they used dummy variables as a trade restriction factor, the effects of other structural changes after 1986, particularly federal timber harvest reductions in the INW region, may be included in the estimate of the coefficient. Certainly, we would expect to see a short-term price increase as the market adjusted to the reduced supply of softwood lumber from Canada. The price data presented in Figure 5.2 shows that prices increased from $394/mbf in April 1996 (when the SLA was about to be implemented) to $529/mbf in November 1996. In the long-term, we would expect that increased domestic production and increased imports from non-Canadian sources might work to drive softwood lumber price down.

Although the absolute effect of the SLA on US softwood lumber prices is uncertain, a substantial “relative” price difference has developed for softwood lumber between the US and Canada following the implementation of the SLA. As shown in Figures 5.3 and 5.4, lumber prices in Boston have been substantially higher than prices for the same product in Toronto prior to the cancellation of cash deposits collection in August 1994 as well as following the implementation of the SLA in May 1996.
During the period of the MOU agreement, there was a 15% export tax collected on softwood lumber. When the MOU was cancelled in October 1991, the US imposed a bonding requirement on softwood lumber imports from Canada under Section 301 of the Trade Act of 1974 and later cash deposits equivalent to the amount of the proposed countervailing duty. The collection of cash deposits was cancelled in August 1994 and the collected bonds and cash deposits were refunded to Canada in December 1994 (Random Lengths 1994a, 1994b). Between August 1994 and May 1996 when the softwood agreement was signed, there were essentially no regulatory restrictions on softwood lumber imports from Canada.

As shown in Figure 5.4, there was a roughly 10% price difference between Boston and Toronto until late 1994 when the collection of cash deposit was canceled, almost no difference between late 1994 and mid 1996, and a roughly 15% (or $100/mbf) difference following the implementation of the SLA in mid 1996. This price difference after mid 1996 is at least partially explained by the relatively short supply of softwood lumber in the US and the relatively excess supply of softwood lumber in Canada as a result of the SLA. In fact, some industry analysts suggest that Canadian producers often sold their products to Canadian customers at discounts as high as $50-100/mbf during the implementation of the SLA so as to avoid the high export fees (Random Lengths 2000c). Therefore it is reasonable to conclude that the SLA resulted in a substantial price difference for softwood lumber between the US and Canada.

**5.1.3 Softwood Lumber Production, Consumption, and Imports**

During the implementation of the SLA, the production and consumption of softwood lumber in the US has increased steadily (Figure 5.5). Domestic production has increased by 14.3%, from 32.2 bbf in 1995 to 36.8 bbf in 1999 (excluding exports, from 30.2 bbf in 1995 to 35.2 bbf in 1999). Similarly, domestic consumption has increased by 13.8%, from 47.7 bbf in 1995 to 54.3 bbf in 1999. As a result, softwood lumber imports have increased by 9.9%, from 17.4 bbf in 1995 to 19.1 bbf in 1999 (AF&PA 2000).
Figure 5.3. Softwood Lumber Prices in Boston and Toronto (Eastern SPF, KD, 2x4, #1&2, Random Lengths), 1991-2000.

Source: Random Lengths

Note: Prices in Toronto are converted into US$ by monthly exchange rates (FRB 2000).

Figure 5.4. Relative Lumber Price in Toronto to Boston (Eastern SPF, KD, 2x4, #1&2, Random Lengths), 1991-2000.

Source: Random Lengths
As for domestic production, the increasing production trend from 1995-1999 reverses the declining trend observed previous to 1995. The most noticeable change is the reversal of the production declines in the West. Before 1995, production in the West has been continuously declining since 1987 due to the federal timber harvest reductions in the PNW region and economic recession in the US. After the implementation of the SLA, western lumber production increased by 17.5%, from 15.8 bbf in 1995 to 17.9 bbf in 1999 (Figure 2.2). In the South, the increasing trend of production continued after the implementation of the SLA. Softwood lumber production in the South grew by 15.1%, from 14.7 bbf in 1995 to 16.9 bbf in 1999 (AF&PA 2000). This consistent growth of domestic production, particularly in the West, suggests that the strong domestic demand in the US and the limited import supply from Canada under the SLA encouraged domestic lumber producers to increase production. In addition, the prolonged economic recession in Japan has redirected previously exported logs toward domestic lumber production in the West (International Wood Markets Research 2000: 132). Furthermore, lumber producers in the West improved their productivity with investments in processing capacity and technology. For example, in Washington State, while employment declined by 24% and the number of sawmills was nearly halved during the period 1989-1999, the volume of lumber production was almost the same for both 1989 and 1999 at approximately 4.2 bbf (WWPA 1999, 2000; Washington State Department of Natural Resources 2000).

Domestic lumber consumption has been driven by the strong US economy, particularly the robust housing industry. New housing starts increased from 1.35 million units in 1995 to 1.67 million units in 1999. As a result, softwood lumber consumption in the residential construction sector increased by 23.8%, substantially more than the overall 14.7% increase in total softwood lumber consumption observed during the period 1995-1999 (WWPA 1999). According to the economic model discussed in Chapter 4, however, domestic consumption would be expected to decrease in response to an increase in domestic lumber prices as a result of the SLA. This inconsistency between theory and observation suggests an outward shift of the US demand curve caused by the strong economic growth in the US.

Figure 5.5. US Softwood Lumber Consumption, Production, and Imports, 1970-1999.
Import growth has been somewhat suppressed under the SLA. Since softwood lumber imports from the four major provinces in Canada are regulated, any increase in imports would have to be attributed to increased imports from the SLA-exempt Canadian provinces or other countries. As a result of the restricted growth in imports and high growth in consumption, the share of imports in the US softwood lumber market has decreased slightly from 36.4% in 1995 to 35.2% in 1999.

Overall, it can be concluded that the strong domestic demand in the US, combined with the restricted import supply from Canada under the SLA, has encouraged increased domestic production of softwood lumber, resulting in a lower share of imports in the US softwood lumber market.

5.2 INDIRECT EFFECTS

The SLA is also expected to cause unintended indirect effects which would undermine the intended direct effects. Five indirect effects, including shifts in exporting country distribution, changes in product quality, shifts in the degree of processing, regulation avoidance, and material substitution, are examined in the following sections.

5.2.1 Shifts in Exporting Country Distribution

By restricting Canadian softwood lumber exports into the US, the SLA has substantially changed the forest products trade flow for both countries. The US has experienced an increase in imports from the SLA-exempt Canadian provinces as well as non-Canadian countries, while Canada has suffered from weak demand in Asia (in particular, Japan) as well as limited export opportunities to the US. The impacts of the SLA on the trade flows for both countries will be discussed in this section.

US Imports from the SLA-Exempt Canadian Provinces

Although softwood lumber exports from the four major provinces in Canada: BC, Alberta, Ontario, and Quebec, into the US are under the strict control of the SLA, other provinces (including New Brunswick, Nova Scotia, Saskatchewan, and Manitoba) are exempt from the export permit requirement defined under the SLA. As a result, these provinces have increased the volume and the share of their softwood lumber exports to the US (Table 5.3). The estimated volume of exports from the SLA-exempt provinces has nearly doubled from 1.4 bbf in 1996 to 2.9 bbf in 1999, and their share of total Canadian exports to the US has increased from 7.9% to 15.6% during this period. Softwood lumber manufacturers in these provinces appear to be taking advantage of their “exempt” status to increase their volume of exports to the US.

The SLA-exempt provinces have increased their production of softwood lumber. As shown in Figure 5.6, softwood lumber production in these provinces increased from 1.7 bbf in 1995 to 2.8 bbf in 1999. In 1999, the production volume for each province was: 1.48 bbf in New Brunswick, 700 mmbf in Nova Scotia, 422 mmbf in Saskatchewan, and 183 mmbf in Manitoba (Wilson 2000). A comparison of the production and export volumes for these four provinces suggests that virtually all of the softwood lumber produced is exported into the US. In fact, during the period April 1999- March 2000, the statistics show that more softwood lumber was exported from these provinces into the US (2.90 bbf) than was produced (2.79 bbf). In particular, the Maritime Provinces of New Brunswick and Nova Scotia exhibited a significant production increase.

This substantial increase in production in the Maritime Provinces may be explained by the fact that many Canadian mills import logs from the US for local processing (Lynn 2000). For example, softwood log exports from the Portland (Maine) Customs District, which is located next to the Maritime Provinces, totaled 1.1 bbf in 1999, representing nearly 60% of US softwood log exports to Canada, and 27% of total US softwood log exports (US ITC 2000). Given the small population of these provinces, it is safe to assume that the imported softwood logs are most likely manufactured into lumber which is then exported back into the US.
Table 5.3  US Softwood Lumber Imports from the SLA Exempt Provinces (mmbf).

<table>
<thead>
<tr>
<th></th>
<th>Four Provinces</th>
<th>(BC)</th>
<th>Other Provinces</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apr. 1, 1996- Mar. 31, 1997</td>
<td>15,910</td>
<td>8,858</td>
<td>1,366</td>
<td>17,276</td>
</tr>
<tr>
<td>Apr. 1, 1997- Mar. 31, 1998</td>
<td>15,557</td>
<td>8,738</td>
<td>2,162</td>
<td>17,719</td>
</tr>
<tr>
<td>Apr. 1, 1998- Mar. 31, 1999</td>
<td>15,423</td>
<td>8,579</td>
<td>2,463</td>
<td>17,886</td>
</tr>
<tr>
<td>Apr. 1, 1999- Mar. 31, 2000</td>
<td>15,679</td>
<td>8,682</td>
<td>2,899</td>
<td>18,578</td>
</tr>
</tbody>
</table>

(Share)

<table>
<thead>
<tr>
<th></th>
<th>Four Provinces</th>
<th>(BC)</th>
<th>Other Provinces</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apr. 1, 1996- Mar. 31, 1997</td>
<td>92.1%</td>
<td>49.7%</td>
<td>7.9%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Apr. 1, 1997- Mar. 31, 1998</td>
<td>87.8%</td>
<td>49.3%</td>
<td>12.2%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Apr. 1, 1998- Mar. 31, 1999</td>
<td>86.2%</td>
<td>48.0%</td>
<td>13.8%</td>
<td>100.0%</td>
</tr>
<tr>
<td>Apr. 1, 1999- Mar. 31, 2000</td>
<td>84.4%</td>
<td>46.7%</td>
<td>15.6%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Note:  "Four Provinces" are BC, Alberta, Ontario, and Quebec.
Source:  Four Provinces: Department of Foreign Affairs and International Trade (2000a)
         Total: US ITC (2000) (Sum of 440710 and 440910, excluding moldings and dowel rods)
         Other Provinces: (Total) - (Four Provinces)

Figure 5.6  Canadian Softwood Lumber Production in the SLA-Exempt Provinces, 1991-1999.
US Imports from Non-Canadian Countries

Given the limitation of exports from Canada, the share of non-Canadian countries in the US softwood lumber import market has increased from 2.3% in 1995 to 4.8% in 1999 (Figure 5.7). US softwood lumber imports from non-Canadian countries have more than doubled, from 389 mmbf to 912 mmbf during the period 1995-1999 (Figure 5.8). Major exporting countries and their volume of exports in 1999 include: Brazil (286 mmbf), Chile (208 mmbf), New Zealand (133 mmbf), Austria (94 mmbf), and Mexico (57 mmbf). Only Mexico has experienced a decline in exports, mainly due to its strong domestic demand growth (US FAS 1999c), while imports from other countries have expanded substantially. In particular, imports from Austria have increased from nearly zero in 1995 to 94 mmbf in 1999.

This diversification in the composition of countries exporting to the US is most likely attributed to the strong domestic demand for softwood lumber, the limited import supply from Canada, and the strong US dollar. These conditions have allowed suppliers with relatively high production and transportation costs to become competitive and penetrate the US market. In addition, the weak demand in Asia, particularly in Japan, due to the economic recession since mid-1997, has redirected the softwood lumber exports of non-Canadian countries from Asia to the growing US market. For example, New Zealand exported 35% more lumber to the US but 72% less logs to Korea in the first quarter of 1998 compared with the same quarter in 1997 (Random Lengths 1998e).

As shown in Table 5.4, each exporting country specializes in exporting softwood lumber of a specific species into the US. For example, Brazil specializes in southern yellow pine, Chile and New Zealand in radiata pine, Austria in spruce, and Mexico in ponderosa pine.

<table>
<thead>
<tr>
<th>Country</th>
<th>Primary Species</th>
<th>Imports of Primary Species (a)</th>
<th>Total Imports (b)</th>
<th>Share (a/b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>Southern yellow pine</td>
<td>204</td>
<td>286</td>
<td>71%</td>
</tr>
<tr>
<td>Chile</td>
<td>Radiata pine</td>
<td>160</td>
<td>208</td>
<td>77%</td>
</tr>
<tr>
<td>New Zealand</td>
<td>Radiata pine</td>
<td>125</td>
<td>132</td>
<td>95%</td>
</tr>
<tr>
<td>Austria</td>
<td>Spruce</td>
<td>60</td>
<td>94</td>
<td>64%</td>
</tr>
<tr>
<td>Mexico</td>
<td>Ponderosa pine</td>
<td>41</td>
<td>60</td>
<td>68%</td>
</tr>
</tbody>
</table>


Note: Sum of 4407.10 (Coniferous Lumber)

Brazil produced 3.6 bbf of softwood lumber in 1999, 286 mmbf of which was exported (FAO2000). Brazil has about 13 million acres of plantations in the southern region, 40% of which are composed of slash pine and loblolly pine, producing nearly 15 bbf of softwood logs annually. The US is the single dominant market for Brazilian pine lumber. Brazilian pine, as a result of its rapid growth rate, is said to have similar characteristics as radiata pine. Softwood lumber production in Brazil is expected to increase as plantations begin to mature, but may begin to decrease around 2010 without further investment in plantation development (Random Lengths 1996d; USDA FAS 1998a).

New Zealand exported 502 mmbf of softwood lumber in 1999, out of the total production of 1.3 bbf (FAO 2000). New Zealand has 4.3 million acres of plantations dominated by radiata pine (90%), harvesting more than 7.2 bbf of softwood logs. New Zealand lumber is exported mainly to Australia, the US, and Japan. The softwood harvest in New Zealand is expected to increase to 13-15 bbf by 2010, and then to over 25 bbf by 2025 (USDA FAS1999a). Similarly, Chile produced 1.8 bbf of softwood lumber, with 484 mmbf exported (FAO 2000). Chile has 4.4 million acres of plantations, 76% of which are covered with radiata pine. Annually, 7.5 bbf of radiata pine logs are harvested. The US and Japan are the primary export markets for Chilean softwood lumber. Exports are expected to increase as knot-free lumber becomes increasingly available from pruned plantations (USDA FAS 1999b; Cartwright 1998: 221-222). Between the two countries with a similar resource base, Chile has an advantage over New Zealand in the US market due to lower transportation costs (Random Lengths 1998d).
Figure 5.7. US Softwood Lumber Imports from Canadian and Non-Canadian Sources, 1991-1999.

Figure 5.8. US Softwood Lumber Imports from Non-Canadian Countries, 1995-1999.
Source: USDA Foreign Agricultural Service (2000)
Austria is now the fourth largest softwood lumber exporter in the world, exporting 2.4 bbf in 1999, out of a total production of 4.1 bbf (FAO 2000). Although most of the lumber is exported to Italy, the strong dollar has been attracting Austrian softwood lumber into the US. Currently, four mills, including a manufacturer with 800 mmbf of annual lumber production capacity, are certified to grade lumber to US standards, primarily shipping boards with a West Coast Lumber Inspection Bureau grade stamp. The white color and small knots of European wood are said to be attractive to home centers and homebuilders in the US (Random Lengths 1997b; US FAS 1998b; Eastin 2000).

Finally, Mexico is now a net importer of softwood lumber because of the construction sector’s expansion during the steady economic recovery. In 1999, Mexico produced 1.3 bbf, imported 272 mmbf, and exported 135 mmbf of softwood lumber (FAO 2000). Only high quality softwood lumber is exported to the US, while imported US dimension lumber, as well as lower grade domestic lumber, is used in the construction sector. Exports of high-grade softwood lumber have been declining recently due to the strong peso, making Mexican lumber more expensive relative to US products (US FAS 1999c).

**Canadian Exports**

During the implementation of the SLA, Canada has experienced a substantial decline in exports to Japan. The volume of Canadian softwood lumber exports to Japan has dropped by as much as 40% from 2.6 bbf in 1996 to 1.7 bbf in 1998 (Figures 5.9 and 5.10). When the SLA was initiated in 1996, it was forecast that much of the excess supply in Canada caused by the SLA would be redirected to overseas markets, especially Japan (Random Lengths 1996a, 1997a). However, Japan’s economic recession, exacerbated by a consumption tax hike in April 1997, drastically reduced its demand for wood products, particularly imported products. As a result, Japan’s total softwood lumber imports decreased by as much as 39%, from 4.6 bbf in 1997 to 2.8 bbf in 1998 (FAO 2000). In addition, Canada faces severe competition from European countries, particularly Finland, Sweden, and Austria, in Japan’s lumber import market (Blandon 1999: 157-159). European countries have increased their share in Japan’s lumber import market from 7.3% in 1995 to 19.7% in 1999 (Forestry Agency 2000).

The hardest hit by Japan’s recession was coastal British Columbia. Since coastal BC has traditionally relied on the Japanese market, with relatively less reliance on the US market, its allocation of export permits to the US under the SLA was relatively small. This is because the allocation of the export permits (the established base and the lower fee base) was determined by each company’s export volume to the US in the previous year. Thus, the coastal industry, unable to redirect its excess production from Japan to the US, found itself at a severe competitive disadvantage. The BC industry is now aspiring to gain increased access to the US market as well as hoping for recovery in Asian demand (Random Lengths 1999a).

In addition, Canadian exports to the EU have decreased, primarily due to the EU’s phytosanitary restriction on green lumber from North America, which aims to prevent infestation of EU forests by the pinewood nematode (Random Lengths 1996b; Eastin and Fukuda 2000). As a result, since the import restrictions were enacted in 1993, Canadian exports to the EU have dropped by as much as 80%, from 1.1 bbf in 1992 to 200 mmbf in 1998 (Figure 5.10).

### 5.2.2 Changes in Product Quality

As the SLA restricts the export volume of standard softwood lumber (4407.10) and value-added softwood lumber (4409.10.10, 4409.10.20, and 4409.10.90), it might be expected that Canadian producers in the four major provinces would shift the product mix of their exports from lower-grade standard lumber to higher-grade standard lumber, or from dimension lumber to value-added lumber. However, such shifts are not necessarily evident from a review of the trade data.
Figure 5.9. Canadian Softwood Lumber Exports, 1991-1998.
Source: OECD (1999)

Figure 5.10. Canadian Softwood Lumber Exports to non-US Countries, 1991-1998.
Source: OECD (1999)
Upgrading of Standard Lumber

It might be expected that Canadian producers in the four major provinces would increase the grade of standard lumber exported into the US under the SLA. Indeed, this tendency is suggested by industry experts who note that Canadian producers shifted their short-length and Economy grade lumber back into their domestic market, while increasing their exports of high-grade standard lumber and value-added lumber into the US market (Random Lengths 1996b, 1998c). However, this trend is not supported by the trade data.

Although product upgrading would be expected to cause a price increase in imported lumber, the average price of imported SPF lumber (4407.10.0015) from Canada (including the SLA exempt provinces) to the US shadowed the US domestic price of SPF lumber, without exhibiting any upward trend independent of the domestic price trend (Fig 5.11). However, a lack of information about the grade mix of imported lumber in the trade data restricts further analysis of product price and quality.

![Figure 5.11. US SPF Lumber Price Indexes, 1992-1999 (1995 = 1.0).](image)

**Source:** US Domestic (SPF Eastern KD #1&2 Random): Random Lengths (1999)

Imports from Canada (General customs value / volume): US ITC (2000)

Shifts from Standard Lumber to Value-added Lumber

Similarly, since the SLA covers both standard lumber (4407.10) and value-added lumber such as siding and flooring (4409.10.10, 4409.10.20, and 4409.10.90), it is expected that exporters in the four major provinces may have shifted their product mix from standard lumber toward value-added lumber to generate higher export revenue. Although the value of value-added softwood lumber exports from the four major provinces did increase under the SLA, its share of total exports changed only marginally (Table 5.5). Again, a lack of information about the volume of value-added lumber exports from the four major provinces restricts the ability to conclusively identify these trends.

From these observations, we must preliminarily conclude that, although there may be a slight trend of upgrading the mix of softwood lumber products exported from the four major provinces in Canada to the US, such a trend is relatively small when compared with the overall trade flow of softwood lumber between the two countries. This insignificance is probably attributed to the limited size of the value-added lumber market in the US and the characteristics of softwood lumber as a commodity. Since softwood lumber is an industrial material used as a manufacturing input rather than a consumer good, the possibility of upgrading the product quality is relatively limited.
Table 5.5 US Imports of Standard and Value-added Lumber under the SLA (Million C$).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard (4407.10)</td>
<td>6,755</td>
<td>8,302</td>
<td>8,601</td>
<td>8,137</td>
<td>9,103</td>
</tr>
<tr>
<td>Value-added (4409.10)</td>
<td>200</td>
<td>195</td>
<td>254</td>
<td>245</td>
<td>270</td>
</tr>
<tr>
<td>Total</td>
<td>6,956</td>
<td>8,497</td>
<td>8,855</td>
<td>8,382</td>
<td>9,373</td>
</tr>
<tr>
<td>Value – added Share</td>
<td>2.9%</td>
<td>2.3%</td>
<td>2.9%</td>
<td>2.9%</td>
<td>2.9%</td>
</tr>
</tbody>
</table>

Note: Exported value from BC, Alberta, Ontario, and Quebec. Value-added (4409.10) includes moldings and dowel rods.
Source: Industry Canada (2000)

5.2.3 Shifts in the Degree of Processing

Since the SLA pertains only to the trade of softwood lumber, it might be expected that the composition of forest products trade between the two countries would shift from softwood lumber toward remanufactured products or softwood logs, both of which are exempt from the SLA.

Shifts to Remanufactured Products

Canadian lumber producers did shift some of their lumber sales from US customers to Canadian remanufacturers who then exported remanufactured products into the US. This shift, though small, can be explained by the fact that remanufactured products can be exported into the US without export permits (Random Length 1996a). In the SLA, “softwood lumber” is defined as 4407.10 (coniferous wood sawn or chipped lengthwise, sliced or peeled of a thickness exceeding 6mm) and 4409.10.10, 4409.10.20, and 4409.10.90 (coniferous wood continuously shaped along any of its edges or faces excluding wood moldings and wood dowel rods) under the Harmonized System. Under these definitions, remanufactured wood products classified under HS code 4418 (“builder’s joinery and carpentry of wood including cellular wood panels and assembled parquet panels; shingles and shakes”) fall outside the trade regulation under the SLA.

As shown in Figure 5.12, exports of the wooden building materials, including “windows, French-windows and their frames” (4418.10), “doors and their frames and thresholds” (4418.20), and “roof trusses” (4418.90.4020), increased substantially during the period 1996-1999. These increases probably imply the growth of the remanufacturing sector in Canada, as well as the strong demand for such products in the US caused by increasing housing starts. As a result, remanufactured wood products became more important in overall forest products trade between the two countries. The share (in value) of the remanufactured products (HS4418) imports from Canada in the total US wood products (HS44) imports from Canada has increased from 5.2% in 1995 to 10.2% in 1999 (US ITC 2000).

Shifts to Logs

Similarly, US softwood log imports from Canada have increased substantially since the implementation of the SLA. As shown in Figure 5.13, US softwood log imports have increased nearly five times from 241,000 m³ in 1995 to 1.2 million m³ in 1999. Almost all of the increase can be attributed to imports from Canada, with a 96% share in 1999. Although the total volume of softwood log imports is less than 3% of the total volume of US softwood lumber imports in 1999, this substantial increase may imply a reverse shift in the degree of processing. Through log exports, Canadian producers may be able to take advantage of higher softwood log prices in the US, while avoiding the export restrictions under the SLA. At the same time, US softwood lumber manufacturers may be substituting less expensive Canadian logs for more expensive domestic logs.
Figure 5.12. Canadian Exports of Value-added Wooden Building Materials into the US, 1996-1999.

Figure 5.13. US Imports of Softwood Logs, 1992-1999.
Note: Sum of 4403.20.0020-0063 (Coniferous logs and timber)
It is important to note that this increase in log exports is also partially attributable to the weak lumber demand in Asia, as well as the export regulation under the SLA. In several Canadian provinces, including BC, exports of raw logs from provincial forests are restricted, unless the logs can be shown to be surplus to domestic milling requirements. Due to the downturn in coastal BC’s exports to Japan since 1997, the log supply from provincial lands may now exceed processors requirements in BC, allowing more log exports to the US. In addition, given the weak demand in Asia, private forestland owners in Canada who are exempt from the log export restrictions may be taking advantage of their ability to export logs to the US. Recently, an industry expert in BC noted that one company in BC has changed its strategy and exported 400,000 m³ of logs from its private forestland into the US in 1999, compared to zero in 1998 (Promnitz 2000). In fact, Canadian exports of Douglas-fir logs, a prominent species in coastal BC, increased by 19 times from 17,000 m³ to 328,000 m³ during the period 1997-1999, equivalent to 38% of the total increase in log exports (US ITC 2000). Thus, at least part of the increase in softwood log exports from Canada to the US can be attributed to weak overseas demand for coastal BC lumber.

5.2.4 Regulation Avoidance

Due to the advantageous position of remanufactured products outside the SLA, some Canadian producers have attempted to slightly modify their products to be exempt from the SLA. One such strategy was to drill, notch, or rougher-head softwood dimension studs exported to the US in order to reclassify those studs as “joinery and carpentry” coded as 4418.90 under the Harmonized System. These modified studs were drilled or notched lengthwise to facilitate electrical wiring or they were roughly fluffed by a planer with notched knives for decorative use, although they were generally used as ordinary studs after trimming or planing the modified parts. The imported value of 4418.90.4040 (“other fabricated structural wood members”) from Canada, including drilled studs, increased nearly seven times between 1996 and 1998. Similarly, the imported value of 4418.90.4090 (“others”), including notched and rougher-headed studs, increased more than five times between 1996 and 1999 (Katsuhisa 1999) (Figure 5.14). It is important to note that the increase in import value of these products may also reflect strong demand in the US housing market. The absolute effects of the regulation avoiding activities on increases in import value are inconclusive.

The US Coalition of Fair Lumber Imports (CFLI) appealed this reclassification of studs based on minor modifications to the US Customs Office as an illegal “loophole” being used by Canadian producers to avoid the export restrictions of the SLA. The Customs Office ruled that the modified products should be reclassified as 4407.10 and be counted against the export permit volume in July 1998 (for drilled studs) and in June 1999 (for notched and rougher-headed studs). As a result of the ruling of the drilled studs case, the import value of 4418.90.4040 decreased by nearly 40% in 1999 (Figure 5.14). The final decisions for these cases, except for rougher-headed lumber, are still pending since Canada appealed against the US Customs rulings. As for the drilled studs case, Canadian lumber manufacturers, with the support of the US National Association of Home Builders (NAHB) and the US National Lumber and Building Material Dealers Association (NLBMDA), filed a suit against the US Customs Office ruling to the US Court of International Trade in July 1998. In December 1998, the Court supported the US Customs Office decision and the plaintiffs appealed to the federal appeals court in January 1999, where the appeal is still being considered (Katsuhisa 1999). As for notched and rougher-headed studs, the Canadian government invoked the dispute resolution process described under Article V of the Softwood Lumber Agreement (Random Lengths 1999d). In October 2000, Canada and the US agreed to add 72.5 mmbf to the established base to be used by March 2001, in return for Canada’s withdrawal of the arbitration proceeding on the rougher-headed studs case (Department of Foreign Affairs and International Trade 2000b). However, the final decision for the notched studs case is still pending. During the appeal and dispute resolution processes, these products count against the softwood lumber quota in the SLA.

5.2.5 Material Substitution

In the US, substitution of softwood lumber by engineered wood products and non-wood products has been under way, especially in the residential construction sector, since before the implementation of the SLA.

Eastin et al. (1996) investigated the use of substitute products in residential construction sector, finding that 85% of respondents have used at least one substitute product, mostly glulam beams and wooden I-beams as a replacement for softwood lumber. They also conducted a factor analysis of product attributes, concluding that physical characteristics (straightness, strength, availability of long lengths, and lack of defects) as well as price/supply characteristics (price, price stability, and availability) are important factors in the substitution process, while technical characteristics (energy efficiency, reduced environmental impacts, ease of use, appearance, and technical support) are less important.

Fleishman et al. (2000) followed up the study by Eastin et al. (1996), comparing survey results of 1998 with those of 1995. They concluded that residential builders have been increasing their use of substitute structural materials, such as steel and reinforced concrete as well as engineered wood products. The results indicate that softwood lumber has lost 10% of its market share in wall applications in the past three years, decreasing from 93% to 83%. The factors influencing the substitution process in 1998 were the same as in 1995.

Although it is very difficult to identify the absolute effects of the SLA on the product substitution process, the SLA may have indirectly enhanced material substitution in the US by increasing softwood lumber prices and contributing to price volatility.

5.3 Preliminary Evaluation

After exploring various aspects of the SLA, the following direct effects were identified:

- The volume of softwood lumber exports from the four major provinces in Canada into the US has been restricted below the 1995 level of 16 bbf.
- A relative price difference of softwood lumber, equivalent to approximately 15%, exists between Canada and the US.
- US softwood lumber production reversed the declining trend observed in the late 1980s and early 1990s.
- US softwood lumber consumption increased, contrary to the expectation from economic theory, due to strong economic growth in the US.
- The share of imports in US softwood lumber consumption decreased from 36.4% in 1995 to 35.2% in 1999.
All of these effects are favorable to softwood lumber producers in the US, allowing them to sell more softwood lumber at higher prices. It is important to note that this advantageous situation is supported by the strong growth of the US economy in addition to the export regulation under the SLA.

Several indirect effects, which may negate the favorable effects described above, were also identified:

- US softwood lumber imports from the SLA-exempt Canadian provinces, as well as other countries, increased substantially.
- The quality of softwood lumber exported from the four major provinces in Canada to the US may have increased, although such a trend was insignificant in the trade data.
- US imports of value-added products and softwood logs from Canada increased.
- Some Canadian producers slightly modified the lumber products in an effort to evade the export permit requirement.
- Product substitution might be encouraged through increased price and price volatility in the US, although the absolute effects are inconclusive.

Again, it is important to note that the increase in softwood lumber imports from non-Canadian countries and the increase in log imports from Canada can be partially attributed to weak demand in Asia as well as the export regulation under the SLA.

Compared with the overall trade flow, these indirect effects are very small. For example, while US softwood lumber imports from other countries increased by as much as 134% during the period 1995-1999, their share in total US imports was only 4.8% in 1999. Similarly, while US softwood log imports increased nearly five times during this period, the total volume of softwood log imports was less than 3% of the volume of softwood lumber imports in 1999. This weakness of the indirect effects is most likely attributed to the comprehensive coverage of the SLA covering more than 80% of US softwood lumber imports, as well as the existence of log export regulations in Canada. In addition, the indirect effects have only been observed during the past four years. In the long-term, structural changes in trade and industry and product substitution may develop enough to undermine, or even overcome, the desirable direct effects.

Overall, the initial objective of the SLA, “to ensure that there is no material injury or threat thereof to an industry in the United States from imports of softwood lumber from Canada,” seems to have been accomplished under the condition of strong economic growth in the US.
6 FUTURE PROSPECTS

Following five years of mixed results, the Softwood Lumber Agreement is set to expire on March 31, 2001. In this chapter, the future prospects of the SLA are discussed from two perspectives: political situation and resource availability. First, the most likely situation after the expiration will be discussed from the political perspective. Then, the policy implications are proposed from the market perspective, especially from a perspective of resource availability in the US.

6.1 POLITICAL PROSPECTS

While it is unclear what will happen at the time of the expiration of the SLA, there are already some movements towards the next step. In this section, the most important changes since the implementation of the SLA are explained first. Then, the current political situation is described, followed by a discussion of possible scenarios following the expiration of the SLA.

6.1.1 BC Stumpage Price Reduction

Since the Canadian stumpage pricing system has been the core issue of the softwood lumber dispute between the US and Canada for more than fifteen years, it is clear that any resolution of the dispute is impossible without some fundamental reform of the stumpage pricing system. However, the provincial government of British Columbia, one of the most important players in the dispute, has moved in exactly the opposite direction. In June 1998, the British Columbia provincial government reduced stumpage prices on the provincial Crown forestlands. The United States subsequently complained that this reduction breached the SLA which prohibits actions having the effect of reducing the export fees.

In BC, where 95% of land is owned by the province, timber companies pay stumpage fees for harvesting publicly owned timber from the provincial forests. Currently, stumpage fees are established at a level so as to meet the annual target revenue level based on the Comparative Value Timber Pricing System. Because of the fiscal relationship between stumpage prices and government revenue, stumpage prices have had a tendency to increase in recent years.

However, in 1997-1998, the BC forest industry experienced economic difficulties due to high logging costs, relatively high stumpage fees, weak demand in Asia, and the export limitations imposed under the SLA. In an effort to help the industry recover, the BC government and forest industry worked together to improve the efficiency of forest management practices and reduce stumpage prices (Wilson et al. 1999).

In May 1998, the BC government announced its intention to reduce stumpage prices the following month. The proposed reduction rate was about 25% for coastal BC and 12% for interior BC (Random Lengths 1998b). As soon as the fees were reduced, the US, in response to a complaint filed by the Coalition of Fair Lumber Imports (CFLI), requested consultation with Canada. In July 1998, the US requested arbitration under the provisions of the SLA, insisting that the stumpage reduction violated the provision of Article VII of the SLA, which prohibits “action to circumvent or offset the commitments set out in this agreement, including action having the effect of reducing or offsetting the export fees.” Canada responded by stating that the SLA had nothing to do with forest management practices in BC. Although an arbitration panel was formed, the two countries reached a compromise agreement in August 1999, just before the expected date of the panel decision (Department of Foreign Affairs and International Trade 1999).

In an Exchanges of Letters, the two countries agreed upon a reallocation of the export quota and a fee increase in BC’s softwood lumber export allotment. The specific provisions of the agreement were:

- No change in the established base volume.
- Reduce BC’s lower fee base from 360 million bf to 270 million bf.
- Set BC’s upper fee base at 110 million bf.
- Establish an unlimited export volume at the extra fee level of US$146.25/mbf.
In addition, the Exchanges of Letters specifically stated that the SLA does not limit forestry management practices in BC. This modified scheme has been effective during the fourth and fifth year of the SLA (Department of Foreign Affairs and International Trade 1999).

6.1.2 Bilateral Political Situation

In September 1999, the US Special Trade Ambassador Peter Sher sent a letter to Canada’s Minister of International Trade, arguing that both countries should get out of trade regulation since the US lumber industry and consumers are becoming increasingly dissatisfied with the SLA. However, he emphasized that this does not mean that the US would accept “free trade” of softwood lumber. He went on to suggest that Canada should address the issue of subsidized stumpage prices, noting that, “if the pivotal issue of provincial forestry practices remain effectively unaddressed, we anticipate that the United States will not be inclined, nor well-positioned, to resist US lumber industry’s urging to return to addressing Canada’s unfair practices through whatever means deemed appropriate at the time” (Random Lengths 1999c). The Canadian government, in their response to this letter, also expressed its desire to let the SLA expire, although it disagreed with the US request to change stumpage pricing policies in Canada (Gonzalez 1999).

The attitude toward the SLA and its renewal is divided in the US. The CFLI, the US lumber producers lobbying group, insists that it will seek some type of action to ensure that the Canadian industry does not gain an advantage of alleged subsidies if Canada fails to address the stumpage price issue appropriately (Random Lengths 2000a). On the other hand, the American Consumers for Affordable Homes (ACAH), which represents 95% of the purchasers and users of softwood lumber in the US, consisting of the National Association of Home Builders (NAHB), the National Lumber and Building Material Dealers Association (NLBMDA), Home Depot, and other organizations, oppose the renewal of the SLA, insisting on free trade without any regulations (ACAH 2000).

In Canada, while the softwood lumber producers group, the Free Trade Lumber Council (FTLC), insists on unregulated trade with the US in cooperation with the ACAH (Random Lengths 2000a), some BC producers are calling for changes in the provincial stumpage pricing system. In 1998, MacMillan-Bloedel proposed transforming the stumpage pricing system to a competitive bid, market-based system to eliminate the disagreement between the two countries. Because of weak overseas demand, particularly in Japan, BC producers are anxious to increase their access to the US market. While some producers in coastal BC, certain ministries in the provincial government, and environmental groups support this proposal, the interior BC industry is hesitant to support major changes in the stumpage pricing system (Random Lengths 1999a).

In addition to government and industry, several environmental groups are getting involved in the dispute case. Ironically, their criticism of the loose management regulations and subsidized logging costs in Canada has positioned these environmental groups close to the US lumber industry (Random Lengths 2000b).

6.1.3 Possible Scenarios

Reflecting these political conditions, there are a number of possible scenarios that can be envisioned in the months leading up to the expiration of the SLA on March 31, 2001. The possible scenarios include:

1. The extension of the current agreement,
2. The imposition of a countervailing duty by the US,
3. “Fair trade” with major changes in the stumpage pricing system employed in Canada, or
4. “Free trade” and the elimination of the SLA.

First, the extension of the SLA is the simplest solution for both countries, since it postpones the final resolution into the future. Article X of the SLA specifies that the SLA can be extended on the written agreement of both countries. However, as explained above, the executive officials in both countries have already expressed their desire to remove the trade regulation. In the US, softwood lumber consumers strongly oppose the extension of the SLA, while producers are less active. The ACAH have complained about the negative effects of the SLA on softwood lumber consumers, claiming that the SLA has increased the cost of a new house by between $800 and $1,300, preventing almost 300,000 families from being able to afford a new home (ACAH 2000; Lindsey 2000). On the other hand, the CFLI’s attitude toward the extension of the SLA is unclear. They will surely oppose
allowing the SLA to expire without any replacement policy since they are still dissatisfied with the stumpage pricing system in Canada, but they may or may not oppose its extension.

In Canada, the forestry industry would likely oppose the extension of the SLA. Producers in coastal BC are having a hard time due to weak demand in Asia and the limited export opportunities to the US market. They would welcome the removal of the export permit system because they could redirect excess production to the strong US market. In addition, the FTLC is calling for unregulated softwood lumber trade with the US, including the elimination of the SLA. Furthermore, competitive producers in the east may be frustrated with their limited export permit allocation, given their expanding production capacity.

In spite of these factors, the governments in both countries may seek to extend the SLA temporarily in order to secure time for negotiations. This is especially true since both countries have just finished major elections: presidential elections in the US in early November 2000 and federal elections in Canada in late November. Overall, the extension of the SLA is possible for a short period of time.

Second, the imposition of a countervailing duty by the US is highly possible. Currently, any retaliatory action is suspended by the SLA, although following the expiration of the SLA the US government and producers will be able to consider this option. The special ambassador, in his letter, indicated that the US would consider an “appropriate” measure to deal with unfair practices by Canada and the CFLI insists that it will seek some type of countervailing action if Canada fails to address the stumpage price issue appropriately. It is important to note that after the third countervail, the criteria for the countervailing actions were loosened by the “Statement on Administrative Action.” Thus this alternative would be more accessible, and attractive, to the US softwood lumber industry than before. Although a countervailing duty would continue to place Canadian producers at a disadvantage, at least some producers in coastal BC, as well as competitive producers in the east with expanded production capacity, would prefer it to the quantitative restrictions imposed under the SLA since they could export an unlimited volume of softwood lumber into the US. Thus, the imposition of a countervailing duty might be, at least temporarily, satisfactory to both the US and some Canadian producers.

Third, there have been some movements to change the stumpage pricing system to a competitive bidding system in Canada, as explained in the previous section. Since the Canadian stumpage pricing system is the biggest problem in the bilateral dispute, identifying a mutually agreeable solution would provide a final resolution to the dispute. The CFLI in the US, some producers and governmental sectors in Canada, and environmental groups in both countries support this alternative. However, Cashore (1997: 32-33) points out three problems with this alternative: vested interest, industry’s hesitance, and countervailability in other programs. First, under the current system, forest workers enjoy high wages and employment levels, and the government exercises control over companies and regions. If a competitive bidding system were introduced, profit margins for companies would shrink due to higher stumpage prices, resulting in smaller returns to forest workers. At the same time, the government would lose its bureaucratic discretion. Second, companies are hesitant to adopt a major stumpage policy change due to uncertainty of the structure of the new system and its impact on their investment in the current tenure lands. Third, Canadian industry and government fear that, even if Canada were to change the stumpage pricing system, US producers may find fault with other programs, resulting in new countervailing cases. Thus, a major change in the stumpage pricing system is unlikely, at least in the short-term.

Finally, the elimination of the SLA is theoretically possible. To achieve this, the US ACAH and the Canadian FTLC are leading an initiative for “free trade” of softwood lumber. In the US, a bill to ensure free trade regarding softwood lumber between the US and Canada, as well as the termination of the SLA, was introduced in the House of Representative in February 2000, receiving the support of more than 100 members of the House (ACAH 2000). However, considering the long history of this dispute, it is unlikely that the CFLI would allow the agreement to expire without significant changes in Canadian stumpage policies.

Although there are many uncertainties regarding this issue, it seems most likely that a countervailing duty petition will be filed by the CFLI in the US following the SLA expiration. There may be an extension of the SLA in order to secure the time for negotiations. At least some Canadian softwood lumber producers would prefer the imposition of a countervailing duty because there would be no quantitative limitation on softwood lumber exports into the US. Thus, the imposition of a countervailing duty would seem to be the most likely temporary resolution to the expiration of the SLA, until Canada moves to change its stumpage pricing policy.
6.2 MARKET PROSPECTS

For the US, the SLA is a regulatory tool designed to restrict the volume of softwood lumber imports from Canada. Since imports are defined as the difference between domestic demand and domestic supply (less exports), the desirability/undesirability of the SLA depends on the future prospects of market conditions in the US. In this section, the outlook for the US softwood lumber consumption and production will be discussed (based upon the official estimate of timber resource availability), followed by its implications on the trade policy for Canadian softwood lumber imports.

6.2.1 The 1993 RPA Timber Assessment Update

In accordance with the Forest and Rangeland Renewable Resources Planning Act (RPA) of 1974, the US government prepares a long-term assessment of timber supply and demand each decade. The latest assessment, the 1993 RPA Timber Assessment Update (Haynes et al. 1995), was conducted as an update of the 1989 RPA Timber Assessment (Haynes 1990). This update reflects the situation following the federal timber supply reductions in the PNW region in the late 1980s and gives the future prospects of the timber resource until 2040. It provides the base case projection, “an outlook in which the major economic determinants of timber demand and forest products supply evolve according to a specific set of assumptions” (Haynes et al. 1995: 1), and several alternative projections. Although the report emphasizes that “the base case should not be interpreted as a ‘best guess’ or ‘most probable’ forecast,” it can be used as a bottom line for the discussion on the future prospects of the softwood lumber market.

According to the 1993 RPA, domestic consumption of softwood lumber is expected to increase gradually throughout the projection period, under the assumptions that GNP growth continues at around 2.5%, and housing starts increase to 1.8 million units by 2020 followed by a gradual decline. Softwood lumber consumption is projected to be 46.9 bbf in 2000, increasing to 60.0 bbf by 2040 (Table 6.1).

The domestic production of softwood lumber is expected to remain stable from 1990 until 2010, before increasing gradually. In the US West, softwood lumber production is expected to decline to 14.6 bbf in 2000, and remain constant until 2020 before increasing due to growing inventories and harvests from maturing industrial plantations. In contrast, softwood lumber production in the South is expected to increase continuously until 2030 followed by a decline due to the age class gap on private forests. Total US softwood lumber production is expected to increase from 36.5 bbf in 2000 to 48.1 bbf in 2040 (Table 6.1).

Table 6.1 Base Case Projection of US Softwood Lumber Consumption, Production, Imports, and Exports in the 1993 RPA (bbf).

<table>
<thead>
<tr>
<th>Year</th>
<th>Consumption (Total)</th>
<th>(West)</th>
<th>(South)</th>
<th>Imports</th>
<th>Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>45.9</td>
<td>36.6</td>
<td>22.4</td>
<td>12.2</td>
<td>3.0</td>
</tr>
<tr>
<td>1999</td>
<td>54.5</td>
<td>36.8</td>
<td>17.9</td>
<td>19.2</td>
<td>1.4</td>
</tr>
<tr>
<td>2000</td>
<td>46.9</td>
<td>36.5</td>
<td>14.6</td>
<td>13.4</td>
<td>3.0</td>
</tr>
<tr>
<td>2010</td>
<td>50.5</td>
<td>38.5</td>
<td>14.4</td>
<td>15.0</td>
<td>3.0</td>
</tr>
<tr>
<td>2020</td>
<td>56.0</td>
<td>42.3</td>
<td>15.9</td>
<td>16.7</td>
<td>3.1</td>
</tr>
<tr>
<td>2030</td>
<td>58.6</td>
<td>46.1</td>
<td>17.5</td>
<td>15.5</td>
<td>3.1</td>
</tr>
<tr>
<td>2040</td>
<td>60.0</td>
<td>48.1</td>
<td>19.9</td>
<td>14.9</td>
<td>3.1</td>
</tr>
</tbody>
</table>

Due to the continuous growth of consumption and relatively lagged increase of production, imports of softwood lumber are expected to increase until 2020 followed by a decline. (In the analysis, all the trade activities except for Canadian imports were determined based upon historical trends.) The expected volume of softwood lumber imports is 13.4 bbf in 2000, 16.7 bbf in 2020, and 14.9 bbf in 2040 (Table 6.1).

6.2.2 Market Prospects

As shown in Table 6.1, the actual volumes in 1999 show a substantial difference from those of the projection for 2000. While total production volumes are similar, the volume of consumption and imports are much higher than the projections for 2000. In addition, the regional production breakdown differs substantially from the projections.

**Domestic Consumption**

The actual volume of softwood lumber consumed was 54.5 bbf in 1999, much higher than the projection of 46.9 bbf in 2000. This strong demand growth can be attributed to a higher-than-anticipated rate of economic growth. Since 1991, the US economy has continued expanding at an average annual growth rate of 3.6%, going as high as 4.6% in 1998. In comparison, the RPA assumption of the annual growth was just 2.5%. As a result, the number of housing starts reached 1.67 million units in 1999, substantially higher than the assumption of 1.38 million units, resulting in a stronger demand for softwood lumber. However, it is uncertain if this strong economic growth will continue in the near future.

The Economic Report on the President (United States 2000) forecasts that the real GDP growth will begin to decelerate to a low of 2.5% in 2002. It also mentions that “the pace of residential investment is likely to fall back to a rate in line with the demographics of household growth.” Similarly, the Joint Center for Housing Studies (2000) notes that “Although household growth may slow slightly over the coming decade, home building will likely rival the 1990s in terms of number of units built and value of construction.” Thus, softwood lumber consumption should begin to stabilize in the short-term.

**Domestic Production**

Although total softwood lumber production in 1999 compares favorably to the projection for 2000, the regional breakdown of actual production is substantially different from that of the projections. While the West is more actively producing softwood lumber than projected, growth in the South is lower than projected. The higher-than-expected production in the West was probably encouraged by the strong domestic demand and the limited imports from Canada under the SLA, while the lower-than-expected production in the South would suggest other restricting factors. It may be possible for the West to maintain their level of production and for the South to increase its expansion, but there are some constraints in both regions.

In the West, new environmental regulations have been, or are going to be, introduced. In Washington State, the new state Forest Practice Rules under the Forest and Fish Agreement signed in April 1999 to protect endangered salmon species, took effect in March 2000. The objective of this new legislation is to establish a statewide forestry program that is in compliance with the Endangered Species Act and the Clean Water Act, by expanding buffer zones (riparian management zones) along streams. The impact of these rules will be to withdraw approximately 15% of the timberland in the state from production (Mapes 1999). In addition, President Clinton announced a moratorium on road construction in more than 40 million acres of federal forestland in October 1999. The detailed plan was proposed by the Forest Service in May 2000 and is now under consideration. According to the USDA Forest Service (2000), the proposed plan will reduce the timber harvest in national forest by 800 mmbf, or approximately 2% of the planned timber sales (16.5 bbf) during Fiscal Years 2000 to 2004. Since most of the national forest is located in the US West, this initiative would further undermine softwood lumber production in the West.

In the South, where two-thirds of forestlands are owned by non-industrial private owners, changing attitudes toward harvesting could discourage forestry activities. Mater (2000) indicates that private owners are becoming hesitant to harvest because forest owners, increasingly shifting to retired white-collar workers, tend to regard their lands as “a heritage for future generations, havens for their families, homes for wildlife, and a place for recreation and spiritual renewal.” She also mentions the influence of the environmental culture, introduction of
environmental regulations, and the volatility of the forest industry as reasons for endangering NIPFs as timber sources, although her analysis is far from rigorous. Cubbage et al. (1995) analyzed the timber inventory, growth and removal data in the US South, concluding that it will be difficult to continue producing high volumes of timber in the South, a reflection of factors such as environmental protection, urbanization, fragmentation, and landowner preferences as well as excessive removals of softwood timber. Perez-Garcia and Abt (1997) examined two harvest projection models for the South in the context of global trade, and concluded that the available inventory in the South will decline unless management intensity increases.

Considering these constraining factors, it appears that it will be difficult for the West to maintain the current level of production and for the South to increase production substantially, as projected in the 1993 RPA. Thus, it appears that total US softwood lumber production will, at best, increase only slightly in the short-term.

**Imports from Canada**

In Canada, there have been the same concerns about the sustainability and broader environmental impacts of forest management on public forestlands as in the US, which could constraint softwood lumber production in Canada (Haynes et al. 1995: 46-47). In fact, the Canadian Forest Service (2000) claims that the Canadian forest industry will have to adapt to a smaller area of “socially acceptable” commercial forest due to environmental concerns represented by an increase of protected area, green consumerism, and aboriginal land claims, although it does not mention specific estimates. In particular, the volume of the annual allowable cut (AAC) in BC is expected to decline from the current 30.2 bbf to 25.4 bbf by 2050 (Blandon 1999 :117). Thus, Canada may not be able to continue to bridge the gap between the domestic consumption and the domestic production of softwood lumber in the US. In this case, softwood lumber prices could increase substantially, encouraging imports from other countries and further material substitution in the US.

6.2.3 **Policy Implications**

The prospects of US softwood lumber consumption and production implies that the significant gap between consumption and production will continue to exist in the near future and the US will continue to rely on softwood lumber imports to satisfy domestic demand. Trade policies intended to limit softwood lumber imports from Canada may be temporarily beneficial for domestic producers through higher prices and increased production, but they could become harmful to producers in the long-term because higher prices and uncertain supplies of softwood lumber would encourage a shift to substitute materials. In addition, the limited availability of Canadian softwood lumber could induce producers in other countries to increase exports to the US, causing structural changes in trade and industry.

Considering these consumption/production factors in the US and the uncertain availability of Canadian softwood lumber, it is important for the US to build a cooperative relationship with Canada in order to provide a secure softwood lumber supply. The US should also invest in domestic resource building and R&D activities for an improved softwood lumber supply, rather than spending large amount of time, money, and energy on trade distorting barriers.


Western Wood Products Association. 2000. Personal contact.

Wilson, Bill. 2000. Personal contact.


Appendix
APPENDIX

SOFTWARE LUMBER AGREEMENT BETWEEN THE GOVERNMENT OF CANADA AND THE GOVERNMENT OF THE UNITED STATES OF AMERICA

The Government of Canada and the Government of the United States of America (hereinafter referred to as the Parties):

HAVE AGREED AS FOLLOWS:

ARTICLE I

ACTIONS BY THE UNITED STATES

1. This agreement is intended to ensure that there is no material injury or threat thereof to an industry in the United States from imports of softwood lumber from Canada. Domestic producers accounting for more than 60 percent of the total U.S. production of softwood lumber, within the meaning of 19 U.S.C. 1671a(c)(4)(D) and 1673a(c)(4)(D), have submitted the letters attached at Annex I and the Department of Commerce will rely on the representations contained in those letters. Title VII of the Tariff Act of 1930 sets out possible independent additional grounds on which the Department may dismiss a petition if the Department finds such grounds exists.

2. The United States shall not self-initiate an investigation under Title VII of the Tariff Act of 1930, as amended, or any successor law, with respect to imports of softwood lumber from Canada. If a petition is filed under Title VII of the Tariff Act of 1930, as amended, or any successor law, with respect to imports of softwood lumber from Canada, the Department of Commerce shall dismiss the petition.

3. The United States shall not take action under section 201-204 of the Trade Act of 1974, as amended, or any successor law, with respect to imports of softwood lumber from Canada.

4. The United States shall not take action under section 204 of the Agricultural Act of 1956, as amended, or any successor law, with respect to imports of softwood lumber from Canada, except required for the collection of permit numbers under Article IV(1)(1).

5. The United States shall not initiate an investigation or take action under sections 301-305 of theTrade Act of 1974, as amended, or any successor law, with respect to imports of softwood lumber from Canada.

ARTICLE II

CANADIAN EXPORT PERMIT

1. Canada shall place softwood lumber on the Export Control List under the Export and Import Permits Act, as amended, and require a federal export permit for each exportation to the United States of softwood lumber firs manufactured in the province of Ontario, Quebec, British Columbia or Alberta and shall require any person to which such a permit is issued to keep records relating to its issuance for 60 months after the data of issuance of the permit.

2. Canada shall collect a fee on issuance of a permit for export to the Unites States of softwood lumber first manufactured in the province of Ontario, Quebec, British Columbia or Alberta for quantities above the established base in a given year. The fee shall be determined in accordance with the following schedule:
Exports (Yearly)  

<table>
<thead>
<tr>
<th>Description</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) 14.7 billion board feet (the established base) or less</td>
<td>Free</td>
</tr>
<tr>
<td>(b) More than 14.7 and less than or equal to 15.35 billion board feet (the lower fee base)</td>
<td>US$50 per thousand board feet</td>
</tr>
<tr>
<td>(c) Amounts in excess of 15.35 billion board feet (the upper fee base)</td>
<td>US$100 per thousand board feet</td>
</tr>
</tbody>
</table>

3. The fees described in paragraph 2 shall be adjusted for inflation on April 1 each year, beginning in 1997, based on the annual percentage change in the simple average of the annual value in:

   (a) the Consumer Price Index, All Urban Consumers, All items less food and energy, published by the U.S. Department of Labor, Bureau of Labor Statistics; and

   (b) the Consumer Price Index for Canada, All-Items, published by Statistics Canada, catalogue no. 62-010-XPB,

over the previous calendar year.

4. Prior to the beginning of each year, Canada shall allocate the established base and the lower fee base for that year among Canadian softwood lumber exporters, except that Canada shall make every effort to make the allocation for the first year of this Agreement by July 1, 1996, but in no event later than September 30, 1996.

5. Subject to paragraph 9, until Canada makes the first allocation referred to in paragraph 4, Canada shall collect the fee under subparagraph 2(b) during a calendar quarter from each exporter who exports softwood lumber first manufactured in the province of Ontario, Quebec, British Columbia or Alberta to the United States following the date on which exports from Canada in that quarter equal or exceed 28.75 percent of the established base (excluding any additional quantities of exports allowed under Article III-Trigger price). For quantities in excess of 650,000,000 board feet that are subject to a fee under this paragraph, Canada shall collect the fee set out in subparagraph 2(c), in lieu of the fee set out in subparagraph 2(b).

6. Subject to paragraph 9, upon allocation by Canada of the established base and the lower fee base among Canadian softwood lumber exporters, Canada shall collect the applicable fee under subparagraph 2(b) or (c), as determined in accordance with paragraph 7, during a calendar quarter from each exporter of softwood lumber first manufactured in the province of Ontario, Quebec, British Columbia or Alberta whose exports to the United States in that quarter exceed 28.75 percent of its yearly allocation of the established base (excluding any additional quantities of exports allowed under Article III-Trigger Price). The fee shall apply with respect to the quantity of the exporter’s exports of softwood lumber to the United States during the calendar quarter that exceeds 28.75 percent of the exporter’s yearly allocation of the established base (fee quantity).

7. The exports on which a fee is payable under paragraph 6 shall be deemed to be exports within the lower fee base set out in subparagraph 2(b), except that if the sum of:

   (a) the exporter’s fee quantity for the then calendar quarter, and

   (b) the exporter’s fee quantities in previous calendar quarters of the same year

exceeds the exporter’s lower fee base allocation, such exports, to the extent of the excess, shall be deemed to be exports within the upper fee base set out in subparagraph 2(c).

8. Canada may remit, following collection:

   (a) at the end of a calendar quarter, fees collected under paragraph 6, to the extent that such fees were collected on exports of softwood lumber to the United States not in excess of 28.75 percent of the established base;

   (b) at the end of the year, one-half the amount of the fees collected under paragraph 2, if exports of
softwood lumber to the United States did not exceed 28.75 percent of the established base in any calendar quarter of that year, to the extent that such fees were collected on exports not in excess of the established base;

at the end of the year, one-third the amount of the fees collected under paragraph 2, if exports of softwood lumber to the United States exceeded 28.75 percent of the established base in any calendar quarter of that year, to the extent that such fees were collected on exports not in excess of the established base.

The quantity of exports for which fees have been remitted under subparagraph (a) shall be counted against an exporter’s allocation of the established base, up to the point that the exporter has used up its allocation of the established base, in which case all further quantities shall be counted against the exporter’s lower fee base allocation.

9. Canada shall not be required to collect a fee under paragraph 5 or 6 at any time from an exporter:
   (a) whose production of softwood lumber was less than 10 million board feet in the previous calendar year, or
   (b) whose production of softwood lumber during the preceding calendar quarter was substantially disrupted (i.e., reduced by at least 25 percent by comparison to the same quarter of the previous year) due to a worker strike, or a mill fire or other force majeure, provided that Canada provides notice and documentation to the United States within 60 days following the event.

10. The fee collected under this article shall be calculated based on the prevailing conversion rate of the Bank of Canada as published in the Bank of Canada Daily Memorandum of Exchange Rates.

11. Nothing in this Agreement shall prevent the transferability of allocations referred to in paragraph 4 between exporters of softwood lumber first manufactured in the province of Ontario, Quebec, British Columbia or Alberta.

ARTICLE III

TRIGGER PRICE

1. For each calendar quarter that the average price per thousand board feet as published in Random Lengths for Spruce-Pine-Fir, Eastern, Kiln Dried, 2x4 random length, Standard & Better, Great Lakes delivered, equals or exceeds:

   (a) US$405, in any calendar quarter during the period April 1, 1996 through March 31, 1998, or
   (b) US$410, in any subsequent calendar quarter,

Canada may export to the United States, without a fee, 92 million additional board feet of softwood lumber first manufactured in the province of Ontario, Quebec, British Columbia or Alberta. The average U.S. price during a quarter shall be the simple average of the weekly price, as published in Random Lengths, for the weeks that end within the three months that comprise the quarter.

2. The 92 million board feet that results from the application of paragraph 1 to a particular quarter may be exported during the four quarters following that quarter.
ARTICLE IV
INFORMATION COLLECTION AND COOPERATION

Collection of Information

1. Canada shall require exporters to the United States of softwood lumber first manufactured in the province of Ontario, Quebec, British Columbia or Alberta, in connection with issuance of a permit under the Export and Import Permits Act, as amended, or any successor law, and the United States shall require importers of such softwood lumber in connection with the customs entry of the softwood lumber into the United States under section 484 of the Tariff Act of 1930, or any successor law, to furnish to it the:

   (a) name of manufacturer/mill;
   (b) name of exporter;
   (c) province of first manufacture;
   (d) 10 digit U.S. H.S. Commodity Code and product description;
   (e) quantity in board feet, cubic metres or square metres;
   (f) value (US$);
   (g) U.S. port of entry;
   (h) U.S. Customs entry number;
   (i) U.S. entry date;
   (j) name of importer (Canada to begin collection after July 1, 1996);
   (k) mode of transportation (Canada to begin collection after July 1, 1996);
   (l) export permit number (United States to begin collection as soon as practicable after the entry into force of this Agreement); and
   (m) indication of whether the importation for which the permit has been issued pertains to quantities described in subparagraph (a), (b) or (c) of Article II(2), or Article III (United States only- collection to begin as soon as practicable after the entry into force of this Agreement)

of the softwood lumber subject to the exportation or importation.

Cooperation

2. Unless the Parties otherwise agree, representatives of the Parties shall exchange, on a monthly basis, aggregated data collected pursuant to paragraph 1, for the purpose of reconciling quarterly their data covering the preceding calendar quarter and the year to date.

3. Canada shall provide to the United States, on a monthly basis data on the total fee collected and remitted pursuant to Article II covering the preceding calendar month and the year to date, broken down by lower fee base and upper fee base.

4. If the Parties cannot reconcile their aggregated data, they shall exchange information regarding exports by specific exporters, importers or manufacturers, and if necessary, regarding specific exports and imports in order to achieve reconciliation.
5. The Parties shall cooperate for purpose of detection and prevention of false designations of province of first manufacture and quantities exported. Where the U.S. Customs Service has reason to believe that an exporter has failed to obtain a permit as required or has made a false designation of province of first manufacture or quantities exported, it may request the Export and Import Control Bureau of the Department of Foreign Affair and International Trade (Bureau) to visit the premises of the exporter to review the records referred to in Article II (1) and the premises of the manufacturer of goods at issue, in order to ensure compliance with the Export and Import Permits Act, as amended, or any successor law. The Bureau will conduct the visit following consultations between the Parties to define the nature of the problem and to agree on the information required. Canada shall share information relating to any such visit with the U.S. Customs Service.

6. Nothing in this Agreement shall be construed to prevent a Party from imposing criminal, civil or administrative penalties for violations of its laws and regulations relating to the implementation of this article.

7. The aggregated data collected under subparagraph 1(c) through (g), and the aggregated data pertaining to fees collected and remitted pursuant to Article II, need not be treated as confidential under Article VI.

ARTICLE V
DISPUTE RESOLUTION

Consultations

1. Either Party may request in writing consultations with the other Party regarding any matter referred to in subparagraph 16(a) or (b) or that the Party considers may constitute a breach of this Agreement. Consultations shall commence within 20 days of the date following delivery of the request.

2. The Parties shall make every attempt to arrive at a mutually satisfactory resolution of the matter through consultations. To this end, the Parties shall:

   (a) provide sufficient information to enable a full examination of the issue;

   (b) treat any confidential information exchanged in the course of consultations in accordance with the provisions of Article VI,

and may mutually agree to have the matter resolved through the assistance of an appropriate neutral third party.

Referral to Arbitration

3. If, within 35 days following the delivery of a request for consultations, the Parties fail to resolve a matter that the requesting Party considers to constitute a breach of this Agreement, other than the taking of an action by the United States inconsistent with Article I, the requesting Party may initiate arbitral proceedings by delivering written notice of arbitration to the other Party. The notice shall specify the nature of the alleged breach. Arbitral proceedings may not be initiated or proceed with respect to any matter that has been referred to an auditor under paragraph 16, except where such matter has been referred to an arbitral panel under paragraph 17.

Appointment of Arbitral Panel

4. Arbitral panels shall be composed of three panelists who may be selected from any of the following:

   (a) the WTO indicative list of governmental and non-governmental panelists;

   (b) the roster established under Article 1124(4) of the NAFTA; and

   (c) the roster established under Article 2009(1) of the NAFTA.
5. The Parties shall endeavour to agree on the panel chair within 15 days following the date of the delivery of the notice of arbitration. If the Parties fail to agree on the selection of a chair by that date, the Parties shall decide by lot which of them shall select the chair. That Party shall select the chair within five days thereafter from among those roster members who are not citizens of that Party.

6. Within 10 days after the panel chair is selected, each Party shall select a panelist from among those roster members who are citizens of the other Party. If a Party fails to select a panelist within the time periods specified, the panelist shall be selected by lot from among the roster members who are citizen of the other Party.

7. Panelist shall be independent of, and not be affiliated with or take instructions from, a Party, including a state or provincial government. Panelists shall be selected strictly on the basis of objectivity, reliability, sound judgment and to the extent possible, expertise appropriate to the substance of the matter in dispute. Panelists shall comply with the Code of Conduct for Dispute Settlement Procedures under Chapter 19 and 20 of the North America Free Trade Agreement (“Code of Conduct”), and in particular shall be free of any conflict of interest or appearance of such a conflict.

8. If a Party believes that a panelist is in violation of the Code of Conduct, the Parties shall consult and, if they agree, the panelist shall be removed and a new panelist shall be selected in accordance with this article. If a member of the arbitral panel withdraws from the panel prior to completing his or her duties, a replacement panelist shall be appointed in the same manner as the panelist who has withdrawn from the panel.

9. The remuneration of panelists, their travel and lodging and all general expenses of the panel shall be borne equally by the Parties. Parties shall be remunerated and their expenses paid in accordance with the rates established by the NAFTA Commission for panelists appointed to dispute settlement panels under the NAFTA. Each panelist shall keep a record and render a final account of his or her time and expenses, and the panel shall keep a record and render a final account of all general expenses.

Submissions

10. Within 15 days following the appointment of the third panelist, the complaining Party shall deliver to the panel and to the responding party a written submission outlining its position and all documents relied on in support of its claim, which may include information supplied to the Party by industry representatives.

11. Within 20 days following the receipt of the submission, the responding Party shall deliver to the panel and to the complaining Party a written counter-submission outlining its position and all documents relied on, which may include information supplied to the Party by industry representatives.

12. The arbitral panel shall conduct the arbitration in the manner it considers appropriate, including establishing procedures to ensure the protection of confidential information and relating to matters such as the participation of experts and whether oral hearings should be held.

Decision

13. No later than 30 days after it receives the counter-submission, the arbitral panel shall issue a written decision, together with its findings and reasons thereof, with regard to whether the matter complained of constitutes a breach of this Agreement. The decision shall contain no recommendation or instruction to the Parties. A decision of the arbitral panel shall be by majority vote and based on the votes of all members of the panel.

14. Whether the arbitral panel finds that the responding Party has breached this Agreement, the arbitral panel shall provide in its decision a reasonable period of time for that Party to cure its breach. The period established shall be the shortest reasonable time period feasible. If the Parties have not agreed by the expiry of that period that the breach has been cured, the complaining Party may request the panel to decide whether the breach has been cured by delivering the request in writing to the panel chair and , concurrently, to the responding Party. The panel shall issue its decision within 15 days after the request is delivered. Paragraph 12 shall apply to proceedings initiated under this paragraph.
Referral to Auditor

15. At the request of either Party, the Parties shall appoint an independent accounting firm (“auditor”) to examine data furnished by the Parties regarding exports from Canada to the United States of softwood lumber pursuant to a request under paragraph 16. The Parties shall ensure that the auditor is free from any conflict of interest, or appearance of conflict of interest, and shall require the auditor to protect any confidential information furnished to the auditor by the Parties. The costs of the auditor shall be borne equally by the Parties.

16. At any time after a Party requests consultations under paragraph 1, a Party may request in writing that the auditor provide an opinion:

(a) regarding whether Canada has failed to comply with its obligation to collect fee with respect to exports of softwood lumber first manufactured in the province of Ontario, Quebec, British Columbia or Alberta, as provided under Article II; or

(b) where both Parties agree, regarding whether a Party has failed to comply with the Agreement in some other respect.

The requesting Party shall concurrently provide a copy of the request to the other Party.

17. Within 10 days after delivery of the request, each Party shall furnish to the auditor any data that the Party considers relevant, which may include information supplied to the Party by industry representatives, and shall provide to the auditor any further information or assistance that it may require. Within 20 days after receiving the request, the auditor shall render an opinion to the Parties on the matter. If, in considering the data, and having made every effort to resolve the issue, the auditor determines that there are questions of interpretation of this Agreement that are essential for its decision and that it considers it is not competent to resolve, it shall so advise the Parties. In any case, the auditor shall make such findings as are practicable regarding the matter. A Party may refer any such question of interpretation to an arbitral panel pursuant to this article, and in its decision the panel shall apply the findings of the auditor to the extent that the panel considers them applicable.

18. In the event the Parties agree pursuant to consultations that Canada has failed to collect fees as provided under Article II, or the auditor determines Canada has failed to collects such fees or that a Party has failed to comply with the Agreement in some other respect, the Party not in compliance shall:

(a) with respect to a matter referred to in subparagraph 16(a), collect the foregone fees within 65 days following the start of consultations;

(b) with respect to a matter referred to in subparagraph 16(b), take action to remedy the non-compliance within 65 days following the start of consultations or such other period of time as the Parties may agree; or

(c) with respect to matters referred to in subparagraphs 16(a) and (b), take such other action as the Parties may agree within such period of time as the Parties may agree.

19. Beginning as soon as practicable after the date on which the collection or action is initiated under paragraph 18, the auditor shall monitor such collection or action, as the case may be. Within 25 days after the deadline for returning to compliance, the auditor shall provide an opinion to the Parties on whether the Party not in compliance is in compliance with paragraph 18.

Action Following Breach or Auditor Determination

20. If,

(a) an arbitral panel finds that Canada has breached this Agreement, and the panel decides under paragraph 14, or the Parties agree by the expiry of the time period for cure of the breach, that the breach has not been cured; or

(b) the auditor determines, under paragraph 19, that Canada has not complied with paragraph 18,
the United States may suspend its obligations under Article I and IV. The United States shall endeavour to avoid any suspension that is manifestly excessive.

21. If,

(a) an arbitral panel finds that the United States has breached this Agreement, and the panel decides under paragraph 14, or the Parties agree by the expiry of the time period for cure of the breach, that the breach has not been cured;

(b) the auditor determines, under paragraph 19, that the United States has not complied with paragraph 18; or

(c) the United States takes action inconsistent with Article I, other than pursuant to paragraph 20,

Canada may suspend its obligations under Article II and IV. Canada shall endeavour to avoid any suspension that is manifestly excessive.

Other Procedure

22. The Parties may agree to modify the procedures set out in this article for the purpose of expediting, enhancing or facilitating the resolution of controversies, including with respect to a particular proceeding or matter.

ARTICLE VI

CONFIDENTIALITY

1. Each Party shall treat as confidential, in accordance with its law, business proprietary information, and any information designated as confidential by the Party providing it, that is not otherwise available, provided under this Agreement or during the consultative process or negotiation of this Agreement.

2. Information referred to in paragraph 1:

(a) may be used by and disclosed to government officials solely in connection with the implementation or operation of this Agreement, except as compelled under law;

(b) shall not, without the permission of the Party or person providing it, be used or disclosed in any trade action or investigation of the type referred to in Article I; and

(c) shall be returned by the Party who has received it to the Party or person who provided it on termination of the Agreement.

ARTICLE VII

GENERAL PROVISIONS

1. This Agreement is without prejudice to the position of either Party as to whether the programs and practices of either Party in respect or forest management constitute countervailable subsidies under domestic or international law.

2. Neither Party shall take action to circumvent or offset the commitments set out in this Agreement, including action having the effect of reducing or offsetting the export fees provided for in Article II (2) or undermining the commitments set out in Article I.
3. Canada shall provide to the United States notice of any new, or amendment to a, federal or Ontario, Quebec, British Columbia or Alberta law, regulation or order-in-council governing stumpage charges or forest management systems related to amendment thereto, is adopted, or as soon thereafter as practicable. Each Party shall endeavour to respond to requests from the other Party for other information that is relevant to the operation of this Agreement.

4. Canada shall, based on sufficient information that it obtains, certify to the United States each quarter that it has no basis to believe that:

   (a) the timber pricing and forest management systems of the provinces of Ontario, Quebec, British Columbia and Alberta have been modified other than as notified under paragraph 3; and

   (b) these provinces are collecting revenues at levels lower than called for under those systems.

The sufficiency of the information that Canada obtains shall not be subject to dispute resolution under Article V, nor shall requests under paragraph 3 be used for the purpose of obtaining the information on which Canada renders its certifications.

5. In October for each year, Canada shall provide the United States with yearly province-by-province aggregations of the volume of Crown softwood timber harvested and revenues collected for that timber in the provinces of Ontario, Quebec, British Columbia and Alberta.

6. Annexes 1 and 2 are incorporated as an integral part of this agreement.

**ARTICLE VIII**

**AMENDMENT**

The Parties may amend this Agreement by mutual agreement in writing.

**ARTICLE IX**

**DEFINITIONS**

For purposes of this Agreement and the Annexes:

**aggregated data** means data compiled in a manner that is not associated with, and could not be used to identify, operations of a particular person;

**board feet** means a unit of measurement equal to 12” x 12” x 1”. One thousand board feet = 2.36 cubic metres of lumber. One thousand board feet = 92.91 square meters of lumber. For the purpose of this Agreement all conversions of board feet to cubic meters or to square metres, as the case may be, shall be on a nominal measurement basis and shall not be rounded up to the nearest cubic metre or square metre;

**day** means a calendar day;

**person** includes a natural person, sole proprietorship, partnership, corporation and association;

**province of first manufacture** means the province where the mill, at which the softwood lumber products was first manufactured into such a product, is situated, whether or not that products was further processed (for example, planing or kiln drying) or was transformed from one softwood lumber product into another such product (for example, a remanufactured product) in another province;
softwood lumber means articles classified under:

(1) tariff item 4407.10.00 of the Harmonized Tariff Schedule of the United States (1996) (United States International Trade Commission Pub. 2937, 19 U.S.C. 1202 (1988)); (for purposes of description only, coniferous wood sawn or chipped lengthwise, sliced or peeled, whether or not planed, sanded or finger-jointed, of a thickness exceeding 6mm);

(2) tariff items 4409.10.10, 4409.10.20, and 4409.10.90 of the Harmonized Tariff Schedule of United States (1996) (United States International Trade Commission Pub. 2937, 19 U.S.C. 1202 (1988)); (for purposes of description only, coniferous wood (including strips and friezes for parquet flooring, not assembled) continuously shaped (tongued, grooved, rebated, chamfered, V-jointed, beaded, moulded, rounded or the like) along any of its edges or faces (other than wood mouldings and wood dowel rods), whether or not planed, sanded or finger-jointed); and

year means a twelve month period beginning April 1 and ending the following March 31.

ARTICLE X
ENTRY INTO FORCE

This Agreement shall enter into force on the date of signature, with effect from April 1, 1996, and shall remain in force for a period of five years after the effective date. It may be extended for a further period on written agreement of Parties.

IN WITNESS WHEREOF the undersigned, being duly authorised for this purpose by their respective governments, have signed this Agreement.

DONE in duplicate at Washington, this 29th day of May 1996, in the English and French languages, each text being equally authentic.

Reymond Chrétien Ira S. Shapiro
FOR THE GOVERNMENT OF CANADA FOR THE GOVERNMENT OF THE UNITED STATES OF AMERICA