

WESTERN RED CEDAR SHAKES AND SHINGLES

Report to the President on
Investigation No. TA-203-18,
Under Section 203 of the
Trade Act of 1974



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UNITED STATES INTERNATIONAL TRADE COMMISSION

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C O N T E N T S

	<u>Page</u>
Summary of advice to the President-----	1
Views of Acting Chairman Anne E. Brunsdale, Commissioner Ronald A Cass, and Commissioner Susan W. Liebeler-----	5
Views of Commissioner Eckes, Commissioner Lodwick, and Commissioner Rohr-----	33
Additional views of Commissioner Eckes-----	43
Additional views of Commissioner Rohr-----	45
Information obtained in the investigation:	
Introduction-----	A-1
Previous Commission investigation-----	A-1
The products:	
Description and uses-----	A-2
Production processes-----	A-4
U.S. tariff treatment-----	A-4
Nature and extent of current import relief-----	A-5
The domestic industry:	
U.S. producers-----	A-5
U.S. importers-----	A-6
The U.S. market and channels of distribution:	
Apparent U.S. consumption-----	A-6
Channels of distribution-----	A-8
Condition of the U.S. industry-----	A-9
U.S. production-----	A-10
Capacity and capacity utilization-----	A-10
U.S. exports-----	A-11
U.S. producers' inventories-----	A-11
U.S. employment-----	A-11
Financial experience of U.S. producers-----	A-14
Financial condition and rate of return of U.S. producers-----	A-16
Capital expenditures-----	A-18
Research and development expenses-----	A-18
Efforts by U.S. producers to adjust to import competition-----	A-18
Canadian shipments of shakes and shingles-----	A-21
U.S. imports and market penetration:	
U.S. imports-----	A-22
Market penetration-----	A-22
Prices-----	A-24
Price trends-----	A-25
Factors affecting the shake and shingle market:	
Stumpage prices-----	A-26
Log prices-----	A-27
The supply of western red cedar-----	A-30
Housing construction-----	A-31
Exchange rates-----	A-32
Probable economic effect of terminating import relief:	
Major foreign suppliers of shakes and shingles to the United States-----	A-34
Economic analysis of the probable economic effect of terminating or extending import relief-----	A-34
Supply and demand conditions-----	A-35
Reduction of the tariff from 35 percent to 20 percent-----	A-37
Termination of import relief-----	A-38
Considerations under section 202(c) of the Trade Act of 1974-----	A-39

Contents

	<u>Page</u>
Appendix A. Presidential proclamation 5498, May 26, 1986, Presidential memorandum, and request from the United States Trade Representative-----	A-47
Appendix B. The Commission's <u>Federal Register</u> notice-----	A-53
Appendix C. List of witnesses-----	A-57
Appendix D. Semiannual trade data-----	A-61

Tables

1. Western red cedar shakes and shingles: U.S. production, exports of domestic merchandise, imports for consumption, and apparent consumption, 1985-87, January-June 1987, and January-June 1988-----	A-7
2. Wood shakes and shingles: U.S. exports of domestic merchandise, by principal markets, 1985-87, January-June 1987, and January-June 1988-----	A-12
3. Western red cedar shakes and shingles: U.S. production and related workers, hours worked, and wages and total compensation paid, 1985-87, January-June 1987, and January-June 1988-----	A-14
4. Income-and-loss experience of U.S. producers on their operations producing western red cedar shakes and shingles, accounting years 1985-87, and interim periods ended Mar. 31, 1987, and Mar. 31, 1988-----	A-15
5. Selected financial information of U.S. producers on their operations producing western red cedar shakes and shingles, accounting years 1985-87, and interim periods ended Mar. 31, 1987, and Mar. 31, 1988-----	A-17
6. Wood shakes and shingles: U.S. imports for consumption, from Canada and all other sources, by types of wood, 1985-87, January-June 1987, and January-June 1988-----	A-23
7. Western red cedar shakes and shingles: Shares of U.S. consumption supplied by U.S. production and U.S. imports, 1985-87, January-June 1987, and January-June 1988-----	A-24
8. Published prices of western red cedar shakes and shingles sold in the United States, net f.o.b. mill, by quarters, January 1985-June 1988-----	A-26
9. Average prices of cedar stumpage sold by the U.S. Forest Service, by quarters, January 1985-June 1988-----	A-28
10. Composite U.S. prices for western red cedar shakes and shingles and prices of western red cedar logs sold in British Columbia, by quarters, January 1985-June 1988-----	A-30
11. U.S. prices of western red cedar shakes and shingles and new one-unit housing started in the western region of the United States, by quarters, January 1985-June 1988-----	A-32
12. U.S.-Canadian exchange rates: Nominal exchange rates of the Canadian dollar in U.S. dollars, real exchange-rate equivalents, and producer price indicators in the United States and Canada, indexed by quarters, January 1985-June 1988-----	A-33

Contents

Tables--Continued

	<u>Page</u>
13. Estimated effects of reducing the 35 percent tariff on red cedar shakes and shingles to 20 percent-----	A-37
14. Estimated effects of terminating the 35 percent tariff on red cedar shakes and shingles-----	A-38
15. Adjustment assistance paid to workers in the shake and shingle industry, 1979-85-----	A-39
16. Estimated effects on consumers of reducing the 35 percent tariff on red cedar shakes and shingles to 20 percent-----	A-41
17. Estimated effects on consumers of removing the 35 percent tariff on red cedar shakes and shingles-----	A-42
18. Canadian retaliatory tariffs-----	A-43
19. Number of firms and workers engaged in production of western red cedar shakes and shingles, 1980-87-----	A-45
D-1. Western red cedar shakes and shingles: Semiannual U.S. production, exports of domestic merchandise, imports for consumption, and apparent consumption, January 1985-June 1988-----	A-62

Note.--Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted from this report. Such deletions are indicated by asterisks.

UNITED STATES INTERNATIONAL TRADE COMMISSION
October 6, 1988

REPORT TO THE PRESIDENT ON INVESTIGATION NO. TA-203-18

WESTERN RED CEDAR SHAKES AND SHINGLES

In accordance with section 203(i)(2) of the Trade Act of 1974 (19 U.S.C. 2253(i)(2)), the United States International Trade Commission herein reports the results of an investigation concerning western red cedar shakes and shingles.

Summary of advice of the Commission

Acting Chairman Brunsdale, Commissioner Liebeler, and Commissioner Cass advise the President that import relief has had some favorable impact on the economic condition of the domestic western red cedar shake and shingle industry. However, the underlying competitive position of the domestic industry has not improved over the period of import relief. The primary beneficiaries of the relief have been the producers of red cedar logs used in the production of shakes and shingles. While the domestic industry would suffer some injury from the elimination of the tariff as opposed to its reduction to 20 percent, consumers of housing and those U.S. industries whose exports were subject to retaliation from Canada would benefit. There is no reason to believe that the continuation of import relief would result in adjustments that will enhance the competitiveness of the domestic industry.

Commissioner Eckes advises the President that termination of the import relief program presently in effect with respect to shakes and shingles of western red cedar would have an adverse effect on the industry producing shakes and shingles of western red cedar.

Commissioner Lodwick advises the President that the termination of relief would have the following economic effects on the U.S. western red cedar shake and shingle industry: 1) a decrease in U.S. western red cedar shake and shingle production, productive capacity, and capacity utilization; 2) a loss of market share, employment, and a decline in total wages paid; and 3) a drop in sales, net income, and prices received. U.S. western red cedar shake and shingle producers have made or planned to make the following efforts to adjust to import competition: 1) built new mills and relocated production facilities, 2) upgraded production equipment, 3) planned to build shake and shingle treatment plants to increase product value, and 4) helped fund research efforts to develop treated shake and shingle products from other types of wood in an effort to cope with the declining supply of red cedar.

Commissioner Rohr advises the President to continue his program of import relief to the domestic western red cedar shake and shingle industry. The U.S. industry has made reasonable progress toward adjusting to import competition since the import relief was granted 28 months ago. The probable effect of terminating relief at this time would be very detrimental to the domestic industry. The program of gradual reduction in the tariff as set forth by the President will allow the industry to make a smoother adjustment to import competition. He also suggests that the U.S. Trade Representative request the Commission to annually review the progress the industry is making under the reduced tariff.

Background

The Commission instituted this investigation effective July 1, 1988, following receipt of a request from the United States Trade Representative, that the Commission institute an investigation in order that it might advise

the President of its judgment as to the probable economic effect on the domestic western red cedar shake and shingle industry of the termination of the import relief provided to the industry by Presidential Proclamation 5498. Public notice of the investigation and hearing was given by posting copies of the notice at the office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the Federal Register of July 20, 1988 (53 F.R. 27410). A public hearing was held in connection with this investigation on August 16, 1988, in Washington, DC. All interested persons were afforded an opportunity to be present, to present evidence, and to be heard.

REPORT TO THE PRESIDENT

concerning

WESTERN RED CEDAR SHAKES AND SHINGLES

USITC Inv. No. TA-203-18

Views of

ACTING CHAIRMAN ANNE E. BRUNSDALE, COMMISSIONER RONALD A. CASS, AND COMMISSIONER SUSAN W. LIEBELER

The Commission has been asked by the United States Trade Representative (USTR) to advise the President of the probable economic effects of termination on December 7, 1988, of import relief to the domestic western red cedar shake and shingle industry.^{1/} Import relief in the form of a 35 percent ad valorem duty on imports of red cedar wood shakes and shingles has been provided for the past two years.^{2/} Under the terms of that grant of relief, if relief is not terminated on December 7 the duty on red cedar shakes and shingles will decline to 20 percent ad valorem on that date and to 8 percent two years thereafter. All relief would terminate on June 7, 1991, and the duty rate will revert to

1/ See Letter from the United States Trade Representative to Chairman Alfred Eckes dated June 29, 1988, reprinted at A-51 of Report.

2/ Relief was granted to the United States western red cedar shakes and shingles industry pursuant to Section 202(b)(1) (19 U.S.C. § 2252(b)(1)) on May 23, 1986. Memorandum from the President to the United States Trade Representative of May 23, 1986, reprinted at 51 Fed. Reg. 19157 (1986), Report at A-50.

zero. Our examination of the probable economic effects of termination of import relief as of December 7, 1988, must compare the effects of the 20 percent tariff (and subsequent 8 percent tariff), not the 35 percent duty that has been in effect, with the absence of any duty.

Our evaluation of the effects of terminating relief is governed by Section 203(i)(4) of the Trade Act of 1974.^{3/} That section asks the Commission to consider a number of specific factors in advising the President.^{4/} These factors can be organized in four groups: first, the effects of terminating or extending import relief on the domestic industry that benefits from import relief, and particularly the degree to which such relief facilitates adjustment by the industry to new market conditions;^{5/} second, the effects on the communities and other industries that are most closely associated with the industry seeking or receiving relief;^{6/} third, the effects on American consumers;^{7/} and fourth, the effects on more general, national and international economic interests and on industries that are affected indirectly by the decision to continue or terminate relief.^{8/} The third

^{3/} 19 U.S.C. § 2253(i)(2).

^{4/} These factors are listed in 19 U.S.C. 2252 (c).

^{5/} 19 U.S.C. § 2252(c)(1)-(3).

^{6/} 19 U.S.C. § 2252(c)(7), (9).

^{7/} 19 U.S.C. § 2252(c)(4).

^{8/} 19 U.S.C. § 2252 (c)(5), (6).

consideration, effects on American consumers, unambiguously supports termination of the import relief in the instant investigation, while factors in the other three groups yield less clear direction.

Following are the conclusions, detailed more fully below, concerning the effects of terminating or continuing import relief according to the Presidential Proclamation of May 23, 1986.

Domestic industry: Terminating the relief will have an adverse effect on the U.S. western red cedar shake and shingle industry, but continuing the relief will not significantly advance adjustment by that industry. Very little has been done by the industry over the past two years and very little can be done to adjust to imports without a change in the availability of old-growth red cedar logs, the underlying physical input to red cedar shakes and shingles.

The domestic industry producing red cedar shakes and shingles has received only a small part of the benefits of the import relief program. These benefits have been captured principally by timber owners and, perhaps less so, the producers of the red cedar logs used in the manufacture of shakes and shingles. According to Petitioner's data, 80 percent of the price increase in shakes and shingles experienced since tariffs were imposed has been reflected in higher log

prices. We believe that any decrease in shake and shingle prices resulting from the termination of protection would be passed through to log producers and timber owners to a similar extent. Thus, the shake and shingle industry that was judged by the Commission to have been seriously injured by increased imports, has not been the primary beneficiary of import relief and will not be the primary loser if relief is terminated.

Associated industries and communities: The production of red cedar shakes and shingles is largely concentrated in two states, Washington and Oregon, but the industry is relatively small, in terms of total employment, profits, gross earnings, and scale of individual plants. Consequently, the adverse effect on the industry is not likely to have any substantial adverse impact on the communities in those states in which shake and shingle production now occurs. Further, the adverse effects on the domestic red cedar shake and shingle industry should not have any secondary adverse effects on other United States industries and, indeed, may have beneficial effects on related industries.

Consumers: American consumers undeniably would benefit from the termination of import relief. Imposition of a duty on imported red cedar shakes and shingles has resulted in increased costs for home buyers and homeowners who purchase these products.

General economic interests: Elimination of the tariff also should promote our overall national and international economic interests. If our imposition of duties on red cedar shake and shingle imports had no effects on the behavior of other national governments, this conclusion probably would not hold, as the duties earn revenues for the United States government that are significant in relation to the other effects considered here. The Canadian government, however, has imposed retaliatory duties on a large number of U.S. exports. While we have no direct estimate of the effects of these duties at this time, they clearly impose costs on unrelated American businesses. Given the manner in which such retaliatory duties are assessed, there is reason to believe that such duties largely offset any positive effects of import relief in this instance. There also is reason to believe that termination of import relief may facilitate cooperative implementation of the U.S.-Canada Free Trade Area Agreement, even though this relationship can only be a subject for speculation.

I. Effects on U.S. Red Cedar Shake and Shingle Industry

A. Market Considerations

Appreciation of the effects on the domestic red cedar shake and shingle industry of continuing or terminating import relief plainly requires an understanding of the nature of the industry, the market for its products, and the import competition it would face in the absence of such relief. Red cedar shakes and shingles are used for roofing or siding, principally in relatively expensive residential housing.^{14/} The particular properties that give these products their value for such uses -- their weathering, insect-resistance, aesthetic, and nail-holding characteristics -- primarily derive from the wood from which they are made, old-growth red cedar.^{15/} Such cedar is from trees approximately 200 or more years old. Red cedar from younger trees does not duplicate the advantageous characteristics of old-growth red cedar, and to date no other wood has been found that duplicates these properties, either in its natural condition or as treated by practicable chemical (or other) processes.^{16/}

^{14/} Report of the Commission (the "Report") at A-8, A-36.

^{15/} Wesley Rickard, Inc., "Update: The Western Red Cedar Timber Resource in the United States as it Relates to United States Production of Shakes and Shingles," (Preliminary), July 1988 ("Wesley Rickard"), at 2.

^{16/} Tr. at 9, 14; Wesley Rickard at 2.

Several implications follow. For one, the supply of red cedar shakes and shingles is closely tied to the availability of the wood. As the inventory of old-growth cedar has been depleted, much more so in the United States than in western Canada, the availability of the wood has been increasingly influenced by factors affecting the logging of more plentiful and commercially important trees among which remaining old-growth red cedar trees are interspersed.^{17/} Second, the consumer demand for cedar shakes and shingles is relatively unaffected by price. Certainly, substitute products -- asphalt-shingle roofs, ceramic tile roofs, slate roofs, or other wood siding, for examples -- are available, but the characteristics of these substitutes are only generally congruent with those of red cedar shakes and shingles. Moreover, the fact that shakes and shingles represent a relatively small part of the "package" in which they often are purchased (a house), also reduces the degree of consumer price sensitivity.^{18/} Finally, as a "natural" product that requires primarily splitting or sawing but little else and that is produced from a raw product supply that is quite limited relative to many other woods, the scale of production

^{17/} Wesley Rickard at 8, 17.

^{18/} USITC Office of Economics, "Final Discussion of Elasticities for Wood Shakes and Shingles, Inv. No. TA-203-18", Memo No. EC-L-329 (September 27, 1988) ("Elasticities Memo").

tends to be small and the capital investment necessary to enter the industry small.^{19/}

The cost of production of red cedar shakes and shingles appears to be affected by three critical factors: the price (and certainty of supply) of old-growth red cedar logs, the efficiency of the sawing and splitting equipment, and the skill and cost of the workforce. It appears that the equipment suited to red cedar shake and shingle production also is suited to production of other wood products, making entry into and exit from this industry less costly than would otherwise be the case. As for the third factor, the workforce for red cedar shake and shingle production does not appear to be highly specialized. Labor for this production, hence, generally is both hired and laid off relatively quickly as the level of production varies.

B. Tariff Effects on Domestic Industry

The effects of the tariff, and of terminating the tariff, on the U.S. red cedar shake and shingle industry follow from the market characteristics described above. Critically, the primary effect of a tariff is to increase the price of red cedar shakes and shingles sold in the United States and not to increase domestic production of shakes and shingles. Due to the limited supply of cedar logs, the volume of production is relatively unresponsive to the

^{19/} Report at A-4.

tariff. Higher shake and shingle prices lead to higher cedar log prices as producers bid against each other for the essential raw material. For this reason, log producers and timber owners capture most of the benefits stemming from the tariff.

The starting point is the tariff's effect on the foreign producers of shakes and shingles. Plainly, the imposition of a tariff raises the prices charged for imported (Canadian) shakes and shingles. For several reasons, however, this price increase does not dramatically affect the quantity of shakes and shingles imported.

First, the change in price should not significantly affect foreign production of shakes and shingles. The foreign producers will experience a decrease in the net price paid to them, as the increase in price to consumers comes from a tax and not a change in demand for the product. This effective decrease in shake and shingle returns will not cause a significant reduction in production of shakes and shingles. Other things equal, the decrease reduces the price the foreign producers will pay for the inputs to production, principally red cedar logs, but this will not significantly decrease the availability of those logs. Because red cedar grows intermixed with other species and old-growth red cedar in particular is only harvested as a by-product of a harvest of an entire mixed stand of timber,^{20/} the harvest of red

^{20/} Elasticities memo at 4.

cedar trees, and the production of red cedar logs, in both Canada and the United States are not very responsive to changes in the prices that can be obtained for the red cedar logs. Within a very wide range of prices, the number of red cedar logs is only very slightly affected by log prices.

Although red cedar logs have uses other than production of shakes and shingles, the decrease in net revenues derived from sales of shakes and shingles may reduce the prices of cedar logs. However, this will not substantially shift uses of the logs unless the demand for the other end products is more sensitive to changes in price than is demand for shakes and shingles. There is no evidence of that in this investigation. Nearly the same amount of old-growth red cedar should be available for Canadian shake and shingle production with or without a 20 percent or even 35 percent tariff. While there will be some decrease in Canadian production of shakes and shingles, the relatively small change in price and availability of the most important input to such production will limit the magnitude of that change.

The division of Canadian red cedar shake and shingle production between the United States and other markets also is unlikely to be substantially affected by the tariff.

The United States constituted by far the largest market for Canadian red cedar shakes and shingles, accounting for over 80 percent of total Canadian shipments during the period of

our investigation.^{21/} While there will be some change in this, the relative unresponsiveness of consumer demand for these products (in the United States and Canada alike) restricts the amount of the change.

For the same reasons, although production of red cedar shakes and shingles in the United States has increased somewhat since the tariff took effect, it is not clear just how much of that increase can be attributed to the tariff. Since the tariff was imposed, production has increased rather dramatically, reversing a long term decline. Although by 1985 red cedar shake and shingle production had fallen well below its pre-1980 levels,^{22/} 1988 production levels were about 35 percent higher than 1985 levels.^{23/} Likewise, employment in the U.S. industry has grown by over 20 percent between 1985 and 1987.^{24/} Hours worked grew by over 40 percent.^{25/} These are favorable developments for the industry, probably attributable primarily to the grant of import relief, but some evidence suggests that the increase in production and employment also may have been partly attributable to an unrelated increase in the U.S. red cedar harvest.

^{21/} Elasticities memo at 5.

^{22/} Wesley Rickard at 16.

^{23/} Report at A-10.

^{24/} Report at A-11.

^{25/} Report at A-13.

C. Industry Adjustment

The relief granted by the President to the western red cedar shake and shingle industry in 1986 was intended to reduce the burden of adjustment costs on the parties most directly affected by them. In keeping with the statutory purpose "to facilitate the orderly adjustment to new competitive conditions by the industry,"^{26/} the duty imposed on red cedar shakes and shingles was intended "to enable the domestic producers of red cedar shakes and shingles to adjust to competition during the relief period."^{27/} In this proceeding, the statute and USTR's request instruct the Commission to take into account "the progress and specific efforts made by the industry concerned to adjust to import competition."^{28/}

There is little evidence that continuation of the duty is useful to industry adjustment. One datum is the experience of the industry with adjustment assistance.^{29/} Prior to the tariff, when the domestic industry was clearly in decline, some 2,066 employees applied for certification

^{26/} 19 U.S.C. § 2253(a).

^{27/} Memorandum from the President to the United States Trade Representative dated May 23, 1986, reprinted at 51 Fed. Reg. 19157 (1986).

^{28/} 19 U.S.C. § 2253(i)(4).

^{29/} Section 202(c)(1) directs that consideration be given to "information and advice from the Secretary of Labor on the extent to which workers in the industry have applied for, are receiving, or are likely to receive adjustment assistance under chapter 2 or benefits from other manpower programs."

for adjustment assistance between 1979 and 1985, and 1,024 were certified.^{30/} Since the imposition of the tariff, use of worker adjustment assistance has declined dramatically.

Between June 30, 1985 and February 6, 1988, 162 workers applied for certification, and all were certified.^{31/} The experience with adjustment assistance for firms has been similar.^{32/} Between 1980 and 1985, 30 of 31 red cedar shake and shingle firms that petitioned the Commerce Department for adjustment assistance were certified; since 1985 not a single firm has been certified.^{33/}

The industry has experienced greater profitability of late, partly as a result of import relief, and has used that profitability to invest in equipment that expands capacity and arguably increases efficiency. Production capacity of U.S. mills has grown by nearly 13 percent between 1985 and 1987.^{34/} This is one consequence of a sharp increase in capital expenditures in the industry since the tariff was imposed. In 1985, capital expenditures by companies in the

^{30/} Report at A-39.

^{31/} Report at A-39.

^{32/} 19 U.S.C. 2252(c)(2) directs that consideration be given to "information and advice from the Secretary of Commerce on the extent to which firms in the industry have applied for, are receiving, or are likely to receive adjustment assistance under chapters 3 and 4."

^{33/} Report at A-39-40. No firms ever received any direct financial assistance, and financial assistance was discontinued effective April 7, 1986.

^{34/} Report at A-15.

industry reporting to the Commission were \$295,000; by 1987, those companies' investment had more than quadrupled, to \$1,430,000. The most common "adjustment" made by producers was the purchase of additional saws, including automatic saws; some mills have also purchased new shingle machines.

Plans for adjustment should the relief be extended reveal an inclination to engage in more purchases of new equipment, such as automatic saws, splitters, feeders, and shingle machines.^{35/} Two large shake and shingle producers reported that they would build treatment plants should the relief be continued.^{36/} Most of the industry members responding to inquiries from the Commission, however, indicated that they did not plan further changes.

Moreover, it is far from clear that the capacity-expanding investments in fact advance the industry's competitiveness in any sense. One basis for concern is the apparent absence of any productivity gains in this industry over the period of protection. Whether measured by aggregate production and employment data, questionnaire data, or petitioner's data, productivity remained fairly constant between 1985 and 1988. For example, based on petitioner's data, productivity was 1.15 thousand squares per worker in the second half of 1987 and 1.18 thousand in the first half of 1988. These are virtually unchanged from productivity of

^{35/} Report at A-41.

^{36/} Id.

1.15 thousand squares per worker in the first half of 1986, immediately prior to the grant of import relief.^{37/} Measured by questionnaire responses, productivity fell from 1.2 squares per hour in 1985 to 1.1 squares per hour in 1986 and then rose to 1.2 squares per hour in 1987.^{38/}

Whatever the effect of the changes made by the domestic industry over the past few years, further import relief is unlikely to facilitate positive adjustment to the long-term competitive conditions faced by the industry. While there may be, as the domestic industry contends,^{39/} some ability to alter supplies of red cedar logs from year to year, the critical factor in the future of this industry is the rapidly diminishing quantity of red cedar of sufficient age to be usable in this industry. One estimate by a respected timber products consulting firm indicates that the total inventory in the United States of red cedar has declined by about one-third since 1980^{40/} and that current total supplies will last about sixteen more years at the harvest levels of 1980-1985. Since the tariff was imposed, production has increased, and red cedar stands may be depleted even more quickly.^{41/}

^{37/} See Petitioner's Prehearing Brief at 17 (Table 1) for production data and at 19 (Table 3) for employment data.

^{38/} See Report at A-14 (Table 3).

^{39/} Petitioner's Post-Hearing Brief at 3.

^{40/} Wesley Rickard at 7.

^{41/} Id. at 10.

Furthermore, that timber is ever more difficult to reach and harvests are ever less productive. Old growth red cedar comprised about 10 percent of total timber harvested in western Washington state between 1965 and 1979; since 1980, only about 4 percent of timber has been red cedar of the requisite age and grade.^{42/}

Canadian supplies, by contrast, are much more abundant. At current harvest levels, Canadian red cedar timber supplies are estimated to last at least another century. This disparity is manifested in log prices, which since the imposition of a ban on the export of logs by the Canadian government have been different each side of the border. The domestic industry admits there has been a "great disparity" in red cedar log prices between the two countries.^{43/} This disparity, which presumably would lessen or disappear if cross-border log trade were permitted, is evidence of current Canadian comparative advantage, and of the long run position of the domestic industry.

Obviously the United States can do little to alter the supply of two-hundred-year-old red cedar timber in the western United States. At most it can help participants in the industry adjust to the inevitable reduction in the size of the industry and to identify possible substitute products

^{42/} Id. at 12. Red cedar grows intermixed with other species, and is only harvested as a mixed stand of timber is cut.

^{43/} Petitioners' Post-Hearing Brief and Response to Questions by Commissioners in Support of Continuing Relief, at 4.

for the industry to produce. Yet there is little reason to believe the tariff protection provided has done that or will do that.

The domestic industry is pursuing research and development into techniques for making shakes and shingles from other types of wood. The most serious efforts are being undertaken jointly by the USDA Forest Service and private industry, represented by the Northwest Independent Forest Manufacturers (NIFM). According to testimony at the hearing, the joint venture is testing the suitability of other woods for use as shakes and shingles to replace red cedar^{44/} and is hopeful of having a product available for commercial use sometime after 1991.^{45/} The parties dispute the effectiveness of these research projects.^{46/ 47/}

^{44/} See Report at A-20.

^{45/} Transcript at 15. Mr. Koeppen of the USDA stated that getting the chemicals registered legally on the market would take longer.

^{46/} Petitioners are optimistic that they will be able to market treated whitewood shakes and shingles in commercial quantities within two years. See Petitioners Posthearing Brief at 5. Petitioners claim that the research has been very encouraging, that whitewood species have performed well in laboratory experiments, and that whitewoods will work with the necessary preservatives. Respondents argue forcefully that the whitewoods being tested are not durable enough to put on a roof. See Respondents Posthearing Brief at 7. They note that these woods have problems with splitting and checking, problems that have not been overcome. *Id.* at 8.

^{47/} It should also be remembered that both government and industry research and development projects are typically subject to significant time overruns, (see Marshall and Meckling, "Predictability of the Costs, Time, and Success of Development," in The Rate and Direction of Inventive Activity

It is clear that this research effort, whatever its prospect for success, is not a response to Canadian imports. Instead, it is needed because of the declining inventory of U.S. red cedar. One estimate is that, at current rates of consumption, the U.S. supply of red cedar would be exhausted within ten years. To date, NIFM pledged \$250,000 to this project, of which \$166,000 has already been paid.^{48/} We do not believe the continuation of this research is tied to the continuation of the tariff because the research is central to the industry's ability to survive the depletion of red cedar in the coming years.

II. Effects on Communities and Associated Industries

Although the production of red cedar shakes and shingles is largely concentrated in two states, there is little reason to expect termination of the tariff to have much adverse effect on the economies of those states. The industry is a small one. Relative to the economies of the states, total employment, profits, and gross earnings are all quite small.

(1962); M. Peck and F.M. Scherer, The Weapons Acquisition Process (1962); E. Mansfield et.al., Research and Innovation in the Modern Corporation, (1971) Ch. 5), that there are significant risks of both technical and commercial failure for R&D projects (see E. Mansfield et. al., The Production and Application of New Industrial Technology, (1977) Ch. 2), and that government efforts to develop new commercial products have not been generally successful (see Alexander, "The Right Remedy for R&D Lag," Fortune, January 25, 1982, p. 60-69.).

^{48/} Tr. at 17 (Statement of Mr. Kuehne).

Even within the small communities in which shake and shingle mills are located, the impacts are likely to be small. These mills typically are far from the largest employees in their respective localities, and the skills and equipment used in producing red cedar shakes and shingles can be transferred to other wood products in these wood-abundant regions.

Further, the elimination of the tariff should have beneficial effects on some related industries. The tariff has been at least in part responsible for the recent increases in red cedar log prices, which have worked a hardship on other industries producing red cedar products. Indeed, those industries have suffered because they have not had the tariff protection available to the shake and shingle industry. In addition, the domestic industry itself admits the tariff has contributed to an increase of hundreds of dollars in the price of houses that use such roofing; elimination of the tariff should be beneficial to industries which produce complementary building materials. The only related industry on which there will be adverse effects of eliminating the duty is the cedar log industry. As explained above, however, this is not in fact a separate industry but, rather, is part of the more general commercial logging industry. In comparison with the returns from its overall operations, losses from elimination of the duty on red cedar shakes and shingles should be trivial.

III. Effects on Consumers

It is clear that consumers benefit from elimination of the tariff. The tariff causes the price of red cedar shakes and shingles to rise; indeed, it has increased by approximately 50 percent since the imposition of the tariff. Some consumers who prefer red cedar shakes and shingles to other roofing or siding materials will purchase other materials when the price of cedar shakes and shingles rises. Other consumers will continue to purchase the shakes and shingles, but at a higher price. The Commission staff estimates that reducing the tariff to 20 percent from 35 percent will produce annual benefits for consumers of between \$6.65 million and \$12.79 million from lower prices and increased quantities of shakes and shingles.^{49/} Elimination of the 35 percent duty would produce estimated annual benefits of between \$17.14 million and \$32.74 million.^{50/} A decision to eliminate the duty rather than to continue the duty at 20 percent, thus, would benefit American consumers by at least \$10.49 million and as much as \$19.95 million annually.

IV. U.S. General Economic Interests

Calculation of effects on the general economic interests of the United States in this investigation yields far from clear results. Plainly, the gains to the consumers from

^{49/} Table 13 at page A-37.

^{50/} Report Table 14 at A-38.

tariff elimination appear to exceed those to producers from continuation of import relief. Estimates by Commission staff suggest that when the duty rate is reduced to 20 percent, consumers will gain between \$6.65 million and \$12.79 million annually, because removing the tariff allows domestic consumers to buy the good at lower prices and will make it possible for them to buy more of the product than they would choose to buy at the tariff-inclusive price. Producers of shakes and shingles will surrender revenues of between \$1.5 million and \$4.9 million annually when the tariff is reduced, because they will receive lower prices for their products and will choose to produce less at those lower prices. The Commission staff estimates the net gain to consumers from elimination of the duty on shakes and shingles is between \$17.14 million and \$32.74 million annually, while revenue losses to domestic shake and shingle producers range between \$4.58 million and \$13.31 million annually.

The overall effect is complicated, however, because the United States government gains tariff revenue from extension of import relief in an amount sufficiently large that, when added to the effects on producers, the total exceeds the costs of import relief to consumers. Under the supply and demand conditions for red cedar shakes and shingles, foreigners effectively pay part of the tariff revenue because the net price they receive is reduced. When the effects of reducing the tariff on foreign prices and thus on tariff

revenue are accounted for, the calculations by Commission staff suggest a net welfare loss of between \$25.25 million and \$30.53 million annually from eliminating the tariff fully instead of allowing its scheduled reduction to 20 percent to go forward as planned.^{51/}

That calculation, however, does not take important factors into account. First, it does not account for any costs associated with the imposition and collection of the duties. Second, and more important, it does not account for the effects of the duty on our trading relationship with Canada and related effects on other U.S. industries.^{52/}

The record seems clear that the imposition of tariff protection for the domestic red cedar shake and shingle industry provoked at least two reactions from the Canadian government. First, the Canadians imposed even more severe restrictions on the export of red cedar logs than had previously been in place. Second, the Canadians imposed tariffs on imports of a variety of other U.S. products.^{53/}

^{51/} Report at A-37-38; see also USITC Memo EC-L-335 (October 3, 1988).

^{52/} 19 U.S.C. 2252(c)(5) and 2252(c)(6) direct that consideration be given to "the effect of import relief on the international economic interests of the United States;" and "the impact on U.S. industries and firms as a consequence of any possible modification of duties or other import restrictions which may result from international obligations with respect to compensation."

^{53/} The items covered by Canadian retaliatory tariffs include: certain books, catalogs of publications issued by non-Canadian publishers, printed music, computer parts, certain semi-conductor devices, tea bags, diesel motor rail

These retaliatory tariffs were imposed on June 2, 1986, assertedly in accordance with the General Agreement on Tariff and Trade (GATT) rules, which permit a nation to impose tariffs in retaliation for tariffs imposed against it under certain circumstances.^{54/} Since these Canadian tariffs were explicitly imposed in retaliation for the U.S. shakes and shingles duty,^{55/} and since (whatever their present status under the GATT) they would be in violation of the GATT once the U.S. duty were removed, there is a strong chance these duties would be removed in reaction to removal of the U.S. shake and shingle duty. The benefits to the U.S. economy from removal of those barriers should be included in our

cars and parts, oatmeal and rolled oats, certain trees, cider, asphalt paving oil, and ozone generators. Report at A-43.

^{54/} Under Article XIX of the GATT, member countries adversely affected by U.S. import relief are entitled to claim equivalent compensation for the U.S. action. Compensation is generally in the form of duty reductions on other products that the affected countries export to the United States. If consultations do not produce agreement as to the form and level of compensation, or if the traded articles are not bound by GATT accords, a trading partner may retaliate by imposing restrictions against products that it selects. Red cedar shakes and shingles are not bound by GATT accords, and the U.S. refused compensation to Canada when it imposed the shake and shingle duty.

^{55/} In a communique released by the Canadian Department of Finance, the Canadian Minister of Finance stated "As is customary under international practice, we have approached the U.S. government as to whether it was prepared to remove the restriction, or to offer compensation to redress the imbalance in conditions of trade caused by the U.S. action. The U.S. administration made it clear that it is not prepared to remove the measure, to compensate Canada, or to take other measures to ensure that Canadian shakes and shingles manufacturers maintain reasonable access to the U.S. market."

calculation of the potential benefits of removing the U.S. tariff on red cedar shakes and shingles.

Moreover, prior to the imposition of the tariff, the Canadian government limited the export of red cedar logs, but export was not entirely forbidden. Logs which were deemed to be "surplus," that is to say, logs not desired at prevailing prices by Canadian red cedar products manufacturers, could be exported from Canada. After the U.S. tariff on shakes and shingles was imposed, the Canadian government imposed an absolute ban on the export of red cedar logs, which has increased the disparity in log prices between the U.S. and Canada^{56/} and has contributed to the substantial increases in U.S. log prices since the tariff.

The evidence is mixed as to whether termination of the U.S. tariff would result in a return to the status quo ante in this regard. The domestic industry contends that on at least two occasions the Government of Canada has suggested to the U.S. government that they negotiate reduction or elimination of the shake and shingle duty. On both occasions, the U.S. government agreed to eliminate the duty only if bilateral free trade in logs were restored; on both occasions the Canadian government allegedly refused.^{57/} For their part,

^{56/} See Post-Hearing Brief and Response to Questions by Commissioners in Support of Continuing Relief from Imports of Red Cedar Shakes and Shingles, at 4.

^{57/} Petitioner's Pre-Hearing Brief in Support of Continuing Relief from Imports of Red Cedar Shakes and Shingles ("Domestic Pre-Hearing Br."), at 4.

the Canadian interests appearing before the Commission have hinted at the reciprocal removal of the export ban but have given no commitments. The Canadian red cedar shake and shingle industry has indicated that, if they were approached by the Canadian government with a proposal for the removal of the export ban they would "probably" assent if the U.S. tariff had been removed.^{58/} As to whether the Canadian government would make such a proposal, the Canadian parties have been equally non-committal.^{59/} The importance of transport costs^{60/} raises a question as to whether, even assuming the export ban were removed, there would be much benefit to the U.S. shake and shingle industry, since it is likely that logs would be processed close to their point of

^{58/} The Co-Chairman of the (Canadian) Fraser Valley Independent Shake and Shingle Producers Assn. stated in testimony before the Commission: "I would respectfully suggest that I don't think the Canadian industry would petition the Canadian government, but I would suggest that perhaps in the spirit of free trade, . . . that in fact if the Canadian government was to approach the Canadian industry with some sort of a proposal, that you would probably find acceptance within the Canadian industry." Hearing transcript at 141-42.

^{59/} Prehearing Brief of Fraser Valley Independent Shake and Shingle Producers Assn. at 40: "[A]lthough we do not speak for the Canadian government, it is not unreasonable to assume that the removal of the tariff under these circumstances might encourage the Canadian government to reconsider the export ban it imposed on western red cedar logs going from Canada into the United States."

^{60/} Most processing now takes place close to the point of harvest; that is why the industry is largely concentrated in the Pacific Northwest. There is no reason to assume that will change in the future.

harvest rather than being transported across the border to be processed in U.S. mills.

If the ban on the export of Canadian red cedar logs were removed, it is likely that U.S. industries besides the shake and shingle industry would benefit. A number of other red cedar products are produced by other industries; these include lumber, veneer, plywood, poles, posts, and pilings. The export ban (arguably a consequence of the U.S. shake and shingle duty) has clearly forced up the U.S. price of red cedar logs.^{61/} If that is the case, then the U.S. duty has had indirect adverse consequences for these industries. No empirical measurement of these effects is available to us at this time.

Conclusion

The overwhelming evidence is that the increased tariff on shakes and shingles has not been effective in increasing the competitive position of the domestic industry. The primary economic effect of the tariff has been to transfer wealth from American consumers to the producers of red cedar logs and, to a lesser extent, shake and shingle producers.

^{61/} The evidence on this point is mixed. While there is a striking temporal coincidence between the imposition of the U.S. duty and Canadian export ban and a dramatic run-up in red cedar prices, there is also evidence that log prices have increased on both sides of the border. See Report at A-26, A-28, A-29, and A-30. That can only be accounted for by increases in the demand for red cedar logs on both sides of the border. An increase in housing starts is one possible explanation for that increase in demand. The supply inelasticity noted in the staff elasticities memo is consistent with this hypothesis.

This was not, of course, the purpose of temporary protection under Section 201.

There is no prospect that continuation of an increased tariff level would do anything to promote the competitive position of the domestic wood shake and shingle industry. Whatever efforts the industry could make to reduce its costs could already have been made. Eliminating the tariff completely rather than reducing it to 20% would not hamper industry efforts to reduce costs or increase productivity.

VIEWS OF COMMISSIONER ECKES, COMMISSIONER LODWICK, AND COMMISSIONER ROHR

The Commission instituted this investigation under section 203(i)(2) of the Trade Act of 1974 after receiving a request from the United States Trade Representative (USTR). In his request, the USTR asked the Commission to advise the President of the probable economic effect on the domestic industry of the termination of the import relief after 30 months, or on December 7, 1988, and to include in its advice a review of the progress and specific efforts being made by the domestic producers of western red cedar shakes and shingles to adjust to import competition. ^{1/} The relief is provided pursuant to Presidential Proclamation 5498 of June 6, 1986, which provided for the imposition of a rate of duty of 35 percent ad valorem on imports of western red cedar shakes and shingles during the period June 7, 1986 through December 6, 1988, with scheduled reductions to 20 percent ad valorem during the period December 7, 1988 through December 6, 1990, 8 percent ad valorem during the period December 7, 1990 through June 6, 1991, and, unless relief is extended beyond June 6, 1991, the rate of duty will revert to "free."

The import relief was imposed by the President following the Commission's determination, in investigation number TA-201-56, Wood Shakes and Shingles, USITC Pub. 1826 (March 1986). In the section 201 investigation, the Commission determined that increased imports of wood shakes and shingles were a substantial cause of serious injury to the domestic industry producing wood shakes and shingles. In providing our advice to the President in this investigation, we have considered the current condition of the domestic

^{1/} Report at A-51.

industry, reviewed its progress and efforts to adjust to import competition, and considered the probable economic effect of terminating the relief.^{2/}

Current condition of the domestic industry

As the Commission has observed in the past, "[t]he Commission's assessment of the condition of the industry establishes the framework for the analysis of the impact of removal of relief and is integral to an objective evaluation of industry adjustment."^{3/}

In our determination in the section 201 investigation, we concluded that increased imports of wood shakes and shingles were a substantial cause of serious injury to the domestic industry. Since the imposition of the import relief program, the condition of the industry producing western red cedar shakes and shingles has improved.^{4/} Relief has been effective in improving the condition of the industry, but there are still signs of weakness, as performance indicators for the most recent period show downturns.

^{2/} Section 203(i)(4) requires the Commission, in advising the President under section 203(i)(2), to "take into account all economic factors which it considers relevant, including the considerations set forth in section 202(c). . . ." With respect to those factors not specifically mentioned in these Views, we incorporate the discussion of the factors contained in the Commission's Report at pages A-34-A-45.

^{3/} Stainless Steel and Alloy Tool Steel, Inv. No. TA-203-16, USITC Pub. 1975 (May 1987) at 6.

^{4/} The Commission's original investigation and determination covered all wood shakes and shingles, however, the President provided relief only with respect to western red cedar shake and shingle imports. Therefore, in this investigation, we have considered only the probable economic effects of termination of the import relief on producers of western red cedar shakes and shingles, and the efforts of such producers to adjust to import competition.

Production of western red cedar shakes and shingles increased from 1985 through 1986, from 1.6 million squares to 2.2 million squares. ^{5/}

Production declined slightly in the interim period January-June 1988, when compared to the 1987 interim period, from 1.1 million squares to 1.05 million

squares. ^{6/} Domestic capacity increased from 1985 to 1987, and remained virtually unchanged in the interim period of 1988 as compared with the interim period 1987. ^{7/} Capacity utilization also increased from 1985 to 1986, and

remained steady in 1987, before declining in the interim period 1988. ^{8/}

Employment, total wages, and average hourly wages per worker all increased from 1985 through 1987. ^{9/} Domestic producers sustained an aggregate net

loss equivalent to 2.4 percent of net sales in 1985, but in 1986 and 1987, U.S. producers experienced their most profitable years since 1980, reporting pre-tax net income equivalent to 9.5 percent of net sales in 1986, and 8.8 percent of net sales in 1987. This profitable condition continued in the first quarter of 1988, when net income equivalent to 8.2 percent of net sales was reported, as compared with net income equivalent to 6.0 percent of net

^{5/} Report at A-7. A "square" is the usual commercial unit of measurement of shakes and shingles, and represents the quantity required to cover 100 square feet of surface area. Report at A-2.

^{6/} Report at A-7.

^{7/} Report at A-10.

^{8/} Id.

^{9/} Report at A-13.

sales during the first quarter of 1987.^{10/} The number of firms reporting losses declined from 1985 to 1987 as well.^{11/}

Imports of western red cedar shakes and shingles increased from 1985 to 1986, from 4.0 million squares to 4.1 million squares, before dropping off in 1987 to 3.3 million squares. This decline continued in interim 1988, with imports falling to 1.51 million squares as compared with 1.52 million squares in interim 1987.^{12/} U.S. producers' share of apparent U.S. consumption increased from 28.3 percent in 1985 to 39.8 percent in 1987, before declining slightly in interim 1988 as compared with interim 1987, to 40.2 percent from 41.5 percent.^{13/}

Prices of western red cedar shakes and shingles increased during the relief period. Prices for #1, 1/2 x 24" western red cedar shakes, which account for approximately 70 percent of the western red cedar shakes sold in the United States, increased 88 percent between first quarter 1985 and second quarter 1988.^{14/} Prices for the other three product categories investigated showed similarly substantial increases.^{15/}

Efforts of U.S. producers to adjust to import competition

U.S. producers of western red cedar shakes and shingles have made reasonable progress in adjusting to import competition since import relief was

^{10/} Report at A-14-A-15.

^{11/} Id.

^{12/} Report at A-23.

^{13/} Report at A-24.

^{14/} Report at A-24, A-25.

^{15/} Report at A-25-A-26.

granted 28 months ago. Efforts to adjust include investment in automatic shake saws. The new automatic saws at U.S. mills increase productivity and can be operated by an unskilled worker in place of a skilled sawyer at lower wages and lower insurance costs. ^{16/} The cost of a new automatic saw is roughly equal to the annual salary of a trained sawyer, approximately \$16,000. ^{17/} By investing in automatic saws, the industry alleviated the problems caused by the shortage of trained sawyers. Many sawyers left the industry due to uncertainty of employment in the period prior to the imposition of relief. ^{18/}

The industry also invested in new shingle machines. Shingle machines allow producers to utilize a lower grade of western red cedar. This adjustment by the industry was an appropriate response to increased competition for higher grade logs. In recent years, lumber mills and foreign purchasers have demanded an ever greater share of available high quality western red cedar logs. ^{19/}

The industry has made efforts to use more efficiently the supply of western red cedar which is the primary input to shake and shingle production. Several mills invested in hydraulic shake splitters. The new shake splitters at U.S. mills enable the producers to split thinner shakes, thus increasing the yield from each log. U.S. mills have also invested in new log decks; which

^{16/} Report at A-19.

^{17/} Report at A-14 and A-19.

^{18/} Report at A-19.

^{19/} Report at A-19.

allow producers to use both logs and salvage bolts. The increased flexibility allows the producers to make better use of the available supply of western red cedar. Some mills have also invested in wood chippers to produce a marketable by-product from their wood waste. Other firms also plan to invest in wood treatment plants, to increase the value added to their products. ^{20/}

Capital expenditures by the domestic western red cedar shake and shingle producers that provided data to the Commission totaled \$1,430,000 in 1987, the first full year of import relief. In 1985, the last full year before import relief, these firms' capital expenditures totaled only \$295,000. ^{21/} This five-fold increase in capital investment shows the industry is taking advantage of the relief period to improve its competitiveness and adjust to import competition.

The industry has also engaged in a variety of research and development activities. Efforts by individual producers include research and development on panelizing shakes. A shake panel would allow producers to make greater use of narrow width shakes. Increased use of narrow width shakes would improve utilization of lower quality western red cedar and white woods, as treatment of these alternative species is developed. ^{22/} Research and development expenditures by individual producers increased from only \$1,000 in 1985 to \$51,000 in 1987, showing a dramatic increase in industry efforts during the relief period. The industry has collectively funded research into the

^{20/} Report at A-19-A-20.

^{21/} Report at A-18.

^{22/} Pre-hearing Brief of Northwest Independent Forest Manufacturers at 9.

development of preservative-treated and fire-resistant hemlock and western white wood shakes and shingles.^{23/} The research and development of such alternative species may yield new raw material supplies to the industry over the long run.

All of these efforts by the industry show that it has made reasonable progress to adjust to import competition. The U.S. western red cedar shake and shingle producers have taken advantage of the relief granted to take prudent measures to adjust.

24/ 25/

Probable Economic Effect of Termination of Import Relief

The import relief provided by the President, along with other market factors, has increased the prices of western red cedar shakes and shingles, thus making it possible for the domestic industry to take measures to adjust to import competition and improve its condition. If relief were terminated as of December 7, 1988, there is no reason to believe that imports would not rapidly increase to their pre-relief levels. After the imposition of the import relief, imports decreased markedly. U.S. production responded vigorously and swiftly to rising U.S. red cedar shake and shingle prices.^{26/} The Canadian industry, which is two to three times larger than the U.S. industry and is similar in structure, would be able to increase exports to the United States rapidly in response to higher export prices

23/ Report at A-20.

24/ See "Additional Views of Commissioner Eckes."

25/ See Additional Views of Commissioner Rohr.

26/ Report at A-7, A-30.

received by Canadian mills if the relief were terminated. The resulting oversupply would drive U.S. prices down and lead to a decline in U.S. market share -- marginal U.S. producers would drop out of the industry and production would fall.

Any declines in prices for western red cedar shakes and shingles would result in a price-cost squeeze on the domestic industry. Red cedar logs are the primary cost component in western red cedar shake and shingle production, accounting for about 50 percent of net sales during 1985-1987.^{27/} During the period of import relief, western red cedar log prices rose significantly.^{28/} While it is likely that log prices would eventually adjust downward if relief were terminated, such adjustment is likely to lag behind the anticipated sharp decline in shake and shingle prices. The industry's increased capacity and productivity, combined with the likely surge in imports in response to termination of relief, would rapidly force down the price of red cedar shakes and shingles.

Moreover, other market factors, such as strong cyclical demand for shakes and shingles, appreciation of the Canadian dollar against the U.S. dollar, and a loggers' strike in Canada have also led to higher prices in the U.S. market and corresponding improvements in the condition of the domestic industry during the relief period. However, these factors are, by their nature, temporary. If relief were terminated, and any of these other factors were to reverse, the combined effect on the domestic industry could be devastating.

^{27/} Report at A-27, n.2.

^{28/} Report at A-26-A-29.

Terminating the relief at this time would diminish if not eliminate the benefits of import relief, and would lead to a decrease in U.S. production, loss of market share and employment, and declining sales and income. Declines in U.S. production would result in the least profitable (or the marginal) firms leaving the industry and/or surviving mills cutting back on their less profitable operations, thereby reducing their capacity utilization or their productive capacity. This would reduce the demand for mill labor and result in lower levels of employment and total wages paid. With the level of import relief scheduled to be reduced to 20 percent on December 7, 1988, some of these effects will be felt in the U.S. red cedar shake and shingle industry, but the effect of termination of the import relief would be much more pronounced.

Market conditions do not warrant a departure from the President's program of import relief. ^{29/} That program of staged reductions in the additional tariff will allow the industry to make a smoother adjustment to import competition. We therefore advise the President to continue his program of import relief.

^{29/} Commissioner Lodwick advises the President that the termination of import relief would have adverse effects on the domestic western red cedar shakes and shingles industry.

Additional Views of Commissioner Eckes

Those who review the Commission's Report in this investigation will observe that this key document includes the results of staff calculations concerning the probable economic effect of terminating import relief. [See Report at A-34, "Economic analysis of the probable economic effect of terminating or extending import relief."] This is not the first section 203 report to contain such estimates, which are based on the use of a static economic model. Similar estimates appear in appendices to the most recent section 203 reports on stainless steel and alloy tool steel and heavyweight motorcycles. 1/

Regular observers know that I seldom place heavy reliance on economic models and theoretical calculations. In joint views in the stainless steel section 203 investigation, I cautioned that:

[a]nalysis [of the impact of termination of relief] must be thoroughly grounded in actual performance indicators (eg. production, profits, employment, import and price trends, etc.) and not in hypothetical outcomes derived from static assumptions. The appropriate use of econometric models is to supplement this analysis, aiding as a tool of estimation, but not of actual determination. 2/

1/ Stainless Steel and Alloy Tool Steel, Inv. No. TA-203-16, USITC Pub. 1975 (May 1987); and Heavyweight Motorcycles, Inv. No. TA-203-17, USITC Pub. 1988 (June 1987).

2/ Stainless Steel and Alloy Tool Steel at 10.

In my view, those who rely heavily on such calculations in decision-making must be prepared to accept the consequences of mathematical and programming errors. The present investigation is a classic example. After the staff report was submitted to the Commission and approved at the Commission meeting on September 29, 1988, the Director of Economics circulated a memorandum alerting members of the Commission to programming errors which produced results different from those originally derived.^{3/}

^{3/} Memorandum EC-L-335, October 3, 1988.

ADDITIONAL VIEWS OF COMMISSIONER ROHR

The Commission's Office of Economics deserves credit for having discovered a programming error in estimating the net welfare effects of the tariff. This estimate was one of the many estimates the Office of Economics provided to the Commission during this investigation. The Office of Economics notified the Commission of the error sufficiently in advance of the due date of our advice. See Memorandum EC-L-355, October 3, 1988.

These corrections to the estimates show that eliminating the tariff would result in a significant domestic total net welfare loss. This result is noteworthy in that estimates of the effects of eliminating tariffs almost always show total net welfare gains.

For most products, import supply is highly responsive to changes in U.S. prices for the imported product. The U.S. market is usually but one of several markets to which exports from other countries can be easily diverted. Foreign production can usually be readily increased in response to an increase in U.S. prices for the imported product. For these reasons, in models that are used to generate these estimates, import supply is usually assumed to be highly responsive to changes in the U.S. import price. Price responsive import supply leads to estimates of total net welfare gains upon elimination or reductions in tariffs.

In the present case, however, the supply of imported western red cedar shakes and shingles is relatively unresponsive to changes in U.S. prices for these products. This is because the U.S. market consumes the vast majority of shakes and shingles worldwide, and there are no other significant markets from which to divert exports. Furthermore, the limited supply of western red cedar logs limits the supply responsiveness of Canadian shake and shingle producers. Therefore, most of the tariff is absorbed by Canadian producers. Based on the unresponsive import supply, the estimates show that eliminating the tariff would cause a total domestic net welfare loss.

The Office of Economics calculations support continuing the program of a gradual reduction in import relief, which I have recommended to the President in the joint views with Commissioner Eckes and Commissioner Lodwick. I also suggest that the U.S. Trade Representative request the Commission to annually review the progress the industry is making under the reduced tariff.

INFORMATION OBTAINED IN THE INVESTIGATION

Introduction

Following receipt of a request filed on July 1, 1988, by the United States Trade Representative under authority delegated by section 4(a) of Executive Order 11846, the Commission instituted investigation No. TA-203-18 under section 203(1)(2) of the Trade Act of 1974 for the purpose of gathering information in order that it might advise the President of its judgment as to the probable economic effect on the domestic industry of the termination of import relief presently in effect, pursuant to Presidential Proclamation 5498, with respect to shakes and shingles of western red cedar. 1/ The import relief presently in effect will terminate on June 6, 1991, unless extended, modified, or terminated by the President at an earlier date.

This relief was proclaimed following an investigation completed by the Commission on March 25, 1986 (investigation No. TA-201-56) 2/ under section 201 of the Trade Act of 1974. In that investigation, the Commission determined 3/ that wood shakes and shingles, provided for in item 200.85 of the Tariff Schedules of the United States (TSUS), are being imported into the United States in such increased quantities as to be a substantial cause of serious injury to the domestic industry producing articles like or directly competitive with the imported articles. 4/

Notice of the current investigation and of a public hearing to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the Federal Register of July 20, 1988 (53 F.R. 27410). 5/ The Commission hearing was held in Washington, DC, on August 16, 1988. 6/ The Commission reported its advice to the President on October 6, 1988.

Previous Commission Investigation

On October 7, 1982, a petition was filed with the Commission and the Department of Commerce by counsel on behalf of the United States Coalition for Fair Canadian Lumber Imports, a group of 8 trade associations and more than 350 domestic producers of softwood lumber products, alleging that imports of

1/ A copy of Presidential Proclamation No. 5498; a May 26, 1986, memorandum from the President to the United States Trade Representative requesting the advice of the Commission; and the request from the United States Trade Representative are presented in app. A.

2/ Wood Shakes and Shingles: Report to the President on Investigation No. TA-201-56 Under Section 201 of the Trade Act of 1974, USITC Publication 1826, March 1986.

3/ Vice Chairman Liebler and Commissioner Brunsdale dissenting.

4/ The Commission's investigation and determination covered all wood shakes and shingles; however, the President provided relief only with respect to western red cedar shakes and shingles.

5/ A copy of the Commission's Federal Register notice is presented in app. B.

6/ A list of witnesses who appeared at the Commission hearing is presented in app. C.

softwood shakes and shingles from Canada were being subsidized by the Government of Canada within the meaning of section 702 of the act (19 U.S.C. § 1671). Accordingly, effective October 7, 1982, the Commission instituted a preliminary countervailing duty investigation (No. 701-TA-198) under section 703(a) of the act (19 U.S.C. § 1671(a)) to determine whether there was a reasonable indication that an industry in the United States was materially injured, or was threatened with material injury, or the establishment of an industry in the United States was materially retarded, by reason of imports of such merchandise from Canada. As a result of that investigation, the Commission determined that there was a reasonable indication that an industry in the United States was materially injured by reason of imports from Canada of the softwood shakes and shingles which were alleged to be subsidized by the Government of Canada.

However, on May 31, 1983, the Department of Commerce determined that no benefits that constitute subsidies within the meaning of the countervailing duty law were being provided to manufacturers, producers, or exporters in Canada of softwood shakes and shingles. The total estimated net subsidy for each product was found by Commerce to be de minimis; therefore, the final subsidy determination was negative and the investigation was terminated.

The Products

Description and uses

The products covered in this investigation are shakes and shingles of western red cedar. These articles are thin, rectangular pieces of wood that have been split (shakes) or sawed (shingles) from a block or bolt $\frac{1}{4}$ of wood. Shakes and shingles are used in similar applications--primarily as a covering for the roof or side of a building. Shakes and shingles generally are laid in rows that overlap so that only a portion of each shake or shingle is exposed to weathering. Shakes and shingles are normally used interchangeably, although shakes are generally thicker than shingles and tend to be used more on roofs, where thickness is an advantage in the weathering process.

The usual commercial unit of measurement of shakes and shingles is a "square," the quantity required to cover 100 square feet of surface area. A square of shakes or shingles usually consists of between three and five bundles, depending on the size of the shake or shingle and the number of inches exposed to the weather. Because the exposed portion of a shake or shingle generally is greater on the sides of a building than on the roof, the number of shakes or shingles making up a wall square will usually be somewhat fewer than the number needed for a roof square.

Between 85 and 95 percent of the shakes and shingles produced in the United States are manufactured from western red cedar (Thuja plicata). The remainder are produced mainly from such species as northern white cedar (Thuja occidentalis) and redwood (Sequoia sempervirens), with other species being used less frequently. Shakes and shingles are produced from these woods because they display such desirable qualities as vertical grain (for ease in splitting), a low coefficient of expansion, high strength, relative freedom

1/ A short, cylindrical section of a log.

from checking 1/ and warping, light weight, good nail-holding qualities, and resistance to rot and insect damage.

In the trade, red cedar shakes and shingles are generally graded according to quality and size specifications, which are established by organizations with inspection services such as the Red Cedar Shingle & Handsplit Shake Bureau of Bellevue, WA. The Bureau is a marketing and inspection organization to which many U.S. and Canadian producers of red cedar shakes and shingles belong. There are five major grading bureaus that account for virtually all of the reported production of western red cedar shakes and shingles. 2/

Nearly all wood shakes and shingles are manufactured in random widths and are packed in bundles. Ten percent of the shingles in any shipment of a specified size category may be 1 inch over or under the specified length. There are generally four grades of shingles. The best quality, or No. 1, shingles represent the premium grade manufactured in each length. These shingles are all vertical-grained, knot-free, and are the preferred type for roofing. When used on a roof, the life of these shingles can generally be expected to be between 20 and 35 years, depending on the pitch of the roof and climate. When used as siding, these shingles will most likely outlast the useful life of the structure to which they are attached.

Second quality (No. 2) shingles may have some flat grain wood but must be clear of knots for three-quarters of the length as measured from the butt. No. 3 shingles are basically those that do not meet No. 1 or No. 2 standards, but are still usable. They must be clear of knots at least 6 inches from the butt. The fourth grade, which is known as undercoursing, is manufactured in 16-inch and 18-inch lengths and is used primarily as an underlayment for higher grade shingles.

In addition to these specifications, a small percentage of shingles are remanufactured into grooved sidewall shakes, or rebuted and rejointed shingles. Grooved sidewall shakes or shingles have been machined to have striated faces and parallel edges. Rebuted and rejointed shingles have been trimmed so that the edges are parallel and at a right angle to the butt.

Shakes certified by an inspection bureau are all 100 percent free of knots and vertical grained, eliminating the grade requirements used for shingles. There are three basic types of shakes--handsplit and resawn, tapersplit, and straight split--all of which are manufactured in various lengths. Handsplit and resawn shakes account for about 90 percent of total U.S. shake production.

Most of the shingles produced in the Eastern United States are manufactured from northern white cedar, for which there is no widely accepted inspection or marketing association similar to the Red Cedar Shingle & Handsplit Shake Bureau. Few, if any, shakes are produced from eastern species. Each mill is basically on its own to develop and maintain its markets for shingles. In addition, mills must maintain their own quality

1/ Splitting lengthwise.

2/ A small but undetermined quantity of shakes and shingles are ungraded and not reported to the grading bureaus. Such products are usually used locally.

control. 1/ Generally, these eastern shingles are graded on the basis of their being free of knots.

Production processes

Shingles are sawn from a block or bolt of wood that is obtained by sawing a log into smaller sections of the desired length. Bolts may be either split or sawn into blocks, which are then placed on a carriage for sawing into shingles. Although there are different types of carriages and saws, the actual method of producing shingles varies little between machines and has changed only slightly since the early 1900's.

Shakes are generally produced from blocks of wood that have been mechanically split from bolts. Blocks are then split into boards. Resawn shakes are produced from boards that are run diagonally through a bandsaw to produce two tapered shakes with one smooth face from each board. Straight-split shakes are produced by splitting blocks of wood into shakes of equal thickness from butt to tip. Tapersplit shakes are similar to straight-split, except the block is turned end over end with each split to achieve the tapered edge. Over 90 percent of the shakes produced in the United States and Canada are resawn. 2/

U.S. tariff treatment

The subject shakes and shingles enter the United States free of duty under TSUS item 200.85. The duty-free status was provided for in the Tariff Act of 1930, 3/ and for shakes and shingles other than western red cedar has been bound since January 1, 1948, as the result of a concession granted by the United States under the General Agreement on Tariffs and Trade. Western red cedar shakes and shingles were not bound. 4/ These articles are provided for in subheading 4418.5000 of the Harmonized Tariff Schedule of the United States, with a column 1 general duty-free rate.

1/ The State of Maine maintains grading rules for northern white cedar shingles under the Maine Commercial Standard; however, compliance with the grading rules is optional. According to officials with the Maine Forest Service, there are no Maine shingle mills registered to sell shingles under the Maine Commercial Standard.

2/ Based on data published by the Red Cedar Shingle & Handsplit Shake Bureau.

3/ Based on a trade agreement with Canada in 1936, the United States reserved the right to impose semiannually an absolute quota on red cedar shingles equal to 25 percent of the combined domestic shipments and imports during the preceding 6-month period. Such quotas were imposed. In a 1939 agreement with Canada, the United States reserved the right to impose a duty not exceeding 25 cents a square on red cedar shingles entered in any calendar year after 1938 in excess of a quantity of not less than 30 percent of the annual average, for the preceding 3 years, of the combined total of domestic shipments and imports. Such duties were imposed until January 1948, when the unconditional duty-free status under the Tariff Act of 1930 was restored.

4/ Most U.S. exports of wood shakes and shingles are to Canada, which also has duty-free status for imports.

Nature and Extent of Current Import Relief

On June 6, 1986, the President of the United States, by Proclamation 5498, imposed a temporary duty increase on U.S. imports of shakes and shingles of western red cedar. 1/ The imposition of the duty increase followed an affirmative finding by the Commission in investigation No. TA-201-56. The Presidential Proclamation provided additional duties on wood shakes and shingles of western red cedar of 35 percent ad valorem for the period June 7, 1986, through December 6, 1988, inclusive; 20 percent ad valorem for the period December 7, 1988, through December 6, 1990, inclusive; and 8 percent ad valorem for the period December 7, 1990, through June 6, 1991, inclusive, as set forth in items 924.30, 924.31, and 924.32, respectively, of the Appendix to the TSUS.

The Domestic Industry

U.S. producers

Production of shakes and shingles is concentrated in the Pacific Northwest, especially in the State of Washington. In 1987, the Red Cedar Shingle & Handsplit Shake Bureau reported that of its 146 member U.S. mills producing red cedar shakes and shingles, 93 were located in Washington, 36 in Oregon, 15 in Idaho, 1 in Montana, and 1 in Alaska. Bureau member mills also reportedly manufacture shakes and shingles from other species of wood such as sitka spruce, larch, Douglas-fir, and incense cedar.

The Bureau's 146 member U.S. mills accounted for about 60 percent of U.S. western red cedar shake and shingle production in 1987. Red cedar shake and shingle producers are largely capable of producing both shakes and shingles. In 1987, according to information supplied by the bureau, 49 percent of all U.S. mills produced wood shingles (8 percent produced only shingles) and 92 percent produced wood shakes (51 percent produced only shakes); 41 percent produced both products.

During 1985-87, the total number of firms producing western red cedar shakes and shingles declined in both Washington and Oregon. 2/ The total for the two States fell by 8 percent, from 224 firms in 1985 to 207 firms in 1986,

1/ A copy of the proclamation is presented in app. A.

2/ About 95 percent of the U.S. production of red cedar shakes and shingles occurs in Washington and Oregon (transcript of the hearing (transcript), p. 20).

and then increased by 2 percent to 212 firms in 1987, as shown in the following tabulation, compiled from data of the States' employment service offices: 1/

<u>Year</u>	<u>Washington</u>	<u>Oregon</u>	<u>Total</u>
1985.....	187	37	224
1986.....	173	34	207
1987.....	180	32	212

U.S. importers

As with U.S.-produced shakes and shingles, most imported shakes and shingles are sold to wholesalers, although a small percentage of imports are purchased directly by retailers, builders, and roofers. The wholesaler usually mixes the imported and U.S.-produced products together for sale, as quality differences are generally not a factor. Most wholesalers also handle a wide variety of other construction materials.

The U.S. Market and Channels of Distribution

Apparent U.S. consumption

U.S. consumption of western red cedar shakes and shingles increased by 10.6 percent, from 5.6 million squares in 1985 to 6.2 million squares in 1986, then declined by 11.7 percent to 5.4 million squares in 1987 (table 1). Consumption continued downward in January-June 1988, dropping an additional 3.0 percent to 2.5 million squares from 2.6 million squares in January-June 1987.

During this investigation, parties in support of continued relief have contended that data comparisons should be made for the 18-month periods prior to (January 1985-June 1986) and following (July 1986-December 1987) imposition of the temporary duty increase. Certain comparisons are presented on this basis in the following tabulation (in thousands of squares): 2/

1/ At the hearing, parties in support of continued relief (American Certified Shake & Shingle Bureau, Blue Label Inspection & Grading Bureau, Inc., Northwest Independent Forest Manufacturers, and Skagit Valley Red Cedar Shake Association) submitted a list of 242 firms that allegedly support the continuation of relief (transcript, p. 166 and exhibit 3). Parties opposed to continued relief contend that 82 of these are companies that no longer manufacture shakes and shingles, are listed twice under different names, or are known to oppose continued relief (Posthearing brief on behalf of the Fraser Valley Independent Shake & Shingle Producers Association (Fraser Valley posthearing brief), p. 1).

2/ Semiannual trade data for the period January 1985-June 1988 are presented in app. D.

Item	18-month period--		Percentage change following imposition of the duty
	January 1985- June 1986	July 1986- December 1987	
Production.....	2,492	3,508	+40.8
Exports.....	102	88	-13.7
Imports.....	6,382	4,970	-22.1
Consumption.....	8,772	8,390	- 4.4
Ratio (percent) to consumption:			
Imports.....	72.8	59.2	-18.7
Production.....	27.2	40.8	+50.0

Table 1

Western red cedar shakes and shingles: U.S. production, exports of domestic merchandise, imports for consumption, and apparent consumption, 1985-87, January-June 1987, and January-June 1988

Period	Production 1/	Exports	Imports	Apparent consumption	Share of consump- tion supplied by--	
					Imports	Production
Quantity (1,000 squares)						
1985.....	1,643	68	3,994	5,569	71.7	28.3
1986.....	2,130	60	4,088	6,158	66.4	33.6
1987.....	2,226	62	3,271	5,435	60.2	39.8
January-June--						
1987.....	2/ 1,102	24	1,521	2,599	58.5	41.5
1988.....	1,050	37	1,507	2,520	59.8	40.2
Value (1,000 dollars) 3/						
1985.....	62,638	3,060	156,879	216,457	72.5	27.5
1986.....	98,964	2,505	175,685	272,144	64.6	35.4
1987.....	119,883	2,437	163,010	280,456	58.1	41.9
January-June--						
1987.....	2/ 59,354	1,068	72,882	131,168	55.6	44.4
1988.....	2/ 69,562	1,030	88,997	157,529	56.5	43.5

1/ Estimated from data supplied by shake and shingle inspection bureaus and official statistics of the U.S. Department of Commerce.

2/ Estimated by Commission staff.

3/ Import values include the temporary duties imposed by the Presidential proclamation that became effective in June 1986.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Historically, consumption of shakes and shingles has been associated with the level of housing starts in the United States. Industry officials estimated during the 201 investigation that as much as 75 percent of U.S. consumption of shakes and shingles is used in new-home construction in years of normal housing activity. However, consumption of wood shakes and shingles has not kept pace with the general increase in housing construction during the 20th century. In the early 1900's annual consumption of shingles often exceeded 10 million squares. ^{1/} The long-term downward trend in U.S. consumption is due primarily to competition from other products--such as fiberglass and asphalt shingles, aluminum and plywood siding, tiles, and so forth ^{2/}--and to the limited availability of suitable old-growth cedar logs. ^{3/}

Virtually all the shakes and shingles consumed in the United States are used on the roofs or sides of buildings (particularly in residential applications) and, as mentioned previously, in years of near-average housing starts about 75 percent of U.S. consumption of shakes and shingles is on new structures, with re-roofing or re-siding accounting for the remainder. Because of this relationship with the residential home market, demand for shakes and shingles is highly dependent on housing construction and related factors, especially interest rates. The following tabulation presents apparent U.S. consumption of western red cedar shakes and shingles and U.S. single-family housing starts during 1985-87, January-June 1987, and January-June 1988:

<u>Period</u>	<u>U.S. consumption</u> <u>(1,000 squares)</u>	<u>Single-family</u> <u>housing starts</u> <u>(1,000 units)</u>	<u>Consumption per</u> <u>housing start</u> <u>(squares/unit)</u>
1985.....	5,569	1,072	5.2
1986.....	6,158	1,179	5.2
1987.....	5,435	1,146	4.7
January-June--			
1987.....	2,599	587	4.4
1988.....	2,520	545	4.6

Channels of distribution

Wood shake and shingle producers generally sell and distribute their products through wholesalers. However, some producers have developed direct contacts with builders or roofers, thus eliminating the middleman. If the contact happens to be a particularly aggressive builder or roofer, it will often give a producer a competitive edge during periods of slow housing starts. However, the bad-debt risk tends to rise when such direct contacts

^{1/} Report to the U.S. Senate on Red-Cedar Shingles . . . , U.S. Tariff Commission, Report No. 149, 1942.

^{2/} Parties opposed to continued relief contend that elimination of the tariff will do much to arrest the shift by builders and home owners toward substitutes. They stated that the Canadian Government, with funding from both Canadian and U.S. sources, announced a \$21 million program to combat the competition from non-wood products (Fraser Valley posthearing brief, p. 2).

^{3/} See the section of this report entitled "The supply of western red cedar."

are utilized, and in past years some producers reported problems with some of their direct contacts who would pay cash for their first few orders, later ask for credit on a larger order, and subsequently go bankrupt.

Most wood shakes and shingles produced in the United States are delivered by truck. The typical trailer load is about 200 squares, with a net worth of between \$8,000 and \$13,000 wholesale. A typical trucking cost (from the Olympic Peninsula to the Los Angeles area) is between \$1,000 and \$1,500 per truckload, or about \$5.00 to \$7.50 per square.

Wood shakes and shingles produced in the West destined for Eastern markets are shipped primarily by rail. The actual rail freight, not including transportation to and from the rail site, is about \$10 per square. Nearly all Eastern-produced shingles are shipped by truck.

Most of the market promotion of shakes and shingles in the United States and Canada is handled by the Red Cedar Shingle & Handsplit Shake Bureau, which maintains an inspection service that certifies the quality of each member mill's production. Other duties of the bureau include research and development, advertising, and market promotion. Although there are other grading and inspection associations in the West, the bureau is by far the largest. Grading standards are highly similar among the associations.

The greatest effect the bureau and other associations have had on the shake and shingle industry has probably been the standardization of grades. Before the uniform grading systems, U.S. producers often marketed shakes and shingles under their own mill grades. These mill grades were often of poor and irregular quality; some industry people state that such poor and erratic quality standards helped to open the U.S. roofing and siding markets to competitive products.

The primary competition for wood shakes and shingles is asphalt roofing shingles, which are used extensively throughout the country. Other products that compete with wood shakes and shingles include asbestos shingles, tile, metal roofing, aluminum and vinyl siding, other types of wood siding, and slate.

Condition of the U.S. Industry

The Commission received usable questionnaire responses from 73 producers of western red cedar shakes and shingles. Many of the 73 respondents have very small operations and could provide only partial data in response to the questionnaire. Respondents accounted for an average of 25.0 percent of U.S. production during 1985-87, as estimated by the staff from data reported by shake and shingle inspection bureaus. ^{1/} Of the 73 firms that provided

^{1/} Following receipt of the request from Ambassador Yeutter to advise the President of the probable effects of termination of the temporary duty, Acting Chairman Brunsdale informed the Ambassador by letter on July 14, 1988, that due to the nature of this industry, which consists of a large number of firms, many of them small, data collection would be extremely difficult in the time originally allotted. The Commission extended the deadline by 30 days but many firms were still unable to comply with the Commission's data request.

questionnaire data, 61 were in favor of the continuation of relief, none were opposed, 8 took no position, and the remaining 4 did not respond to the question.

U.S. production

U.S. production of western red cedar shakes and shingles increased annually from 1.6 million squares in 1985 to 2.2 million squares in 1987, an increase of 35.5 percent. 1/ Shakes accounted for about 70 percent of U.S. production during the period, as shown in the following tabulation based on inspection bureau data (in thousands of squares):

<u>Period</u>	<u>U.S. production of--</u>		
	<u>Shakes</u>	<u>Shingles</u>	<u>Total</u>
1985.....	1,175	468	1,643
1986.....	1,511	619	2,130
1987.....	1,605	621	2,226
January-June--			
1987.....	788	314	1,102
1988.....	700	350	1,050

Capacity and capacity utilization

Data on capacity and capacity utilization are not available for each of the many mills that produce shakes and shingles from western red cedar. Questionnaire data from the firms that reported both production and capacity are presented in the following tabulation:

<u>Period</u>	<u>Production</u>	<u>Capacity 1/</u>	<u>Capacity utilization 2/</u>
	-----(<u>1,000 squares</u>)-----	-----	(<u>Percent</u>)
1985.....	496	971	48.1
1986.....	650	1,067	59.1
1987.....	668	1,097	59.1
January-June--			
1987.....	326	565	61.2
1988.....	276	566	49.4

1/ Two firms supplied production data but were unable to supply data for capacity.

2/ Ratios are for firms that supplied data for both production and capacity.

1/ U.S. production increased from 2.5 million squares during the 18-month period prior to imposition of the temporary duty to 3.5 million squares during the 18-month period following imposition of the duty, or by 40.8 percent.

As shown above, capacity of respondent mills increased by 13.0 percent, from 971,000 squares in 1985 to 1.1 million squares in 1987. Capacity utilization by the reporting mills increased from 48.1 percent in 1985 to 59.1 percent in 1986 and 1987, then dropped to 49.4 percent in January-June 1988.

U.S. exports

U.S. exports of western red cedar shakes and shingles declined by 11.8 percent, from 68,000 squares in 1985 to 60,000 square in 1986, then increased by 3.3 percent to 62,000 squares in 1987 (table 2). During January-June 1988, exports totaled 37,000 squares, 54.2 percent more than the quantity exported in January-June 1987. ^{1/} Canada was the principal market for U.S. exports during the period. Other markets included the Bahamas, Jamaica, and the French Pacific Islands.

U.S. producers' inventories

During 1985-87, 21 of the producers that responded to the Commission's questionnaire held inventories of shakes and 14 producers held inventories of shingles. Yearend inventories of shakes declined by 12.1 percent from 10,677 squares in 1985 to 9,390 squares in 1987. Yearend inventories of shingles trended upward from 6,543 squares in 1985 to 11,666 squares in 1987, or by 78.4 percent, as shown in the following tabulation (in squares):

<u>Period</u>	<u>Shakes</u>	<u>Shingles</u>	<u>Total</u>
As of Dec. 31--			
1985.....	10,677	6,543	17,220
1986.....	8,396	12,647	21,043
1987.....	9,390	11,666	21,056
As of June 30--			
1987.....	9,495	6,773	16,268
1988.....	6,810	7,114	13,924

U.S. employment

Employment data are available for the States of Washington and Oregon, which account for about 95 percent of U.S. production of red cedar shakes and shingles. The number of shake and shingle production workers employed in those States increased by 22.4 percent, from 1,557 in 1985 to 1,906 in 1987. Total wages paid to those workers increased by 38.2 percent, as average annual

^{1/} U.S. exports declined from 102,000 squares during the 18-month period prior to imposition of the temporary duty to 88,000 squares during the 18-month period following imposition of the duty, or by 13.7 percent.

Table 2

Wood shakes and shingles: U.S. exports of domestic merchandise, by principal markets, 1985-87, January-June 1987, and January-June 1988

Market	1985	1986	1987	January-June--	
				1987	1988
Quantity (1,000 squares)					
Canada.....	43	47	53	21	31
Bahamas.....	5	5	3	1	1
Jamaica.....	4	2	1	1/	1
French Pacific Islands...	3	1	1/	0	0
All other.....	13	4	3	1	3
Total.....	68	60	62	24	37
Value (1,000 dollars)					
Canada.....	1,692	1,804	2,024	935	805
Bahamas.....	245	259	186	73	49
Jamaica.....	268	117	73	14	68
French Pacific Islands...	174	93	17	-	-
All other.....	681	232	136	46	107
Total.....	3,060	2,505	2,437	1,068	1,030
Unit value (per square) 2/					
Canada.....	\$39.01	\$38.02	\$37.84	\$44.36	\$26.04
Bahamas.....	47.58	50.98	57.17	57.47	37.19
Jamaica.....	73.78	56.46	72.57	56.89	55.92
French Pacific Islands...	57.26	76.14	39.95	-	-
All other.....	54.29	52.98	39.35	45.63	33.58
Average.....	45.18	41.61	39.53	45.25	28.09

1/ Less than 500 squares.

2/ Unit values are calculated from unrounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

wages increased yearly from \$14,030 per worker in 1985 to \$15,843 per worker in 1987, as shown in the following tabulation: 1/ 2/

Year	Number of workers			Total wages			Average annual wages per worker		
	Wash.	Oreg.	Total	Wash.	Oreg.	Total	Wash.	Oreg.	Avg.
				---(1,000 dollars)---			------(Dollars)-----		
1985..	1,262	295	1,557	18,629	3,215	21,844	14,761	10,899	14,030
1986..	1,425	277	1,702	22,343	3,477	25,820	15,679	12,553	15,170
1987..	1,588	318	1,906	26,026	4,172	30,197	16,389	13,119	15,843

Employment data were obtained by questionnaire from about 30 U.S. shake and shingle producers that in 1987 accounted for 24.9 percent of the number of workers as reported by State employment services and shown in the above tabulation. The number of production workers employed at the reporting establishments increased by 40.1 percent, from 339 in 1985 to 475 in 1987, then declined by 17.2 percent to 367 in January-June 1988 from 443 in January-June 1987 (table 3). Hours worked by those employees increased by 43.9 percent, from 410,000 hours in 1985 to 590,000 hours in 1987, but declined by 24.8 percent in January-June 1988 from hours worked in January-June 1987. 3/ Total wages paid by the responding firms increased by 52.3 percent from 1985 to 1987, then dropped by 24.1 percent in January-June 1988 from the corresponding 1987 period. Average hourly wages rose by 5.9 percent from \$11.02 in 1985 to \$11.67 in 1987. 4/ Total compensation increased by 46.0 percent from 1985 to 1987, and rose on an hourly basis from \$12.25 to \$12.45. Productivity was relatively constant during 1985-87 and then increased by 18.2 percent from January-June 1987 to January-June 1988.

1/ These data, provided by the States' employment service offices, are for SIC 2429, special product sawmills, which may include some data applicable to the cooperage industry.

2/ Employment increased by 25.8 percent from the 18-month period prior to the duty to the 18-month period following imposition of the duty (Hearing brief in support of continuing relief, p. 5).

3/ According to industry sources, a shake production line, requiring two or three men, can produce about 30 to 35 squares per 8-hour shift; a shingle line, requiring two men, can produce about 20 to 35 squares per 8-hour shift (see USITC Publication 1826, March 1986, p. A-5).

4/ Some producers reported that, prior to imposition of the temporary duty, they had reduced employee wages and/or benefits to cut costs and continue operation (see, e.g., transcript, p. 54). Mr. Jones, owner of Jones Shake Mill, Marble Mount, WA, stated at the hearing that his firm in the last 2 years has given 6 percent raises, restored medical benefits, and instituted a bonus attendance plan for employees (transcript, p. 36). Other firms reported in questionnaire responses that, subsequent to the temporary duty, they restored wages and/or benefits that they had cut prior to the duty.

Table 3

Western red cedar shakes and shingles: U.S. production and related workers, hours worked, and wages and total compensation paid, 1985-87, January-June 1987, and January-June 1988

Item	1985	1986	1987	January-June--	
				1987	1988
Number of workers.....	339	440	475	443	367
Hours worked (thousands)....	410	577	590	298	224
Wages paid (1,000 dollars)..	4,612	6,506	7,026	3,388	2,573
Total compensation (1,000 dollars).....	5,167	6,709	7,542	3,518	2,712
Average hourly wages.....	\$11.02	\$11.07	\$11.67	\$11.46	\$11.68
Average hourly total compensation.....	\$12.25	\$11.32	\$12.45	\$11.89	\$12.32
Productivity (squares/hour).	1.2	1.1	1.2	1.1	1.3

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Financial experience of U.S. producers

Forty-four producers, accounting for 32 percent of estimated U.S. production of western red cedar shakes and shingles in 1987, ^{1/} furnished usable financial information on their overall establishment and shake and shingle operations. Forty-two of the 44 firms produce mainly shakes and/or shingles in their establishments; hence, financial data only on shake and shingle operations are presented in this report.

Income-and-loss data are shown in table 4. One firm suspended its operation in 1985. Two firms started their shake and shingle operations in 1986 and four others opened in 1987. Aggregate net sales of red cedar shakes and shingles rose by 78 percent, from \$28.1 million in 1985 to \$49.9 million in 1987. During the interim periods ended March 31, net sales declined by 12 percent, from \$7.1 million in 1987 to \$6.2 million in 1988.

In 1985, the reporting firms sustained an aggregate net loss of \$681,000, equivalent to 2.4 percent of sales. In 1986 and 1987, U.S. producers of red cedar shakes and shingles experienced their most profitable years since 1980. U.S. firms reported a pre-tax net income of \$3.8 million, or 9.5 percent of net sales in 1986 and \$4.4 million, or 8.8 percent of net sales in 1987. During the interim period ended March 31, 1988, net income before income taxes increased to \$507,000, or 8.2 percent of net sales, compared with \$422,000, or 6.0 percent of net sales, in the corresponding period of 1987.

^{1/} Coverage in this section of the report generally exceeds coverage in other sections that utilize questionnaire data because several companies that did not provide questionnaire data submitted financial statements and income tax forms that contained sufficient detail to be used in lieu of such data.

Table 4

Income-and-loss experience of U.S. producers 1/ on their operations producing western red cedar shakes and shingles, accounting years 1985-87, and interim periods ended Mar. 31, 1987, and Mar. 31, 1988

Item	1985	1986	1987	Interim period ended Mar. 31--2/ 1987 1988	
				1987	1988
Value (1,000 dollars)					
Net sales.....	28,068	39,527	49,931	7,059	6,180
Other income or (expense) <u>3/</u>	318	385	500	(7)	4
Total sales and other income.....	28,386	39,912	50,431	7,052	6,184
Operating expenses:					
Cost of wood and other materials.....	15,580	19,386	26,133	3,417	2,986
Labor <u>4/</u>	6,468	8,390	10,759	1,491	1,213
Fuel and energy.....	562	664	795	123	116
Interest expense.....	540	462	435	88	77
Depreciation.....	668	739	944	141	166
All other expenses....	5,249	6,504	6,956	1,370	1,119
Total operating ex- penses.....	29,067	36,145	46,022	6,630	5,677
Net income or (loss) before income taxes...	(681)	3,767	4,409	422	507
Share of net sales (percent)					
Cost of wood and other materials.....	55.5	49.0	52.3	48.4	48.3
Labor.....	23.0	21.2	21.5	21.1	19.6
Fuel and energy.....	2.0	1.7	1.6	1.7	1.9
Interest expense.....	1.9	1.2	0.9	1.2	1.2
Depreciation.....	2.4	1.9	1.9	2.0	2.7
All other expenses.....	18.7	16.5	13.9	19.4	18.1
Total operating ex- penses.....	103.6	91.4	92.2	93.9	91.9
Other income or (ex- pense).....	1.1	1.0	1.0	(0.1)	0.1
Net income or (loss) be- fore income taxes.....	(2.4)	9.5	8.8	6.0	8.2
Number of firms reporting					
Net losses.....	21	13	6	4	8
Data <u>1/</u> <u>2/</u>	37	40	44	18	21

1/ One producer's operation was shut down in 1985. Two and four producers commenced operations in 1986 and 1987, respectively.

2/ Three producers started their operations after Mar. 31, 1987. Data for one producer are for its entire fiscal year ended Mar. 31.

3/ For some producers, this line item includes net income from chip sales, log sales, and hog fuel.

4/ Labor includes officers' salaries for some of the companies.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Selected individual operating expenses are also presented in table 4. These data show that wood and other materials are the major cost item. Such costs declined from 55.5 percent of net sales in 1985 to 49.0 percent in 1986, but then increased to 52.3 percent in 1987. These costs remained steady at about 48.0 percent during both interim periods. The second major expense is labor, which includes officers' salaries for some firms. This cost, as a share of net sales, decreased from 23.0 percent in 1985 to 21.5 percent in 1987, and further declined to 19.6 percent in interim 1988. Officers' salaries may fluctuate during each year based on an individual firm's financial performance and an individual officer's tax status. Fuel and energy, interest expense, and depreciation are not significant expenses in relation to net sales. Such expenses each varied between a low of 0.9 percent and a high of 2.7 percent during the periods for which data were collected. All other operating expenses, which include repairs and maintenance, inspection fees, taxes and licenses, insurance, telephone, supplies and postage, dues and subscriptions, accounting and legal, and other general and administrative expenses, fluctuated between 14 and 19 percent of net sales during 1985 to interim 1988. Other income or expense items, which include net income from chip sales, log sales, and hog fuel for some producers, and other miscellaneous income or expenses like rental income, any gain or loss on disposal of fixed assets, interest or dividend income, and so forth, increased from \$318,000 in 1985 to \$500,000 in 1987.

The number of firms reporting net losses fell from 21 of 37 in 1985 to 6 of 44 in 1987. During the interim period ended March 31, 1988, the number of firms reporting net losses was 8 of 21, compared with 4 of 18 in the corresponding period of 1987.

* * * * *

Financial condition and rate of return of U.S. producers.--Selected financial information for 39 of 44 U.S. producers that provided income-and-loss data in 1987 are presented in table 5. These 39 firms represented about 30 percent of U.S. production of cedar shakes and shingles in 1987.

Total assets of the responding firms increased by 38 percent, from \$6.9 million in 1985 to \$9.5 million in 1987. During the interim period ended March 31, 1988, aggregate assets of reporting firms fell by 13 percent to \$2.4 million from \$2.8 million in the corresponding period of 1987.

Total capital or stockholders' equity rose by more than fourfold, from \$605,000 in 1985 to \$3.3 million in 1987. Aggregate capital of reporting firms increased by 150 percent, from \$109,000 in the interim period ended March 31, 1987, to \$272,000 in the corresponding period of 1988.

Table 5
Selected financial information of U.S. producers ^{1/} on their operations producing western red cedar shakes and shingles, accounting years 1985-87, and interim periods ended Mar. 31, 1987, and Mar. 31, 1988

Item	1985	1986	1987	Interim period ended Mar. 31--2/	
				1987	1988
Net sales (1,000 dollars)....	24,731	32,844	40,954	6,471	5,233
Net income or (loss) before income taxes (1,000 dollars).....	(1,167)	2,040	2,507	284	152
Total assets ^{3/} (1,000 dollars).....	6,869	8,291	9,469	2,796	2,428
Total liabilities ^{3/} (1,000 dollars).....	6,264	6,729	6,129	2,687	2,156
Capital or stockholders' equity ^{3/} (1,000 dollars)..	605	1,562	3,340	109	272
Debt-to-equity ratio (times).	10.3	4.3	1.8	24.7	7.9
Ratio of net income or (loss) before income taxes to--					
Net sales (percent).....	(4.7)	6.2	6.1	4.4	2.9
Total assets (percent)...	(17.0)	24.6	26.5	10.2	6.3
Capital or stockhold- ers' equity (percent)..	(192.9)	130.6	75.1	260.6	55.9
Number of firms report- ing data ^{1/} ^{2/}	32	35	39	15	18

^{1/} One producer's operation was shut down in 1985. Two and four producers commenced operations in 1986 and 1987, respectively.

^{2/} Three producers started their operations after Mar. 31, 1987. Data for one producer are for its entire fiscal year ended Mar. 31.

^{3/} These data are as of the end of the fiscal periods.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

The debt/equity ratio is computed to determine the debt-paying ability of an entity. Further, this ratio helps to determine how well creditors are protected in case of insolvency of a company. The debt-to-equity ratio of the responding firms decreased from 10.3 in 1985 to 1.8 in 1987, and from 24.7 in interim 1987 to 7.9 in interim 1988.

Additional measures of profitability include return on total assets and return on capital or stockholders' equity. Return on total assets turned around from a negative 17.0 percent in 1985 to a positive 24.6 percent in 1986. This ratio increased to a positive 26.5 percent in 1987. The ratio dropped to 6.3 percent in interim 1988 from 10.2 percent in interim 1987. Return on capital or stockholders' equity showed a similar trend, except in 1987 when capital increased significantly. Except for a slight increase in the return on total assets in 1987, both ratios followed a trend similar to the trend for the ratio of net income or loss to net sales.

Capital expenditures.--Twenty-six producers, accounting for 22 percent of U.S. production of cedar shakes and shingles in 1987, provided usable data on capital expenditures for building, machinery, equipment, and fixtures used for producing shakes and shingles. Capital expenditures increased sharply from 1985 to 1987, as new firms entered the industry and existing firms upgraded equipment and made other improvements. Such data are presented in the following tabulation (in thousands of dollars):

<u>Period</u>	<u>Capital expenditures</u>
1985.....	295
1986.....	837
1987.....	1,430
Interim period ended Mar. 31-- <u>1/</u>	
1987.....	114
1988.....	150

1/ Eight producers reported for interim 1987 and 11 producers, including 3 new entrants, reported for interim 1988.

Research and development expenses.--Eleven producers, accounting for 12 percent of U.S. production of cedar shakes and shingles in 1987, reported research and development expenses. These data are shown in the following tabulation (in thousands of dollars):

<u>Period</u>	<u>Research and development expenses</u>
1985.....	1
1986.....	20
1987.....	51
Interim period ended Mar. 31--	
1987.....	3
1988.....	1

Several producers indicated that they contributed to "NIFM," a shake and shingle research development fund during the period under investigation.

Efforts by U.S. Producers to Adjust to Import Competition

Actions taken by U.S. producers of western red cedar shakes and shingles subsequent to the President's provision of import relief were reported by the producers in response to the Commission's questionnaire. Each producer was requested to provide details of actual adjustments made in order to better compete with imports, adjustments currently underway, and what additional adjustments are planned if relief is extended.

Thirty-three of the 73 responding mills did not report making any adjustments subsequent to the implementation of import relief, nor did they report future plans for adjustments. Forty mills responded that adjustments have been made and/or are currently underway. Fourteen mills have plans for adjustments should relief be extended.

Adjustments made by the mills range from basic building maintenance and upgrading of equipment to the building of an entirely new mill with all new equipment. 1/ Seven producers built new mills and purchased new equipment, at costs ranging from \$15,000 to \$60,000. An additional two mills merely relocated in order to be closer to their wood supply and thereby reduce transportation costs. One mill relocated next to the cedar lumbermill from which it purchases raw material. Another mill relocated to Alaska.

The most common adjustment made by producers was the purchase and installation of additional saws such as automatic (shake) saws, bandsaws, flatsaws, tapersaws, and shingle machines. Automatic saws were favored by 17 mills buying one or more at prices ranging from \$11,000 to \$26,000. Another three mills plan to purchase an automatic saw should relief be extended. Automatic saws can increase production and be operated by an unskilled operator in place of a skilled sawyer at lower wages and lower insurance costs. There presently is a shortage of trained sawyers, as many sawyers left the industry due to uncertainty of employment in the period prior to the imposition of relief.

Shingle machines were also popular, with five mills purchasing one or more and another five mills planning to buy one should relief be extended. Prices for shingle machines range from \$10,000 to \$16,000. Shingle machines allow the producer to utilize a lower grade of log that is unsuitable for use in shake production. Whereas shingles can be easily manufactured from low quality logs or bolts, shake manufacture requires higher quality wood. In recent years, competition from lumbermills and foreign purchasers of logs has forced the mills to frequently buy wood of inferior quality. Thirteen mills bought a variety of saws such as bandsaws, tapersaws, ridgesaws, flatsaws, or cut-off saws at a cost of \$2,000 to \$10,000 per saw. Producers feel these saws make their production more efficient and involve less waste of wood.

Seven mills installed shake splitters. Splitters cost from \$6,000 to \$8,000 and are able to split thinner shakes, thus increasing the yield from each log. Three mills plan to install a splitter should relief be extended. Log decks were installed by eight mills at a cost of \$8,000 to \$40,000. The log decks enable producers to use both logs and salvage bolts. 2/ Depending on the price of the raw material, the producers can switch back and forth between

1/ Parties opposed to continued relief contend that because of the declining red cedar resource, adjustment measures that involve new capital investment in facilities to manufacture red cedar shakes and shingles are pointless. Such measures allegedly do nothing to adjust to the imminent depletion of the old-growth resource (Fraser Valley posthearing brief, p. 6).

2/ Parties in support of continued relief state that, as a result of the high price of shakes and shingles today, there is a much higher utilization of red cedar bolts that can be obtained from salvaging logging operations, which could not be economically justified under pretariff prices (Posthearing brief in support of continuing relief, pp. 2-3).

the two. Four mills upgraded their shingle machines by converting them to hydraulic controls. This results in fewer breakdowns, decreases maintenance costs, and reduces downtime. The process costs from \$4,000 to \$12,000.

Three mills built sawmills at costs from \$8,000 to \$45,000 to be able to saw logs that are too small for shake and shingle production and otherwise would be hauled away at a high cost. An additional mill has plans to build a sawmill should the relief be extended. Wood chippers, often referred to as "hogs," were installed by three producers. The wood chipper allows the mill to produce a marketable by-product from its wood waste (hog fuel) that otherwise would be dumped or burned on site. The dramatic rise in the price of logs has resulted in many shake and shingle producers making efforts to use all scraps of wood, even what was previously destined for the burner.

The most potentially far-reaching plans for adjustment should relief be extended are those of two large mills that hope to build treatment plants. Fire-retardant treatment can add 50 percent to the consumer price of shakes and shingles. By treating their own shakes and shingles, the mills could lower the price to the end user and capture additional sales and profits.

A fundamental problem the shake and shingle industry faces is an increasingly short supply of old growth western red cedar logs. Because old growth cedar on private lands is nearly depleted, U.S. producers are largely dependent on public lands. The Northwest Independent Forest Manufacturers (NIFM) entered into an agreement with the U.S. Forest Service Forest Products Laboratory to jointly sponsor research into the development of preservatively treated and fire-resistant hemlock and western whitewood shakes and shingles. The research is being jointly funded by the industry and Federal Government. The U.S. Forest Service Lab in Madison, WI, is heading the research activities, with field testing areas in Louisiana, Texas, Oregon, and Idaho.

At the hearing, testimony given by Mr. Robert Koeppen on behalf of the U.S. Forest Service reported on the status of the ongoing research. Tests were begun in November 1986 using oilborne and waterborne preservative and fire-retardant treatments on shingles and tapersawn shakes made from hemlock and pacific fir. These whitewoods, particularly hemlock, are not as highly esteemed species as western red cedar and consequently are relatively underutilized. Oilborne treatments are preferred because they do not leech out of the wood, and because of their high flash point and ability to reduce splitting. Shingles were found to be unprofitable due to their excessive curling and splitting and therefore were dropped from further research. The thicker tapersawn shakes performed better, although not perfectly. Western red alder and pine were also tested and found to produce a satisfactory shake that is readily treated. Mr. Koeppen stated that the lab feels it has developed a patentable process of treatment for fire retardant and wood preservative and hopes to have a marketable product ready for commercial use sometime after 1991. 1/

1/ Transcript, pp. 6-15.

Testimony at the hearing from parties opposed to continued relief disputed the utility of such research. Mr. James Arthurs, Co-Chairman of the Fraser Valley Independent Shake & Shingle Producers Association, after conducting his own tests, believes the structural integrity of these alternative species to be far inferior to that of red cedar. He alleged that the overwhelming majority of western hemlock and Pacific and Douglas fir logs do not split properly and, as a result, cannot be made into handsplit shakes. He further alleged that shakes and shingles produced from such species are highly susceptible to splitting, checking, decay, and rot after a short period of exposure on a roof. Hemlock and fir also weigh close to three times as much as cedar and their use would therefore increase the already high transportation and building costs. Mr. Arthurs contends that none of the available preservatives are chemically compatible with the fire-retardant treatments. Further, the Environmental Protection Agency and American Wood Preservers Association have stringent testing and approval requirements that must be met before a new preservative can be marketed. During the hearing he stated several times his concerns about the nature of the research conducted by the U.S. Forest Service and the difficulty of marketing a new species to consumers accustomed to red cedar. 1/

Canadian Shipments of Shakes and Shingles

Counsel for the Fraser Valley Independent Shake & Shingle Producers Association provided shipment and export data to the Commission for red cedar shakes and shingles manufactured in Canada. 2/ The Canadian shake and shingle mills are all located in British Columbia. 3/ Total shipments of Canadian red cedar shakes and shingles declined by 21.0 percent, from 4.8 million squares in 1985 to 3.8 million squares in 1987 and are projected to decline to 3.5 million squares in 1988, or by an additional 7.4 percent. 4/ Shipments in the Canadian home market declined from 578,000 squares in 1985 to 457,000 squares in 1987 and are projected to decline to 423,000 squares in 1988.

According to the Canadian data, total exports declined by 21.0 percent, from 4.2 million squares in 1985 to 3.3 million squares in 1987. 5/ Exports are projected to decline to an estimated 3.1 million squares in 1988. Exports to the United States accounted for 94.2 percent of total exports in 1985, 99.5

1/ Ibid., pp. 113-122.

2/ Letter of Aug. 29, 1988. Counsel obtained data from Dr. Jock Dobie of Statistics Canada. Dr. Dobie used export shipments to estimate total shipments, assuming that exports accounted for 88 percent of total shipments in each period. Thus, trends for home-market and total shipments mirror the trend for total exports.

3/ Transcript, p. 113.

4/ In the last 2 years, several large firms, including Classic Shake & Shingle (now reorganized as "Interfor"), Canadian Forest Products, Ltd.'s Huntington Merritt Division, and Stave Cedar Lake Mills, Inc. (formerly B.C. Forest Products, Ltd.), permanently closed shake and shingle mills that had an aggregate annual capacity of 700,000 squares (Fraser Valley prehearing brief, p. 24, and transcript, p. 126).

5/ According to U.S. Department of Commerce statistics, U.S. imports of red cedar shakes and shingles declined by 18.1 percent from 1985 to 1987.

percent in 1986, and 97.7 percent in 1987, as shown in the following tabulation (in thousands of squares):

<u>Item</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u> ^{1/}
Total shipments.....	4,818	4,544	3,805	3,524
Home-market shipments.....	578	545	457	423
Exports to--				
United States.....	3,993	3,978	3,270	^{2/} 3,008
All others.....	247	21	78	^{2/} 93
Total.....	4,240	3,999	3,348	3,101

^{1/} Projected.

^{2/} Estimated by Commission staff.

U.S. Imports and Market Penetration

U.S. imports

U.S. imports of western red cedar shakes and shingles, nearly all of which were from Canada, increased by 2.3 percent, from 4.0 million squares in 1985 to 4.1 million squares in 1986, then declined by 20.0 percent to 3.3 million squares in 1987 (table 6). Imports continued to decline in January-June 1988, dropping 0.9 percent from the level of imports in January-June 1987. ^{1/} Shakes and shingles of western red cedar accounted for about 80 percent of the total imports of all wood shakes and shingles during 1985-87. The ratio of imports to U.S. production declined from 243.1 percent in 1985 to 191.9 percent in 1986 and to 146.9 percent in 1987. The ratio of imports to production increased from 138.0 percent in January-June 1987 to 143.5 percent in the corresponding period of 1988.

Imports of shakes and shingles of wood other than western red cedar followed a similar trend, increasing 21.2 percent from 1985 to 1986 and then declining by 20.2 percent from 1986 to 1987. Such imports continued to fall in January-June 1988, dropping 27.0 percent from the level of imports in January-June 1987.

Market penetration

Imports of western red cedar shakes and shingles supplied a large but decreasing share of the U.S. market during 1985-87. The share of the market supplied by imports declined from 71.7 percent in 1985 to 66.4 percent in 1986 and to 60.2 percent in 1987 (table 7). During January-June 1988, the market

^{1/} Imports declined from 6.4 million squares during the 18-month period prior to imposition of the temporary duty to 5.0 million squares in the 18-month period following imposition of the duty, or by 22.1 percent.

Table 6

Wood shakes and shingles: U.S. imports for consumption, from Canada and all other sources, by types of wood, 1985-87, January-June 1987, and January-June 1988

Item	1985	1986	1987	January-June--	
				1987	1988
Quantity (1,000 squares)					
Western red cedar:					
Canada.....	3,993	4,086	3,270	1,521	1,507
All other.....	2	1	1	1/	1/
Total.....	3,994	4,088	3,271	1,521	1,507
Other:					
Canada.....	887	1,066	858	507	369
All other.....	1/	9	1/	1/	1
Total.....	887	1,075	858	507	370
Total:					
Canada.....	4,880	5,152	4,127	2,028	1,876
All other.....	2	10	1	1	1
Total.....	4,882	5,162	4,129	2,028	1,877
Value (1,000 dollars) 2/					
Western red cedar:					
Canada.....	156,816	175,632	162,961	72,856	88,981
All other.....	62	53	49	26	16
Total.....	156,879	175,685	163,010	72,882	88,997
Other:					
Canada.....	22,544	25,897	22,508	11,968	11,533
All other.....	19	57	30	19	40
Total.....	22,564	25,954	22,538	11,987	11,573
Total:					
Canada.....	179,361	201,529	185,469	84,824	100,514
All other.....	82	110	79	45	56
Total.....	179,442	201,639	185,548	84,869	100,570
Unit value (per square)					
Western red cedar:					
Canada.....	\$39.28	\$42.98	\$49.84	\$47.90	\$59.05
All other.....	34.76	53.00	49.00	55.82	63.93
Average.....	39.28	42.98	49.84	47.92	59.06
Other:					
Canada.....	25.42	24.30	26.24	23.61	31.26
All other.....	65.64	3/ 6.32	94.09	3/ 137.18	45.22
Average.....	25.43	24.15	26.27	23.64	31.29
Average:					
Canada.....	36.76	39.12	44.94	41.83	53.58
All other.....	39.13	11.00	79.00	60.93	56.00
Average.....	36.76	39.06	44.94	41.85	53.58

1/ Less than 500 squares.

2/ Landed duty-paid value. Values for western red cedar shakes and shingles include the temporary duties imposed by the Presidential proclamation that became effective in June 1986.

3/ These values reflect apparent reporting errors.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table 7

Western red cedar shakes and shingles: Shares of U.S. consumption supplied by U.S. production and U.S. imports, 1985-87, January-June 1987, and January-June 1988

Item	1985	1986	1987	January-June--	
				1987	1988
<u>Percent of quantity</u>					
Share of consumption supplied by--					
U.S. production.....	28.3	33.6	39.8	41.5	40.2
U.S. imports.....	71.7	66.4	60.2	58.5	59.8
Total.....	100.0	100.0	100.0	100.0	100.0
<u>Percent of value</u>					
Share of consumption supplied by--					
U.S. production.....	27.5	35.4	41.9	44.4	43.5
U.S. imports.....	72.5	64.6	58.1	55.6	56.5
Total.....	100.0	100.0	100.0	100.0	100.0

Source: Compiled from data supplied by shakes and shingles inspection bureaus and from official statistics of the U.S. Department of Commerce.

share supplied by imports increased to 59.8 percent, up from 58.5 percent in January-June 1987. 1/

Prices

Wood shakes and shingles are generally sold on an f.o.b. mill basis. Prices are determined by negotiation between buyers and sellers and frequently change daily. Price data, compiled from information obtained from surveying firms in the industry, are published in the Random Lengths' Weekly Lumber Price Guide. These published prices are often used as a reference point in price negotiations between buyers and sellers of both domestic and Canadian western red cedar shakes and shingles. Some manufacturers reportedly sell strictly at the Random Lengths' price. 2/

1/ U.S. market share supplied by imports declined from 72.8 percent during the 18-month period prior to imposition of the temporary duty to 59.2 percent during the 18-month period following imposition of the duty, a decline of 18.7 percent. The market share supplied from U.S. production increased from 27.2 percent to 40.8 percent during those periods, an increase of 50.0 percent.

2/ Random Lengths' data include a single price for both U.S.-produced and Canadian shakes and shingles that are sold in the U.S. market. The Canadian prices included in the Random Lengths' data include the 35 percent ad valorem tariff.

Published prices for the period January 1985 to June 1988 for the two largest selling shakes and the two largest selling shingles are presented in table 8. These products account for the majority of shakes and shingles sold in the United States: 1/

Product 1: #1, 1/2" x 24" handsplit and resawn western red cedar shakes

Product 2: #1, 3/4" x 24" handsplit and resawn western red cedar shakes

Product 3: #1, (blue label), 5X (16-inch) western red cedar shingles

Product 4: #1, (blue label), Perfection (18-inch) western red cedar shingles

Product 1 accounts for approximately 70 percent of western red cedar shakes sold in the United States, and product 2 accounts for roughly 20 percent. Products 3 and 4 account for 25 and 41 percent, respectively, of the western red cedar shingles sold in the United States. 2/

Price trends

The prices published by Random Lengths are f.o.b. wholesale prices based on telephone surveys of numerous U.S. and Canadian producers of wood shakes and shingles. The prices are for both domestic and Canadian wood shakes and shingles 3/ that are sold in the United States and are weighted by the volume sold. The prices for all four products fluctuated but increased overall during the period January 1985 to June 1988. 4/ Prices for product 1, #1, 1/2" x 24" western red cedar shakes, increased 88 percent, from \$37.00 per square in January-March 1985 to \$69.50 in April-June 1988. Prices for product 2, #1, 3/4" x 24" western red cedar shakes, increased 83 percent, rising from \$43.83 per square in January-March 1985 to \$80.25 per square in April-June 1988.

1/ Questionnaires with usable purchase prices were received from only a few wholesalers, therefore no reliable purchase price series based on questionnaires can be presented. Prices submitted by wholesalers were consistent with Random Lengths' data.

2/ Estimates of product share of total sales in the U.S. market are based on the Red Cedar Shingle & Handsplit Shake Bureau's production reports for 1985, 1986, and 1987.

3/ Random Lengths does not publish separate price series for domestic and Canadian red cedar shakes and shingles.

4/ Random Lengths' price data for wood shakes and shingles are reported on a weekly basis. Quarterly prices were calculated by taking a simple average of the prices for the 3 months in each quarter.

Table 8
Published prices of western red cedar shakes and shingles sold in the United States, net f.o.b. mill, by quarters, January 1985-June 1988

Period	(Per square)			
	Western red cedar shakes 1/		Western red cedar shingles 2/	
	Product 1	Product 2	Product 3	Product 4
1985:				
Jan.-Mar.....	\$37.00	\$43.83	\$41.08	\$43.17
Apr.-June.....	36.67	43.50	44.25	48.50
July-Sept.....	37.42	46.25	52.17	49.67
Oct-Dec.....	38.67	47.83	49.33	42.92
1986:				
Jan.-Mar.....	39.17	46.75	43.58	45.92
Apr.-June.....	41.75	51.33	50.50	54.58
July-Sept.....	47.42	59.25	49.33	58.92
Oct-Dec.....	60.42	68.75	57.92	63.50
1987:				
Jan.-Mar.....	54.17	64.00	54.08	59.75
Apr.-June.....	51.50	61.50	57.42	62.50
July-Sept.....	54.00	64.92	65.67	72.00
Oct-Dec.....	55.25	69.58	67.17	68.75
1988:				
Jan.-Mar.....	60.92	71.50	66.67	73.83
Apr.-June.....	69.50	80.25	83.00	90.75

1/ Product 1: #1, 1/2" x 24" handsplit and resawn western red cedar shakes.
Product 2: #1, 3/4" x 24" handsplit and resawn western red cedar shakes.
2/ Product 3: #1, (blue label), 5X (16-inch) western red cedar shingles.
Product 4: #1, (blue label), Perfection (18-inch) western red cedar shingles.

Source: Random Lengths' Lumber Price Guide.

The prices for the two western red cedar shingle products also had large overall increases during the period. Prices for product 3, #1, 5X (blue label) shingles, increased 102 percent during the period, rising from \$41.08 per square in January-March 1985 to \$83.00 per square in April-June 1988. In April-June 1988, prices for product 4, #1 (blue label) Perfection (18-inch) shingles, were also more than double the level in January-March 1985; prices increased 110 percent from \$43.17 per square to \$90.75 per square during the period.

Factors affecting the shake and shingle market

Stumpage prices.--U.S. production of shakes and shingles is concentrated in the Pacific Northwest region of the United States, and a large portion of the red cedar logs used by U.S. shake and shingle producers comes from National Forests in this area. The prices paid for stumpage on public land are generally determined during open auctions, involving either oral or sealed

bids, with the sale being awarded to the highest bidder. These bid prices are available from the U.S. Forest Service and from most public owners, by region and species. The stumpage purchased is usually sold under contracts lasting from 3 to 5 years in duration. The stumpage is not harvested immediately, rather under the contract it is usually harvested over a 3- to 5-year period. Due to the nature of these contracts, the prices bid are reflective of expected future market conditions. ^{1/} Therefore, the stumpage prices are not representative of prices currently being paid for timber harvested even though they often serve as a point of reference.

Average stumpage prices published by the U.S. Forest Service for cedar sold in the Pacific Northwest region are presented in table 9. During the period of January 1985 to June 1988 bid prices for stumpage fluctuated dramatically. Stumpage prices increased irregularly from \$140.40 per thousand board feet in January-March 1985 to \$350.90 per thousand board feet in July-September 1987. In the fourth quarter of 1987 average stumpage prices decreased to \$141.80 per thousand board feet.

Log prices. --Cedar logs are the most important input to producers of shakes and shingles. ^{2/} ^{3/} Price data for cedar logs is compiled by several different sources that rely on surveys, either telephone or written, of mills. Because of this, log prices vary from source to source; however, most demonstrate overall increases in log prices in the past few years. The

^{1/} See USITC Publication 1826, March 1986, p. A-63.

^{2/} Cost of wood to U.S. producers of shakes and shingles was about 50 percent of net sales during 1985-87 (see table 4).

^{3/} U.S. producers of shakes and shingles use red cedar logs that are grown in the northwestern region of the United States. Since June 1986, there has been a total ban on exports of Canadian red cedar logs; thus, U.S. producers of shakes and shingles must rely on the supply of red cedar logs in the United States.

Table 9
Average prices of cedar stumpage 1/ sold by the U.S. Forest Service, by
quarters, January 1985-June 1988

Period	Price <u>2/</u>	Index
1985:		
Jan.-Mar.....	\$140.40	100.00
Apr.-June.....	109.80	78.21
July-Sept.....	117.10	83.40
Oct-Dec.....	129.20	92.02
1986:		
Jan.-Mar.....	105.50	75.14
Apr.-June.....	208.90	148.79
July-Sept.....	155.70	110.90
Oct-Dec.....	156.10	111.18
1987:		
Jan.-Mar.....	120.60	85.90
Apr.-June.....	180.60	128.63
July-Sept.....	<u>3/</u> 350.90	249.93
Oct-Dec.....	141.80	101.00
1988:		
Jan.-Mar.....	<u>4/</u>	<u>4/</u>
Apr.-June.....	<u>4/</u>	<u>4/</u>

1/ Predominantly western red cedar.

2/ Prices for stumpage are reported in dollars per thousand board feet.

3/ This price is unusually high because of an abnormally large volume of Port Orford and Alaskan cedar stumpage sold in this quarter. These species are considerably more expensive than western red cedar.

4/ Not available.

Source: Statistics of the U.S. Forest Service.

following tabulation shows western red cedar pond values 1/ for the three grades of cedar used in shake and shingle production sold from the Olympic National Forest (per thousand board feet): 2/

<u>Date</u>	<u>Grade 1</u>	<u>Grade 2</u>	<u>Grade 3</u>
April 1983.....	\$389	\$302	\$255
June 1983.....	403	304	263
October 1983.....	441	319	275
April 1984.....	501	375	310
June 1984.....	508	384	331
October 1984.....	534	362	277
November 1984.....	460	362	277
March 1985.....	452	363	251
October 1985.....	425	307	274
December 1985.....	433	353	261
March 1986.....	410	368	238
December 1986.....	400	318	242
March 1987.....	453	361	273
May 1987.....	468	373	282
July 1987.....	516	411	311
August 1987.....	535	426	322
November 1987.....	559	445	337
February 1988.....	577	460	348
May 1988.....	456	362	278
July 1988.....	448	356	274

Prices for all three grades of red cedar logs increased irregularly from April 1983 to July 1988. Prices for red cedar logs in the Puget Sound Area of Washington State are published in the Pacific Rim Log Market Reports; prices for all three grades nearly doubled during the period November 1985 to May 1988. 3/

Shake and shingle production in Canada is concentrated in British Columbia. Three grades of red cedar logs are used to produce shakes and shingles in Canada--grades K, L, and M. Weighted-average log prices for western red cedar logs sold in the Vancouver, British Columbia, market are compiled by the Ministry of Forests. The log prices for red cedar sold in the Vancouver area are based on copies of invoices of log producers for their sales to Canadian shake and shingle producers. Prices for cedar logs sold in Vancouver fluctuated during the period January 1985 to June 1988 but

1/ The pond value of logs is the value of the log delivered to the mill.

2/ These prices are based on market surveys of mills' actual payments for cedar logs.

3/ Prices for grade 1 cedar logs increased from \$375-\$425 in November 1985 to \$600-\$800 in May 1988. Prices for grade 2 and grade 3 cedar logs increased during the same period from \$300-\$325 and \$260-\$280 to \$500-\$600 and \$375-\$450, respectively. (Fraser Valley prehearing brief, table 4, p. 16, compiled from Pacific Rim Log Reports.)

registered an overall increase of 43 percent (table 10). Prices for wood shakes and shingles, both domestic and Canadian, rose at a fairly steady rate, increasing 88 percent during the period. 1/

Table 10

Composite U.S. prices for western red cedar shakes and shingles and prices of western red cedar logs sold in British Columbia, by quarters, January 1985-June 1988

Period	(January-March 1985=100.00)			
	Composite price of western red cedar shakes and shingles <u>1/</u>		Composite price of western red cedar logs in British Columbia <u>2/</u>	
	Value	Index	Value	Index
	<u>Per square</u>		<u>Per cubic meter</u>	
1985:				
Jan.-Mar.....	\$39.62	100.00	Can\$44.99	100.00
Apr.-June.....	40.72	102.78	52.46	116.60
July-Sept.....	42.68	107.72	47.88	106.42
Oct-Dec.....	42.03	106.08	50.04	111.22
1986:				
Jan.-Mar.....	42.04	106.11	58.21	129.38
Apr.-June.....	46.55	117.49	59.12	131.41
July-Sept.....	52.38	132.21	43.19	96.00
Oct-Dec.....	61.22	154.52	45.09	100.22
1987:				
Jan.-Mar.....	57.15	144.25	58.40	129.81
Apr.-June.....	57.46	145.03	55.27	122.85
July-Sept.....	59.68	150.63	52.27	116.18
Oct.-Dec.....	62.18	156.94	56.17	124.85
1988:				
Jan.-Mar.....	68.68	173.35	61.21	136.05
Apr.-June.....	74.61	188.31	64.24	142.79

1/ Composite prices and indexes are based on the sales of shakes and shingles in the U.S. market in U.S. dollars.

2/ Composite prices for red cedar logs sold in Vancouver are weighted-averages for the three grades of red cedar logs that are used in the production of red cedar shakes and shingles.

Source: Random Lengths' Lumber Price Guide, Council of Forest Industries of British Columbia, and The Ministry of Forest average log prices.

The supply of western red cedar.--Western red cedar is primarily a West Coast species whose range extends from southern California north to southeastern Alaska. British Columbia has by far the largest stock of red

1/ Staff used market share estimates of the Red Cedar Shingle and Handsplit Shake Bureau to calculate weighted-average composite western red cedar shake and shingle prices.

cedar, followed by Washington State. The shake and shingle industry relies almost exclusively on old growth western red cedar, which typically comes from trees in excess of 200 years of age. 1/ Young growth western red cedar does not contain the natural preservatives or have the structural integrity necessary to serve as a viable raw material for the shake and shingle industry. The supply of cedar in the northwestern United States, particularly that under private ownership, has been depleted to the point that it has at times during 1988 represented a constraint on shake and shingle production. 2/ Because old growth western red cedar is a limited resource, supply considerations are likely to have an even greater effect on shake and shingle production in the future. Although there are no precise figures available on the remaining supply of old growth western red cedar in the United States, Wesley Rickard, Inc., estimates that the supply in western Washington, which represents the greatest concentration in the United States, will last 16.5 years at 1980-85 harvest rates. 3/ Prospective harvest levels are difficult to predict, in part because future sales of cedar on Federal and State lands may be curtailed as supplies diminish.

In recent years, U.S. shake and shingle producers have sought access to lower-cost Canadian western red cedar, which at current harvest levels will last another century or so. 4/ However, at present Canada prohibits the export of cedar logs. 5/

Housing construction.--The demand for western cedar shakes and shingles is both seasonal and cyclical and is determined largely by new housing construction and to a somewhat lesser extent by the replacement of roofing and siding. The demand for shakes and shingles is not evenly distributed geographically; a large portion of shakes and shingles are used in the western region of the United States. New single-family housing units started in this region peaked during April-June and were lowest during January-March and October-December of 1985-87 (table 11). When compared with the same quarter of the previous year, housing starts increased in each quarter of 1986 and in January-March 1987 and then declined in each quarter from April-June 1987 through April-June 1988. New housing construction in January-March and April-June 1988 was 11 percent and 4 percent higher, respectively, than the level of construction in the same quarters of 1985.

Seasonal fluctuations in shake and shingle prices were less pronounced, as prices in the western region increased at a relatively steady rate throughout the period. With the exception of shake prices in October-December 1987, shake and shingle prices were higher in every quarter during January

1/ The Western Red Cedar Timber Resource in the United States As It Relates to the United States Production of Shakes and Shingles (Preliminary), Wesley Rickard, Inc., July 1988, p. 2.

2/ Numerous shake and shingle producers noted, in questionnaire responses and staff interviews, that they experienced difficulty during 1988 in obtaining cedar logs and they were often forced to purchase blocks or bolts of salvage wood, typically removed from the timber site by helicopter. Others were forced to discontinue production intermittently.

3/ Wesley Rickard, Inc., The Western Red Cedar Timber Resource . . . , p. 10.

4/ Fraser Valley posthearing brief, p. 8.

5/ Transcript, p. 139.

Table 11

U.S. prices of western red cedar shakes and shingles and new one-unit housing started in the western region of the United States, by quarters, January 1985-June 1988

(January-March 1985=100)

Period	Shake price		Shingle price		Single-family housing starts	
	Value	Index	Value	Index	Quantity	Index
	Per square		Per square		1,000 units	
1985:						
Jan.-Mar....	\$38.43	100.00	\$42.38	100.00	53.0	100.00
Apr.-June...	38.10	99.14	46.89	110.65	69.0	130.19
July-Sept...	39.28	102.21	50.62	119.44	67.0	126.42
Oct.-Dec....	40.60	105.64	45.35	107.01	50.0	94.34
1986:						
Jan.-Mar....	40.76	106.06	45.03	106.25	54.0	101.89
Apr.-June...	43.77	113.90	53.03	125.14	81.0	152.83
July-Sept...	49.92	129.90	58.13	137.17	68.0	128.30
Oct.-Dec....	62.15	161.71	59.06	139.36	58.0	109.43
1987:						
Jan.-Mar....	56.23	146.31	59.31	139.95	64.0	120.75
Apr.-June...	53.60	139.46	66.47	156.84	76.0	143.40
July-Sept...	56.29	146.47	67.58	159.46	65.0	122.64
Oct.-Dec....	58.28	151.65	71.31	168.26	50.0	94.34
1988:						
Jan.-Mar....	63.13	164.27	81.62	192.59	59.0	111.32
Apr.-June...	71.74	186.67	81.29	191.81	72.0	135.85

Source: Random Lengths' Publications and Current Construction Reports of the U.S. Department of Commerce, Bureau of the Census.

1986-June 1988 than in comparable quarters of the preceding year. In January-March and April-June 1988, shake prices were 64 percent and 88 percent higher, respectively, than in the corresponding quarters of 1985, and shingle prices were 93 percent and 73 percent higher, respectively.

Exchange rates

Quarterly data reported by the International Monetary Fund indicate that during January 1985-June 1988 the nominal value of the Canadian dollar appreciated 10.0 percent relative to the U.S. dollar (table 12). ^{1/} Adjusted for movements in producer price indices in the United States and Canada, the real value of the Canadian currency registered an overall appreciation equivalent to 15.4 percent as of April-June 1988 relative to that of January-March 1985.

^{1/} International Financial Statistics, July 1988.

Table 12

U.S.-Canadian exchange rates: 1/ Nominal exchange rates of the Canadian dollar in U.S. dollars, real exchange-rate equivalents, and producer price indicators in the United States and Canada, 2/ indexed by quarters, January 1985-June 1988

Period	U.S. Producer Price Index	Canadian Producer Price Index	Nominal exchange- rate index --US dollars/Can\$--	Real exchange- rate index ^{3/}
1985:				
January-March.....	100.0	100.0	100.0	100.0
April-June.....	100.1	100.5	98.8	99.3
July-September....	99.4	100.5	99.5	100.7
October-December..	100.0	101.3	98.1	99.4
1986:				
January-March.....	98.5	102.3	96.4	100.2
April-June.....	96.6	100.8	97.8	102.0
July-September....	96.2	101.0	97.7	102.6
October-December..	96.5	101.6	97.7	102.9
1987:				
January-March.....	97.7	102.1	101.2	105.8
April-June.....	99.2	103.4	101.5	105.8
July-September....	100.3	104.9	102.4	107.0
October-December..	100.8	106.0	103.2	108.6
1988:				
January-March.....	101.2	106.4	106.8	112.2
April-June.....	102.5	107.5	110.0	^{4/} 115.4

1/ Exchange rates expressed in U.S. dollars per Canadian dollar.

2/ Producer price indicators--intended to measure final product prices--- are based on average quarterly indices presented in line 63 of the International Financial Statistics.

3/ The indexed real exchange rate represents the nominal exchange rate adjusted for relative movements in producer price indices in the United States and Canada. Producer prices in the United States increased 2.5 percent during the period January 1985 through June 1988 compared with a 7.5-percent increase in Canadian prices during the same period.

4/ Data are derived from U.S. and Canadian producer price indices reported for April-May only.

Note.--January-March 1985=100.0.

Source: International Monetary Fund, International Financial Statistics, July 1988.

Probable Economic Effect of Terminating Import Relief

Major foreign suppliers of shakes and shingles to the United States

The effect on the U.S. red cedar shake and shingle industry of terminating import relief depends in large part on the foreign industry's potential level of output for the subject products. The United States and Canada are the only two countries in the world that have large commercial resources of old growth red cedar from which shakes and shingles are produced. 1/ The shake and shingle industry in Canada consists of a large number of small or part-time firms. 2/ Data on home-market and export shipments available from Statistics Canada are presented in the section of this report entitled "Canadian shipments of shakes and shingles."

Canada's total shipments of red cedar shakes and shingles decreased 21 percent from 1985 to 1987 and are projected to decline an additional 7 percent in 1988. Data on capacity and capacity utilization in Canada are unavailable, therefore it is difficult to determine the extent to which Canadian producers would be able to increase production if the import restrictions were terminated. However, it is known that three large Canadian shake and shingle manufacturers permanently closed mills in the past 2 years. These three firms accounted for production capacity of 700,000 squares per year. Two of the firms, Canadian Forest Products and B.C. Forest Products, have dismantled and auctioned their equipment. 3/

Economic analysis of the probable economic effect of terminating or extending import relief

On June 6, 1986, import relief was provided to the domestic shake and shingle industry in the form of a tariff for up to 5 years on imports of red cedar shakes and shingles. The relief consists of a 35 percent ad valorem tariff for shakes and shingles entering the United States during the period June 7, 1986, through December 6, 1988, a 20 percent ad valorem tariff for the period December 7, 1988, through December 6, 1990, and an 8 percent ad valorem tariff for the period December 7, 1990, through June 6, 1991.

In assessing the likely effects of terminating the import relief, it is relevant to consider the changes in the domestic industry that have occurred since the tariff was imposed. Absent other changes, a tariff will increase domestic and import prices, domestic production, and employment, while apparent U.S. consumption and the importers' share of the U.S. market will decline. All of these results occurred during the relief period, but other factors besides the tariff have had an influence on the shake and shingle

1/ Countries other than the United States and Canada may produce shakes and shingles for domestic consumption and exportation from other species, but the quantity of such production is believed to be insignificant (see USITC Publication 1826, March 1986, p. A-39).

2/ The Red Cedar Shingle and Handsplit Shake Bureau estimates the number of shake and shingle mills in Canada to be approximately 150.

3/ Fraser Valley prehearing brief, p. 24, and transcript, pp. 126 and 156.

market. Continuation of high demand for red cedar in the presence of a declining supply of these logs has caused log prices to increase. This increase in log prices has contributed to the increase in shake and shingle prices. Prices for shakes and shingles during the period prior to the temporary duty ranged from \$39 to \$46 per square during January 1985-June 1986. During the period under import relief, July 1986-June 1988, shake and shingle prices rose from \$52 to \$74 per square. Domestic production and employment also increased. The following tabulation presents semiannual domestic production figures from January 1985 to December 1987 (in thousands of squares):

<u>Period</u>	<u>Production</u>
1985:	
January-June.....	775
July-December.....	868
1986:	
January-June.....	849
July-December.....	1,282
1987:	
January-June.....	1,102
July-December.....	1,124

U.S. production of shakes and shingles was significantly higher during the 18-month period after the temporary duty, July 1986-December 1987, compared with production in the 18-month period before the tariff, January 1985-June 1986.

Apparent U.S. consumption of red cedar shakes and shingles increased 10.6 percent from 1985 to 1986. It then decreased 11.7 percent from 1986 to 1987 and continued to decrease in January-June 1988, down 3.0 percent compared with consumption in the corresponding period of 1987. U.S. imports increased 2.3 percent from 1985 to 1986 and then declined 20.0 percent from 1986 to 1987.

Termination of the import relief is likely to decrease prices of both domestic and Canadian shakes and shingles. Removal of the 35 percent tariff will cause the share of imports in the domestic market to increase and domestic production to decrease. The effect of termination of import relief on the domestic shake and shingle industry will also be influenced by the response of the log market. Since the imposition of a 35 percent tariff on imported shakes and shingles, the demand for red cedar logs in the United States has increased substantially, and this has caused the prices of logs to increase. However, as the demand for domestic shakes and shingles declines, the demand for cedar logs by shake and shingle producers will also decline. Therefore, prices for cedar logs are likely to decrease, and the price decrease in shakes and shingles would be at least partially offset by lower raw material costs.

Supply and demand conditions.--The probable effects of removal of import restrictions on the red cedar shake and shingle industry depend importantly upon the domestic and import supply and demand elasticities and the overall aggregate demand elasticity in the United States for shakes and shingles.

Both domestic and import supply are believed to be moderately inelastic. The major input for domestic and Canadian shake and shingle producers is cedar logs. Red cedar logs are harvested along with other species of timber but generally account for a small portion of the total harvest. Thus, the supply of cedar logs is not very responsive to changes in cedar log prices, and the supply of shakes and shingles is also likely to be relatively inelastic. However, because western red cedar is more abundant in Canada and can still be found in purer stands than exist in the United States, import supply is likely to be somewhat more elastic than domestic supply.

The aggregate demand for red cedar shakes and shingles is determined largely by new housing construction and to a lesser extent by the replacement of roofing and siding. In the new housing market, shakes and shingles are generally used in upscale housing and account for a relatively small portion of the total cost of the structure. There are several close substitutes for wood shakes and shingles in terms of performance and, as prices rise, customers can turn to alternative products, such as ceramic tile, asphalt shingles, and cedar and hardboard siding. There may be considerable reluctance to switch to alternative products, especially in upscale applications, because the style of roof can be a key element of this type of housing. This inflexibility is reflected in the relatively modest response in the decrease in apparent consumption to the substantial increase in prices. In light of all available information, the aggregate demand for wood shakes and shingles is considered to be moderately inelastic.

Demand for both the domestic and imported products is likely to be elastic even though the aggregate demand for red cedar shakes and shingles is considered moderately inelastic. Once the consumer has decided to use red cedar shakes and shingles, the decision becomes whether to use domestic or foreign product. Because domestic and Canadian shakes and shingles are used in the same applications and are virtually identical, i.e., highly substitutable, consumers will readily shift between the domestic and foreign products.

The probable economic effects on the domestic industry of removal of the tariff have been calculated through the use of a static economic model. ^{1/} This methodology allows for estimating the effect of a tariff reduction on aggregate demand, domestic shipments, imports, prices, and employment. Data from 1987 were used to estimate the effects that a tariff reduction of 15 or 35 percentage points would have had on consumers during that year. A tariff reduction of 15 percentage points represents the reduction that is scheduled to occur if the import relief continues as originally scheduled. A tariff reduction of 35 percentage points represents termination of the import relief. The estimated effects of a decrease or removal of a tariff are explored using a range of likely price elasticities that are believed to be

^{1/} The model assumes that the domestic and imported products are substitutes and that both domestic and import supply curves slope upward. A more detailed explanation on the methodology is described in the USITC staff research paper: Rouslang and Suomela, "Calculating the Consumer and Net Welfare Costs of Import Relief," July 1985.

reasonable for the shake and shingle industry; these elasticities range from a low to a high level, thus providing lower and upper bound results. 1/

Reduction of the tariff from 35 percent to 20 percent. --The effects of a 15 percentage-point tariff reduction are smaller than those of removing the 35 percent duty entirely (table 13). Imports are estimated to increase by 160,000 to 230,000 squares, or between 5.0 and 7.0 percent. Total consumption is estimated to increase by 130,000 to 140,000 squares; the domestic producers' share of total consumption is estimated to decrease from approximately 39.8 percent to between 37.2 and 38.4 percent. Domestic shipments are estimated to decline by 20,000 to 80,000 squares; the value of these shipments is estimated to decrease from \$120 million to between \$109 million and \$116 million. Estimates of declines in employment producing shakes and shingles are 16 to 69 jobs. Domestic and import prices are estimated to decrease by 2.6 to 5.0 percent and 2.2 to 4.1 percent, respectively. Domestic capacity utilization is estimated to decline from 59.1 percent to between 57.0 and 58.6 percent.

Table 13

Estimated effects of reducing the 35 percent tariff on red cedar shakes and shingles to 20 percent

Item	Actual level	Case I <u>1/</u>		Case II <u>2/</u>	
		New level	Change (+ or -)	New level	Change (+ or -)
U.S. consumption (million squares).....	5.44	5.57	+ 0.13	5.58	+ 0.14
Importers' shipments (million squares).	3.27	3.43	+ .16	3.50	+ 0.23
U.S. producers' shipments (million squares) <u>3/</u>	2.16	2.14	- .02	2.08	- 0.08
U.S. exports (million squares).....	.06	.06	.00	.07	+ 0.01
U.S. employment (workers).....	1,906	1,890	- 16	1,837	- 69
U.S. capacity utilization (percent)....	59.1	58.6	- .5	57.0	- 2.1
Price changes:					
Domestic prices (percent).....	-	-	- 2.55	-	- 5.00
Import prices (percent).....	-	-	- 2.20	-	- 4.10
Total net welfare loss (\$million).....	-	18.33	-	15.02	-
Consumer gains (\$million).....	-	6.65	-	12.79	-

1/ Elasticities used in case I are as follows: U.S. supply, 0.4; import supply, 0.5; and aggregate demand, -1.0.

2/ Elasticities used in case II are as follows: U.S. supply, 0.8; import supply, 0.9; and aggregate demand, -0.5.

3/ Derived by subtracting U.S. exports from U.S. production.

Source: Estimates prepared by the staff of the U.S. International Trade Commission, Office of Economics.

1/ The following ranges of elasticity estimates were used in the model: aggregate demand, -0.5 to -1.0; domestic demand, -10; import demand, -9.9; domestic supply, 0.4 to 0.8; and import supply, 0.5 to 0.9.

Termination of import relief.--Effects of the removal of the 35 percent tariff are summarized in table 14. 1/ Imports are estimated to increase by 420,000 to 620,000 squares, or between 13 and 19 percent. Domestic shipments are estimated to decline by 50,000 to 220,000 squares; the value of these shipments is estimated to decrease from \$120 million to between \$93 million and \$109 million. Estimates of declines in employment are 42 to 177 jobs. Prices for domestic and imported shakes and shingles are estimated to decrease by 6.6 to 12.9 percent and 5.4 to 10.1 percent, respectively. Total consumption is estimated to decline by 360,000 to 390,000 squares; the domestic producers' share of total consumption is estimated to decrease from approximately 39.8 percent to between 33.2 and 36.3 percent. Domestic capacity utilization is also estimated to decrease from 59.1 percent to between 53.6 and 57.8 percent.

Table 14
Estimated effects of terminating the 35 percent tariff on red cedar shakes and shingles

Item	Actual level	Case I <u>1/</u>		Case II <u>2/</u>	
		New level	Change (+ or -)	New level	Change (+ or -)
U.S. consumption (million squares).....	5.44	5.80	+ 0.36	5.83	+ 0.39
Importers' shipments (million squares).	3.27	3.69	+ .42	3.89	+ .62
U.S. producers' shipments (million squares) <u>3/</u>	2.16	2.11	- .05	1.94	- .22
U.S. exports (million squares).....	.06	.07	+ .01	0.08	+ .02
U.S. employment (workers).....	1,906	1,864	- 42	1,729	- 177
U.S. capacity utilization (percent)....	59.1	57.8	- 1.3	53.6	- 5.5
Price changes:					
Domestic prices (percent).....	-	-	- 6.56	-	- 12.92
Import prices (percent).....	-	-	- 5.40	-	- 10.10
Total net welfare loss (\$million).....	-	48.86	-	40.27	-
Consumer gains (\$million).....	-	17.14	-	32.74	-

1/ Elasticities used in case I are as follows: U.S. supply, 0.4; import supply, 0.5; and aggregate demand, -1.0.

2/ Elasticities used in case II are as follows: U.S. supply, 0.8; import supply, 0.9; and aggregate demand, -0.5.

3/ Derived by subtracting U.S. exports from U.S. production.

Source: Estimates prepared by the staff of the U.S. International Trade Commission, Office of Economics.

1/ The following ranges of elasticities were used in the model: aggregate demand, -0.5 to -1.0; domestic demand, -10; import demand, -9.9; domestic supply, 0.4 to 0.8; and import supply, 0.5 to 0.9.

Considerations under section 202(c) of the Trade Act of 1974

Section 202(c)(1).--Section 202(c)(1) directs that consideration be given to "information and advice from the Secretary of Labor on the extent to which workers in the industry have applied for, are receiving, or are likely to receive adjustment assistance under chapter two or benefits from other manpower programs."

During 1973-85, the Department of Labor instituted 150 investigations in response to petitions from workers in the shake and shingle industry. A total of 2,666 employees applied for certification through June 30, 1985; 1,024 of these workers were certified, whereas petitions on behalf of 1,642 workers were denied. Workers received funds in the form of cash benefits, training, and job search and relocation allowances. These payments and the number of recipients are presented in table 15.

Table 15
Adjustment assistance paid to workers in the shake and shingle industry, 1979-85

Year	Cash benefits		Training		Job search		Relocation	
	Value	Workers	Value	Workers	Value	Workers	Value	Workers
1979.....	\$344,530	79	-	-	-	-	-	-
1980.....	1,929,214	529	\$8,709	27	\$1,620	16	\$5,423	6
1981.....	432,496	161	50,608	106	323	2	2,020	1
1982.....	35,216	32	22,010	40	20	1	1,241	2
1983.....	0	0	6,184	9	0	0	1,580	2
1984.....	750	1	0	0	0	0	0	0
1985.....	4,286	7	0	0	0	0	0	0
Total..	2,746,492	809	87,511	182	1,963	19	10,264	11

Source: Compiled from official statistics of the U.S. Department of Labor.

Since June 30, 1985, the Department of Labor has instituted six shake and shingle investigations. Through February 6, 1988, 162 employees had applied for certification, and all of these workers were certified. ^{1/} Under the program, the Department of Labor distributes funds to state unemployment insurance offices, which in turn allocate the funds to workers. Payment data for shake and shingle investigations instituted after June 30, 1985, are not available because state unemployment insurance offices have not reported this information to the Department of Labor.

Section 202(c)(2).--Section 202(c)(2) directs that consideration be given to "information and advice from the Secretary of Commerce on the extent to which firms in the industry have applied for, are receiving, or are likely to receive adjustment assistance under chapters 3 and 4."

^{1/} Derived from official statistics of the U.S. Department of Labor's Employment and Training Administration, Office of Trade Adjustment Assistance, Report KG630RP1 (Certification and Denials).

Since 1980, 30 of the 31 cedar shake and shingle firms that petitioned the Commerce Department for adjustment assistance were certified, and 1 firm terminated its petition for assistance. No firms have been certified since March 1985. The shake and shingle industry has never received any direct financial assistance in the form of direct loans or loan guarantees from the Commerce Department. Financial assistance was discontinued effective April 7, 1986, upon enactment of the Consolidated Omnibus Reconciliation Act of 1985.

However, the Department has provided technical advice and assistance to the industry. Specifically, in June 1980, the Commerce Department's Economic Development Administration provided a \$241,000 grant to the western red cedar industry for the purpose of identifying methods and technologies that have the potential to improve the competitive position of the U.S. shake and shingle manufacturers. In addition, since 1980, the Trade Adjustment Assistance program of the Commerce Department has provided \$102,184 worth of indirect assistance in the form of technical consultations and adjustment plans to 30 shake and shingle firms, as shown in the following tabulation: 1/

<u>Year</u>	<u>Firms</u>	<u>Technical assistance</u>
1980.....	1	\$6,222
1981.....	11	38,539
1982.....	17	48,028
1983.....	1	5,420
1984.....	0	0
1985.....	1	3,875
1986.....	1	100
1987.....	0	0
Total..	<u>1/</u> 32	102,184

1/ Two firms received assistance in 2 different years.

Section 202(c)(3).--Section 202(c)(3) directs that consideration be given to "the probable effectiveness of import relief as a means to promote adjustment, the efforts being made or to be implemented by the industry concerned to adjust to import competition, and other considerations relative to the position of the industry in the Nation's economy."

Forty mills responded that adjustments had been made and/or are currently underway; 16 of these mills have plans for adjustments should the relief be extended. Thirty-two mills that responded to questionnaires stated that they made no adjustments subsequent to the imposition of the import relief, nor do they have future plans for adjustment. 2/

1/ Compiled from official statistics of the Department of Commerce.

2/ For more detailed information and dollar amounts of adjustments made in the shake and shingle industry, see the section of this report entitled "Efforts by U.S. producers to adjust to import competition."

Adjustments made by the mills range from basic building maintenance and upgrading of equipment to building an entirely new mill. The most common adjustment made by producers to increase productivity was the purchase and installation of additional saws; automatic saws were favored by several producers because they can be operated by an unskilled sawyer in place of a skilled one. In addition, some mills also purchased new shingle machines; these machines allow a producer to utilize a lower grade of wood than is used in shake production. Plans for adjustment should the relief be extended include purchase of new equipment, such as automatic saws, splitters, feeders, and shingle machines. Two large shake and shingle producers reported that they would build treatment plants should the relief be continued.

Section 202(c)(4).--Section 202(c)(4) directs that consideration be given to "the effect of import relief upon consumers (including the price and availability of the imported articles and the like or directly competitive articles produced in the United States) and on competition in domestic markets for such articles."

If the tariff on cedar shakes and shingles is reduced, it is likely that the price of imports will decrease, and the quantity will increase. Tables 16 and 17 present estimates of declines in prices and the resulting gains for consumers that may occur if the import relief is terminated or reduced. 1/ Lower and upper bounds of the estimates are calculated using the range of likely price elasticities. 2/

Table 16

Estimated effects on consumers of reducing the 35 percent tariff on red cedar shakes and shingles to 20 percent

Projected decrease in import price		Projected decrease in U.S. price		Estimated total consumer gains	
Range		Range		Range	
Low	High	Low	High	Low	High
--Percent--		--Percent--		-1,000 dollars-	
2.2	4.1	2.6	5.0	6,650	12,790

Source: Staff of the U.S. International Trade Commission, Office of Economics.

1/ The estimated effects on consumers and prices presented are based on a methodology described in the USITC staff research paper: Rousslang and Suomela, "Calculating the Consumer and Net Welfare Costs of Import Relief," July 1985.

2/ The following ranges of elasticity estimates were used in the model: aggregate demand, -0.5 to -1.0; domestic demand, -10; import demand, -9.9; domestic supply, 0.4 to 0.8; and import supply, 0.5 to 0.9.

Table 17
Estimated effects on consumers of removing the 35 percent tariff on red cedar shakes and shingles

<u>Projected decrease in import price</u>		<u>Projected decrease in U.S. price</u>		<u>Estimated total consumer gains</u>	
<u>Range</u>		<u>Range</u>		<u>Range</u>	
<u>Low</u>	<u>High</u>	<u>Low</u>	<u>High</u>	<u>Low</u>	<u>High</u>
<u>---Percent---</u>		<u>---Percent---</u>		<u>-1,000 dollars-</u>	
5.4	10.1	6.6	12.9	17,140	32,740

Source: Staff of the U.S. International Trade Commission, Office of Economics.

Section 202(c)(5) and 202(c)(6).--Sections 202(c)(5) and 202(c)(6) direct that consideration be given to "the effect of import relief on the international economic interests of the United States;" and "the impact on U.S. industries and firms as a consequence of any possible modification of duties or other import restrictions which may result from international obligations with respect to compensation."

In 1987, Canada accounted for 99 percent of U.S. imports of red cedar shakes and shingles. The following tabulation presents for 1987 the bilateral trade balance between the United States and Canada, total U.S. imports from Canada and exports to Canada in 1987, and 1987 U.S. imports of Canadian red cedar shakes and shingles (in millions of U.S. dollars):

<u>U.S. trade deficit with Canada</u>	<u>U.S. imports from Canada</u>	<u>U.S. exports to Canada</u>	<u>U.S. shake and shingle imports from Canada</u>
(13,849.6)	70,850.6	57,001.0	163.0

Under article XIX of the GATT, member countries adversely affected by U.S. import relief are entitled to claim equivalent compensation for the U.S. action. Compensation is generally in the form of duty reductions on other products that the affected countries export to the United States. If consultations do not produce agreement as to the form and level of compensation, or if the traded articles are not bound by GATT accords, a trading partner can retaliate by imposing restrictions against products that it selects.

Initially, the Canadian Government requested equivalent compensation for the U.S. imposition of section 201 import relief. However, since red cedar shakes and shingles are not bound by GATT accords, the United States refused to compensate Canada. ^{1/} Consequently, the Canadian Government responded to the higher tariffs on shakes and shingles by introducing retaliatory tariffs, and by restricting exports of red cedar blocks and bolts. On June 2, 1986, the Canadian Government imposed import levies on a range of U.S. products, including computer parts and semiconductors, certain books, and publications (table 18). On June 26, 1986, the Canadian Minister of International Trade announced that red cedar blocks and bolts had been added to the Export Control List. Products on the list cannot be exported without a Government permit.

Table 18
Canadian retaliatory tariffs

Product	Tariff action
Certain books.....	10.0%
Catalogues of publications issued by publishers outside of Canada.....	20.6%
Printed music.....	5.5%
Computer parts.....	3.9%
Certain semiconductor devices.....	5.4%
Tea bags.....	6 cents per lb.
Diesel motor rail cars and parts.....	12.5%
Oatmeal and rolled oats.....	Increase from 1% to 10%
Certain trees including Christmas trees.....	30.0%
Cider.....	Increase from 5% to 20%
Asphalt oil for paving.....	10.0%
Ozone generators or air filters.....	Increase from 5% to 10%

Source: Compiled from a communique released by the Canadian Department of Finance.

^{1/} In a communique released by the Canadian Department of Finance, the Canadian Minister of Finance stated "As is customary under international practice, we have approached the U.S. government as to whether it was prepared to remove the restriction, or to offer compensation to redress the imbalance in conditions of trade caused by the U.S. action. The U.S. administration made it clear that it is not prepared to remove the measure, to compensate Canada or to take other measures to ensure that Canadian shakes and shingles manufacturers maintain reasonable access to the U.S. market."

Section 202(c)(7).--Section 202(c)(7) directs that consideration be given to "the geographic concentration of imported products marketed in the United States."

In 1987, the bulk of the red cedar shake and shingle imports entered the United States on the West Coast, followed by the Midwest, as shown in the following tabulation (in percent):

<u>Region 1/</u>	<u>Share</u>
West Coast.....	76.9
Midwest.....	11.8
Northeast.....	7.3
Other.....	4.0
Total.....	100.0

1/ Customs districts, listed in order of importance for each of the regions presented, are--West Coast (Seattle, WA; Portland, OR); Midwest (Duluth, MN; Detroit, MI; Chicago, IL); Northeast (St. Albans, VT; Ogdensburg, NY; Buffalo, NY; Portland, ME); Other (all other customs districts not previously indicated).

The principal customs district of importation of red cedar shakes and shingles, Seattle, WA, accounted for 76.8 percent of 1987 imports. Thus, any impact of the import relief on employment in firms that handle, transport, or distribute the subject products may have been felt primarily in that area.

Section 202(c)(8).--Section 202(c)(8) directs that consideration be given to "the extent to which the U.S. market is the focal point for exports of such article by reason of restraints on exports of such article to, or on imports of such article into, third-country markets."

The vast majority of the Canadian-produced western red cedar shakes and shingles, 88.0 percent on average since 1986, are exported; 98.7 percent of these exports entered the U.S. market during 1986-87. The Red Cedar Shingle and Handsplit Shake Bureau states that there are no restrictions on exports of Canadian cedar shakes and shingles to third-country markets.

Section 202(c)(9).--Section 202(c)(9) directs that consideration be given to "the economic and social costs which would be incurred by taxpayers, communities, and workers, if import relief were or were not provided."

Red cedar shake and shingle producers tend to be small firms employing a relatively low number of workers. On average, from 1980 to 1985, shake and shingle mills employed seven workers per mill. Employment in the shake and shingle industry is concentrated in Washington, and to a lesser extent, in Oregon (table 19).

Table 19

Number of firms and workers engaged in production of western red cedar shakes and shingles, 1980-87 1/

Year	Washington		Oregon		Total	
	Firms	Workers	Firms	Workers	Firms	Workers
1980.....	296	2,144	59	482	355	2,626
1981.....	260	1,749	52	378	312	2,061
1982.....	227	1,414	41	277	268	1,691
1983.....	218	1,910	41	275	259	2,185
1984.....	208	1,763	39	201	247	1,964
1985.....	187	1,262	37	295	224	1,557
1986.....	173	1,425	34	277	207	1,702
1987.....	180	1,588	32	318	212	1,906

1/ Only Washington and Oregon employment data are available after 1984. However, from 1980 to 1984, 90 percent of the shake and shingle workers were employed in Washington or Oregon.

Source: Data supplied by the U.S. Department of Labor and the States of Washington and Oregon.

If the tariff on Canadian shakes and shingles is removed, the domestic industry will no longer be protected from import competition. To the extent that the elimination of section 201 import protection would cause an increase in imports and a reduction in domestic sales, the industry would be forced to reduce output and lay off workers. Economic costs faced by taxpayers under these conditions would include State and Federal unemployment insurance payments, income maintenance in cases of extended need, food stamps, and reduced Federal, State, and local tax receipts. Social costs to the workers and the communities would result from the added unemployment burden and would be concentrated in Washington and Oregon.

APPENDIX A

PRESIDENTIAL PROCLAMATION 5498,
MAY 26, 1986, PRESIDENTIAL MEMORANDUM, AND
REQUEST FROM THE UNITED STATES TRADE REPRESENTATIVE

Proclamation 5498 of June 6, 1988

Temporary Duty Increase on the Importation Into the United States of Wood Shingles and Shakes of Western Red Cedar

By the President of the United States of America

A Proclamation

1. Pursuant to Section 201(d)(1) of the Trade Act of 1974 (the Trade Act) (19 U.S.C. 2251(d)(1)), the United States International Trade Commission (USITC) on March 25, 1988, reported to the President the results of its investigation No. TA-201-58 under Section 201(b) of the Trade Act (19 U.S.C. 2251(b)). The USITC determined that wood shingles and shakes, provided for in item 200.85 of the Tariff Schedules of the United States (TSUS), are being imported into the United States in such increased quantities as to be a substantial cause of serious injury to the domestic industry producing articles like or directly competitive with the imported articles. The USITC recommended that a tariff of 35 percent ad valorem be imposed for a period of 5 years on imports of wood shingles and shakes of western red cedar in order to remedy this serious injury.

2. On May 23, 1988, pursuant to Section 202(b)(1) of the Trade Act (19 U.S.C. 2252(b)(1)), and after taking into account the considerations specified in Section 202(c) of the Trade Act (19 U.S.C. 2252(c)), in order to remedy this serious injury, I determined to impose a tariff on imports into the United States of wood shingles and shakes of western red cedar in an amount that differs from the tariff recommended by the USITC. On May 23, 1988, in accordance with Section 203(b)(1) of the Trade Act (19 U.S.C. 2253(b)(1)), I transmitted a report to the Congress setting forth my determination and intention to proclaim a temporary tariff and stating the reason why my decision differed from the action recommended by the USITC.

3. Section 203(e)(1) of the Trade Act (19 U.S.C. 2253(e)(1)) requires that import relief be proclaimed and take effect within 15 days after the import relief determination date.

Proc. 5498

Title 3—The

4. Pursuant to Sections 203(a)(1) and 203(e)(1) of the Trade Act, I am providing import relief through the temporary imposition of a tariff on wood shingles and shakes of western red cedar, as hereinafter proclaimed.

NOW, THEREFORE, I, RONALD REAGAN, President of the United States of America, acting under the authority vested in me by the Constitution and the statutes of the United States, including Sections 203 and 604 of the Trade Act (19 U.S.C. 2253 and 2483), do proclaim that—

(1) Subpart A, part 2 of the Appendix to the TSUS is modified as set forth in the Annex to this proclamation.

(2) This proclamation shall be effective with respect to articles entered, or withdrawn from warehouse for consumption, on or after June 7, 1988, and before the close of June 6, 1991, unless the period of its effectiveness is earlier expressly modified or terminated.

IN WITNESS WHEREOF, I have hereunto set my hand this 8th day of June, in the year of our Lord nineteen hundred and eighty-six, and of the Independence of the United States of America the two hundred and tenth.

RONALD REAGAN

ANNEX

Note: The new tariff items are set forth in columnar form, and material in such columns is inserted in the columns of the TSUS designated "Item", "Articles", "Rates of Duty 1", and "Rates of Duty 2", respectively.

Subject to the above note, the TSUS is modified as follows:

Effective as to articles entered, or withdrawn from warehouse for consumption, on or after the effective date of this proclamation and before the close of the date provided by this proclamation, subpart A of part 2 of the Appendix to the Tariff Schedules of the United States (19 U.S.C. 1202) is modified by inserting in numerical sequence the following new items and superior heading:

"Wood shingles and shakes of western red cedar provided for in item 200.85:			
924.30	If entered during the period from June 7, 1988, through December 6, 1988, inclusive	35% ad val.	35% ad val.
924.31	If entered during the period from December 7, 1988, through December 6, 1990, inclusive	20% ad val.	20% ad val.
924.32	If entered during the period from December 7, 1990, through June 6, 1991, inclusive	8% ad val.	8% ad val."

Presidential Documents

Memorandum of May 23, 1986

Western Red Cedar Shakes and Shingles Import Relief Determination

Memorandum for the United States Trade Representative

Pursuant to Section 202(b)(1) of the Trade Act of 1974 (19 U.S.C. 2251(b)(1)), I have determined the action I will take with respect to the report of the United States International Trade Commission (ITC), transmitted to me on March 25, 1986, concerning the results of its investigation of a petition for import relief filed by the Northwest Independent Forest Manufacturers on behalf of the domestic industry producing wood shakes and shingles, provided for in Item 200.85 of the Tariff Schedules of the United States.

After considering all relevant aspects of the case, including those set forth in Section 202(c) of the Trade Act of 1974, I have determined that provision of import relief in the form of a tariff for up to 5 years is in the national economic interest. The tariff will apply to all U.S. imports of western red cedar shakes and shingles. The additional duty will be 35 percent ad valorem for the first 30 months of the period, 20 percent ad valorem for months 30 through 54, and 5 percent ad valorem for months 54 through 60. This 5-year relief program should be sufficient to enable the domestic producers of red cedar shakes and shingles to adjust to competition during the relief period.

In conjunction with providing import relief, I hereby direct you to request that the ITC advise me of the probable economic effect on the domestic industry of the termination of import relief after 30 months. This advice is to include a review of the progress and specific efforts being made by the domestic producers of western red cedar shakes and shingles to adjust to import competition. I also direct you to request, on my behalf, advice regarding termination of relief from the Secretaries of Commerce and Labor. The ITC, Commerce, and Labor advice is to be provided to me, through you, 3 months prior to the expiration of the 30-month period. It is my intention to continue relief for the entire 5-year period if general market conditions continue to warrant relief and if the domestic producers have begun to make reasonable progress toward adjustment during the first 30-month period.

As required by Section 203(e)(1) of the Trade Act of 1974, this tariff will be implemented by Presidential Proclamation no later than June 7, 1986, which is the 15th day after the date of this determination.

* This determination shall be published in the Federal Register.

Ronald Reagan

THE WHITE HOUSE,
Washington, May 23, 1986.

THE UNITED STATES TRADE REPRESENTATIVE
Executive Office of the President
Washington, D.C. 20506

453

June 29, 1988

The Honorable Alfred E. Eckes, Jr.
Acting Chairman
U.S. International Trade Commission
500 E Street, S.W.
Washington, D.C. 20436

Dear Mr. Chairman:

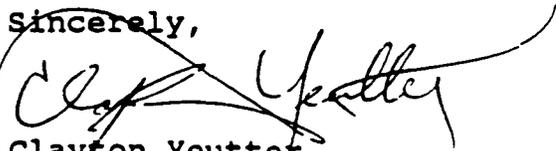
In a memorandum on May 23, 1986, the President determined to provide import relief for the domestic industry producing wood shakes and shingles in the form of a tariff for up to 5 years on imports of western red cedar shakes and shingles. The President's action followed a determination by the U.S. International Trade Commission that such shakes and shingles were being imported into the United States in such increased quantities as to be a substantial cause of serious injury to the domestic industry producing articles like or directly competitive with the imported articles.

In conjunction with providing import relief, the President directed me to request, pursuant to section 203(i)(2) of the Trade Act of 1974, that the Commission advise him of the probable economic effect on the domestic industry of the termination of import relief after 30 months, which would be December 7, 1988. This advice is to include a review of the progress and specific efforts being made by the domestic producers of western red cedar shakes and shingles to adjust to import competition. At the time the President decided to grant import relief he indicated that it was his intention to continue relief for the entire five-year period if it appears at the end of 30 months that market conditions warrant a continuation of relief and that domestic producers have begun to make reasonable progress toward adjustment.

I am hereby requesting the Commission to provide such advice to the President not later than September 6, 1988.

The Commission's assistance in this matter is greatly appreciated.

Sincerely,


Clayton Yeutter

CY:A:st

APPENDIX B

THE COMMISSION'S FEDERAL REGISTER NOTICE

[Investigation No. TA-203-18]

Wood Shakes and Shingles

AGENCY: United States International Trade Commission.

ACTION: Institution of an investigation under section 203(i)(2) of the Trade Act of 1974 (19 U.S.C. 2253(i)(2)) and scheduling of a hearing to be held in connection with the investigation.

SUMMARY: Following receipt of a request filed on July 1, 1988, by the United States Trade Representative under authority delegated by section 5(a) of Executive Order 11846, the United States International Trade Commission instituted investigation No. TA-203-18 under section 203(i)(2) of the Trade Act of 1974 for the purpose of gathering information in order that it might advise the President of its judgment as to the probable economic effect on the domestic industry concerned of the termination of import relief presently in effect with respect to shingles and shakes of western red cedar, provided for in item 200.85 of the Tariff schedules of the United States (TSUS). Such relief was provided by Presidential Proclamation 5498 of June 6, 1986, published in the Federal Register on June 10, 1986 (51 FR 20953) and is set forth in items 924.30, 924.31, and 924.32 of the Appendix to the TSUS. The relief is scheduled to terminate on June 6, 1991.

For further information concerning the conduct of this investigation, hearing procedures, and rules of general application, consult the Commission's Rules of Practice and Procedure, Part 206, Subparts A and D (19 CFR Part 206), and Part 201, subparts A through E (19 CFR Part 201).

EFFECTIVE DATE: July 1, 1988.

FOR FURTHER INFORMATION CONTACT: Bruce Cates (202-252-1187), Office of Investigations, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436. Hearing-impaired individuals are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on 202-252-1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-252-1000.

SUPPLEMENTARY INFORMATION:

Participation in the investigation.—Persons wishing to participate in the investigation as parties must file an entry of appearance with the Secretary to the Commission, as provided in § 201.11 of the Commission's rules (19 CFR 201.11), not later than twenty-one (21) days after publication of this notice in the Federal Register. Any entry of appearance filed after this date will be referred to the Chairman, who will determine whether to accept the late entry for good cause shown by the person desiring to file the entry.

Service list.—Pursuant to § 201.11(d) of the Commission's rules (19 CFR 201.11(d)), the Secretary will prepare a service list containing the names and addresses of all persons, or their representatives, who are parties to this investigation upon the expiration of the period for filing entries of appearance. In accordance with § 201.16(c) of the rules (19 CFR 201.16(c)), each document filed by a party to the investigation must be served on all other parties to the investigation (as identified by the service list), and a certificate of service must accompany the document. The Secretary will not accept a document for filing without a certificate of service.

Hearing.—The Commission will hold a hearing in connection with this investigation beginning at 9:30 a.m. on August 16, 1988, at the U.S. International Trade Commission Building, 500 E Street SW., Washington, DC. Requests to appear at the hearing should be filed in writing with the Secretary to the Commission not later than the close of business (5:15 p.m.) on August 3, 1988. All persons desiring to appear at the hearing and make oral presentations, with the exception of public officials and persons not represented by counsel, should file prehearing briefs by August 8, 1988, and attend a prehearing conference to be held at 9:30 a.m. on August 9, 1988, in the hearing room of the U.S. International Trade Commission Building. Posthearing briefs must be submitted not later than the close of business on August 19, 1988. Confidential material should be filed in accordance with the procedures described below.

Parties are encouraged to limit their testimony at the hearing to a nonconfidential summary and analysis of material contained in prehearing briefs and to information not available at the time the prehearing brief was submitted. Any written materials submitted at the hearing must be filed in accordance with the procedures described below and any confidential materials must be submitted at least three (3) working days prior to the

hearing (see § 201.6(b)(2) of the Commission's rules (19 CFR 201.6(b)(2))).

Written submissions.—As mentioned, parties to this investigation may file prehearing and posthearing briefs by the dates shown above. In addition, any person who has not entered an appearance as a party to the investigation may submit a written statement of information pertinent to the subject of the investigation on or before August 19, 1988. A signed original and fourteen (14) copies of each submission must be filed with the Secretary to the Commission in accordance with section 201.8 of the Commission's rules (19 CFR 201.8). All written submissions except for confidential business data will be available for public inspection during regular business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary of the Commission.

Any business information for which confidential treatment is desired shall be submitted separately. The envelope and all pages of such submissions must be clearly labeled "Confidential Business Information." Confidential submissions and requests for confidential treatment must conform with the requirements of § 201.6 of the Commission's rules (19 CFR 201.6).

Authority: This investigation is being conducted under the authority of Section 201 of the Trade Act of 1974. This notice is published pursuant to § 201.10 of the Commission's rules (19 CFR 201.10).

By order of the Commission.

Issued: July 15, 1988.

Kenneth R. Mason,

Secretary.

[FR Doc. 88-16338 Filed 7-19-88; 8:45 am]

BILLING CODE 7020-02-M

APPENDIX C

LIST OF WITNESSES

CALENDAR OF PUBLIC HEARING

Those listed below appeared as witnesses at the United States International Trade Commission's hearing:

Subject : Wood Shakes and Shingles

Inv. No. : TA-203-18

Date and time: August 16, 1988 - 9:30 a.m.

Sessions were held in connection with the investigation in the Main Hearing Room 101 of the United States International Trade Commission, 500 E Street, S.W., in Washington.

Government appearance:

U. S. Department of Agriculture Forest Service, Washington, D.C.

Robert Koeppen, Staff Specialist, Forest Products
and Harvesting Research

Domestic:

Northwest Independent Forest Manufacturer,
Tacoma, Washington
on behalf of:

M. J. "Gus" Kuehne, President

Bruce Miller, Sr., Miller Shingle
Co., Inc.

Eric Christenson, Christenson Bros.
Shake Inc.

Clarence Jones, Jones Shake & Logging

Ron Hurn, Sol Duc Shake Co.

Importers:

Arnold & Porter--Counsel
Washington, D.C.
on behalf of:

The Fraser Valley Independent Shake and
Shingle Producers Association, an
association of Canadian producers of red
cedar shakes and shingles

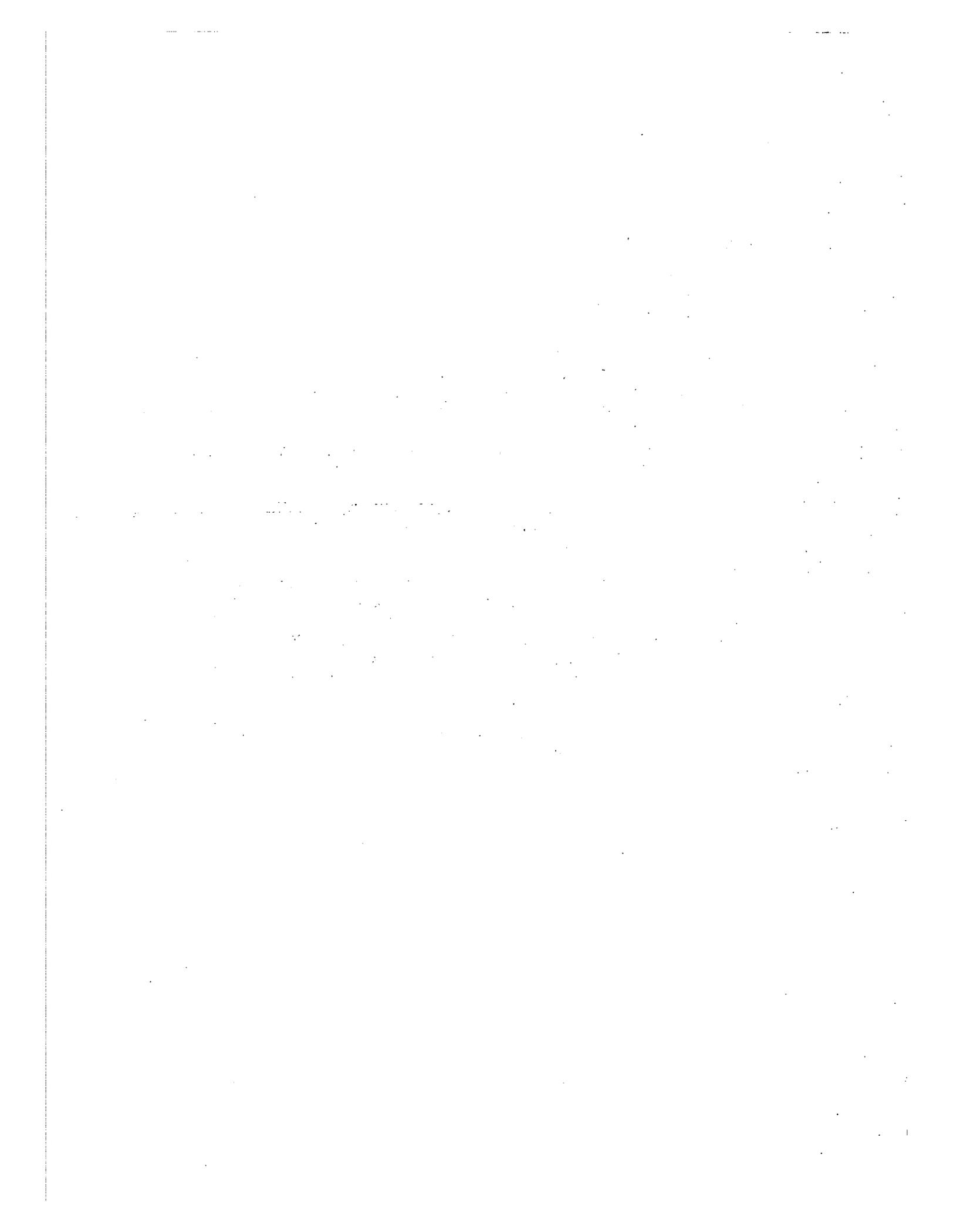
James R. Arthurs, President, Arthurs
Cedar Corporation, Mission, British
Columbia

Robert Karney, General Manager,
Washington Cedar & Supply Co.

Sindy Calabrigo, Blue Ribbon Inspec-
tion and Grading Bureau

Scott Clark, Co-Chairman, The Frazer
Valley Independent Shake and
Shingle Producers Association

Alan O. Sykes)--OF COUNSEL
Shelley R. Slade)



APPENDIX D

SEMIANNUAL TRADE DATA

Table D-1

Western red cedar shakes and shingles: Semiannual U.S. production, exports of domestic merchandise, imports for consumption, and apparent consumption, January 1985-June 1988

(In thousands of squares)

Period	Production 1/	Exports	Imports	Apparent consumption	Share of consumption supplied by--	
					Imports	Production
1985:						
Jan.-June....	775	33	1,901	2,643	71.9	28.1
July-Dec.....	868	35	2,093	2,926	71.5	28.5
1986:						
Jan.-June....	849	34	2,387	3,202	74.5	25.5
July-Dec.....	1,282	26	1,699	2,955	57.5	42.5
1987:						
Jan.-June....	^{2/} 1,102	24	1,521	2,599	58.5	41.5
July-Dec.....	1,124	38	1,750	2,836	61.7	38.3
1988:						
Jan.-June....	1,050	37	1,507	2,520	59.8	40.2

^{1/} Estimated from data supplied by shake and shingle inspection bureaus and official statistics of the U.S. Department of Commerce.

^{2/} Estimated by Commission staff.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.