

Research Department  
Federal Reserve  
Bank of  
San Francisco

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## Northwest Timber Dilemma

In the last few years, the lumber industry of the Pacific Northwest has suffered from its worst slump since World War II. Lumber mills have been forced to close or to curtail operations in response to the downturn in the demand for timber products. As of January 1, for example, 82 out of 197 mills in Oregon were closed. In fact, softwood lumber production in the Pacific Northwest has dropped nearly 35 percent from its peak level in 1978. Although there are now signs that the lumber industry is reviving, the recovery remains jeopardized by a variety of special demand and supply problems.

### Demand problems

The forest products industry depends on the housing industry for almost half of the demand for its products. Thus, when high interest rates and the recession precipitated a 40-percent decline in housing starts between 1979 and 1981, the effect was transmitted directly to the forest products industry. A strong dollar further depressed sales by weakening the competitive position of U.S. producers in world export markets.

The downturn in demand affected the economies of the Pacific Northwest dramatically because of their dependence on a thriving forest products industry. Over one-fourth of total manufacturing employment in Washington and Oregon (which together produce over half of the nation's softwood lumber), for example, is in the forest products industry. Cutbacks in mill production caused massive job layoffs, raising unemployment rates in some timber processing areas of the two states to nearly 30 percent, and contributing to state unemployment rates that are above national levels.

### Supply problems

For lumber firms on the west side of the Cascade mountain range, weakened product demand hit at a time when timber processors were facing sharp increases in

production costs. These cost increases were a legacy of the unique stumpage and mill capacity environment of the Pacific Northwest.

Of the 740 million acres in the nation classified by the U.S. Forest Service as forestland, two-thirds or 488 million acres are classified as commercial forestland. Across the nation, only 28 percent of this commercial forestland is publicly owned; the remainder is privately owned. In the western half of Washington and Oregon, however, national and other public forests account for 49 percent of the available timberland, and over one-half of the mills in the region depend on publicly owned timber for their supply. Public policies toward timber contracting and harvesting thus have a major impact on the production costs of Northwest producers.

Timber harvesting rights on most public lands (and some private) are awarded by the landowner through a competitive bidding process. Mills bid for the stumpage, and the bid becomes the fee for removing standing timber. Contracts in the Northwest typically extend for three years (although a few longer terms exist). If it is successful in bidding for the stumpage, the mill obligates itself to remove a specific quantity of timber within the life of the contract and to pay the bid price at the time of harvest.

Stumpage contract prices in western Oregon and Washington nearly doubled between 1977 and 1980 on forest service lands. When product demand subsequently collapsed, the implicit stumpage market value fell below contract stumpage costs.

In other regions of the country, lumber producers are protected from such price collapses by a price escalation adjustment system in which contract stumpage fees are adjusted periodically to follow shifting

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market prices. In some cases, for example, if the lumber price index falls, rates are reduced by 100 percent of the difference between the quarterly price index and the base index. If the index rises, prices are adjusted upward, but by only 50 percent of the difference. As a result, the system largely protects the producer from market downturns but also reduces potential profits should the market value of timber rise during the life of the contract.

The contracts in western Oregon and Washington did not contain this type of price adjustment mechanism. Indeed, in the early 1970s, when stumpage prices were generally increasing, Northwest producers enjoyed the profit-making opportunities of their contracts and did not press for the inclusion of a price escalation mechanism. When the demand for wood products began to fall, Northwest lumber producers were left facing the worst of both worlds: decimated demand for their products and vast and costly obligations to harvest timber.

#### **The bidding mess**

The high contract-cost problem can be traced to three factors. First, the prospects for continued growth in home construction had contributed to aggressive bidding by Pacific Northwest forest products companies.

The then-strong foreign demand encouraged this enthusiasm. In recent years, over 20 percent of the total softwood log harvest in the Northwest has been exported as foreign markets proved extremely lucrative. Lumber harvested from most publicly owned land is ineligible for export. Thus, lumber companies expected private lands to be increasingly committed to meeting export needs, thereby reducing the supply of lumber available to meet domestic needs. Demand for publicly owned timber harvesting rights was further stimulated by this trend.

Second, lumber companies feared that government would withdraw timberland

from the market and redesignate it for wilderness or other non-commercial use. During the 1960s, the amount of public land available for commercial harvesting increased, leading to expectations of a continued availability of timber. But changes in public policies, some due to environmental concerns, caused approximately 5 percent of commercial timberland to be withdrawn from production between 1970 and 1977. Expecting further cutbacks in allowable harvests, lumber companies placed increasingly high values on the rights to harvest timber on public lands.

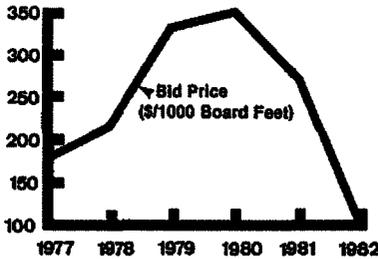
Finally, competition for the crucial public harvesting rights was stiffened by what many in the industry considered an excessive number of mills for the region. In an environment of over-capacity and little direct control over the timber supply, survival depends upon wresting the available supply from rival processors. Given the length of the lumber contracts involved, gaining access to the supply of stumpage was a do-or-die proposition for many mills hoping to profit from the demand anticipated in the early 1980s; it added to the vigorous bidding competition and the resulting upward spiral of costs.

#### **The industry reaction**

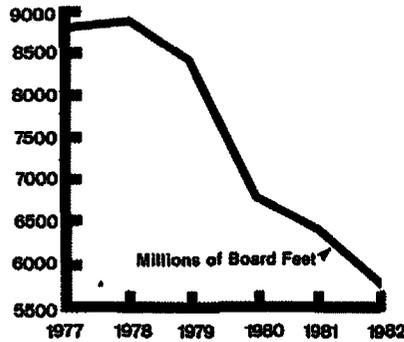
It can be argued that the situation facing the Pacific Northwest timber industry is simply the consequence of some unfortunate forecasting errors by the region's producers and does not warrant public intervention. However, the magnitude of the problem and its consequences for income and employment in the Northwest have spurred the industry to seek relief from the government.

In particular, the industry has sought—and obtained in some cases—short-term extensions of harvesting obligations in existing contracts. Many of the contract termination dates are quickly approaching, and the industry has estimated that it would lose over \$2 billion if it were forced to fulfill its contracts while timber market values are

U. S. FOREST SERVICE  
TIMBER CONTRACT PRICES  
COASTAL NORTHWEST



SOFTWOOD LUMBER PRODUCTION  
COASTAL NORTHWEST



depressed. Of course, the contract extensions that have been obtained (typically one or two years) merely postpone the industry's cash-flow problem unless the market for wood products rebounds smartly as the recession unwinds.

### Canadian competition

The industry is also petitioning the U.S. government to shield it from what it considers subsidized competition from Canadian imports. Canada's share of the U.S. softwood lumber market rose from 13 percent in 1961 to 30 percent in 1981. The share rose partly in response to exchange rate changes favorable to the Canadians. But U.S. producers allege that it is the government subsidy of Canadian imports that is injuring the domestic industry; and they have detailed these allegations in a complaint filed before the U.S. International Trade Commission (ITC).

In this regard, it is interesting to contrast U.S. and Canadian public timberlands policies. The Canadian Crown-Provincial Government owns nearly 90 percent of Canada's commercial forest land. Instead of bidding for timber harvest rights, Canadian companies are granted long-term rights to harvest timber through a negotiated tenure system. The stumpage fee paid is the government appraised market value of the standing timber, derived (much as it would be in a regulated industry) by examining end-product market values, estimated production and harvesting costs and a fair profit. This fee is adjusted monthly to incorporate changes in market values. Historically, the stumpage fees generated by this system have been considerably lower than those paid by Northwest producers. This differential is the basis for the allegation that Canadian producers receive an implicit subsidy.

At the very least, the two systems implicitly incorporate different patterns of risk-sharing between producers and public stumpage suppliers. In the Canadian system, there is no risk that stumpage prices will be bid

above current or future market value in an auction. Since the contracts extend for a secure length of time and contain a price escalation (and de-escalation) mechanism, producers bear little price risk. Canadian producers thus are largely protected from the variations in supply price that have devastated the Northwest market.

### Conclusion

Of course, the flip side of this coin is that by sharing the risk with the public sector, the Canadian lumber processors also forego the profit opportunities of fixed price contracts. Still, some industry observers in the U.S. feel that some redistribution of risk-bearing may be necessary to maintain a healthy lumber industry in the long-run, and that the incorporation of a price escalation mechanism in Northwest timber contracts would be one step in this direction. Indeed, at the end of March, the Forest Service will initiate an experimental price adjustment system in western Oregon and Washington.

The issue of unfair Canadian competition is still not resolved. The ITC issued a preliminary finding of injury on November 22, 1982. Next, the Department of Commerce must determine by early March whether or not Canadians implicitly receive a government subsidy. Depending on the determination, the U.S. will decide whether to impose duties or take other actions.

These developments do not erase the cumulative gap of over \$2 billion between the average contract price and the current price for uncut timber on government land. Still, there is tentative hope for a recovery. The recent increases in home building activity should increase the demand for wood products, and, since softwood lumber inventories were at their lowest level in ten years on January 1, should lead to a pick-up in lumber prices and harvesting activity. If the demand for lumber and wood products recovers further, the worst could be over for the Northwest lumber industry.

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**BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT**  
 (Dollar amounts in millions)

Selected Assets and Liabilities	Amount Outstanding	Change from	Change from	
			Dollar	Percent
<b>Large Commercial Banks</b>	2/2/83	1/26/83		
Loans (gross, adjusted) and investments*	164,183	601	6,334	4.0
Loans (gross, adjusted) — total#	143,046	550	6,636	4.9
Commercial and industrial	45,416	310	3,409	8.1
Real estate	57,279	— 89	814	1.4
Loans to individuals	23,815	— 26	291	1.2
Securities loans	2,831	77	844	42.5
U.S. Treasury securities*	7,635	74	1,444	23.3
Other securities*	13,502	— 23	— 1,746	— 11.5
Demand deposits — total#	40,175	2,507	— 713	— 1.7
Demand deposits — adjusted	27,202	110	— 196	— .7
Savings deposits — total	59,851	2,333	29,048	94.3
Time deposits — total#	75,446	— 1,939	— 15,687	— 17.2
Individuals, part. & corp.	66,692	— 1,699	— 15,343	— 18.7
(Large negotiable CD's)	25,815	— 522	— 10,388	— 28.7
<b>Weekly Averages of Daily Figures</b>	Week ended 2/2/83	Week ended 1/26/83	Comparable year-ago period	
<b>Member Bank Reserve Position</b>				
Excess Reserves (+)/Deficiency (-)	82	170	60	
Borrowings	7	4	237	
Net free reserves (+)/Net borrowed(-)	75	166	— 177	

\* Excludes trading account securities.

# Includes items not shown separately.

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