

Research Department  
Federal Reserve  
Bank of  
San Francisco

May 1, 1981

## Out of the Woods?

Last year was a dismal one for the U.S. softwood lumber industry, and 1981 to date has not been much better. The demand for lumber in 1980 declined for residential construction and for other uses as well, so that production plunged 17 percent on the heels of a 4-percent decline over the 1977-79 period. For the year, production dropped to the lowest level in over three decades.

The decline would have been even more severe except for the second-half pickup in homebuilding and in general economic activity. Because of that pickup, lumbermen entered 1981 with hopes for a strong recovery for their industry. But now, prospects look less hopeful because of the renewed weakness in housing and other markets. Industry leaders today expect only modest gains in production and prices above 1980's depressed levels.

Most of the industry's woes in the 1979-80 period could be traced to its heavy reliance on the homebuilding industry, which constitutes its single most important market. Private housing starts dropped about 35 percent over the 1978-80 period, nearly matching the 43-percent decline over the 1973-75 span (see chart). Moreover, construction of single-family units, which generally require nearly twice as much lumber as multi-family units, weakened even earlier and thus dropped 41 percent over the 1977-80 period. As a result, single-family units dropped from 73 to 66 percent of total units started over that period.

Reflecting these trends, consumption of lumber by the residential-construction industry dropped about 38 percent over the 1977-80 period. The overall consumption decline remained limited in 1978 and 1979 because of continued strength in lumber's other markets—nonresidential construction, building repair and remodeling, materials handling (containers) and exports. But in 1980 all of the industry's domestic markets turned sour as

the economy weakened in the winter and spring months. Thus, as noted above, total softwood-lumber consumption dropped 17 percent in 1980 to about 32.4 billion board feet. The only good news occurred in the relatively small but promising export market, which grew about 11 percent (to 2.0 billion board feet) on the basis of heavy Japanese, Canadian, and Italian demand.

### Price trends

Softwood-lumber prices actually increased through most of 1979 despite emerging weakness in end-product demand, but they then plunged 23 percent between the fall of 1979 and the spring of 1980. For 1980 as a whole, prices dropped 10 percent—almost offsetting 1979's 11-percent increase.

Price weakness would have been even more pronounced except for the rising cost of the industry's basic raw material, timber. Raw-material costs in any given period reflect prices of timber purchased at different times, because of the typical lag between time of purchasing and time of harvesting. Thus, the sharp rise in stumpage (timber) prices throughout the second half of the 1970's heavily affected industry costs and prices in the latter part of that period.

Stumpage price increases were widespread, but especially so in the National Forests, which are located mainly in the West. For example, the price of National Forest timber in Washington and Oregon rose at an average annual rate of 16 percent over the 1975-78 period, and then accelerated to a 34-percent rate over the 1978-80 period. Part of the reason was heavy demand, as sales of National Forest timber rose from 11.0 to 11.6 billion board feet between 1978 and 1980. Bidding for public timber reached a feverish pitch in 1979 because of rising demand in all markets—even housing, at least in the early part of the year. Another part of the reason for the price upsurge was heavy export demand

Research Department  
Federal Reserve  
Bank of  
San Francisco

Opinions expressed in this newsletter do not necessarily reflect the views of the management of the Federal Reserve Bank of San Francisco, nor of the Board of Governors of the Federal Reserve System.

---

for privately-owned timber, which affected prices of National Forest timber despite restrictions on exports of the latter.

Lumber mills consequently experienced a cost-price squeeze in 1980, as their timber costs rose while their finished-lumber prices declined. The squeeze particularly affected the smaller, non-integrated producers, who generally rely heavily on timber from publicly-owned lands. Large integrated producers, on the other hand, could meet part of their raw-material needs from their own supplies, and also could benefit from strong log export demand as well as the appreciating value of their timber stands. Those producers thus were more successful in dealing with the decline in end-product demand and prices.

#### **Outlook for 1981 . . .**

In early 1981, softwood-lumber orders and prices showed renewed weakness. In March, production lagged 16 percent below its year-earlier pace while prices had fallen about 5 percent below the year-earlier level. Part of this weakness reflected the poor state of the housing industry, as new starts trended downward to a 1.3-million-unit annual rate by March. That rate—although 24 percent above year-earlier levels—still represented a severely-depressed pace. Considering this poor start, what are the prospects for the industry for the remainder of 1981 and beyond?

Most industry analysts expect U.S. softwood-lumber consumption to increase moderately this year—perhaps by 5 or 10 percent. Prices may increase at a somewhat faster rate, due to the continued upward pressures exerted by raw-material costs. But this scenario presupposes a second-half improvement in the housing market.

Most analysts expect housing starts to fall a bit further by mid-year, reflecting continued tightness in mortgage markets and the steady decline since last September in housing permit activity. Further weakness also is suggested by the heavy inventory of unsold homes.

If housing demand picks up as expected in the second half, private starts for the year could reach 1.4-1.5 million units—about 8 to 15 percent above the 1980 level. But the improvement may be concentrated in the multi-family rather than the single-family end of the market—the sector which uses the most lumber per unit. For that reason, housing lumber demand may increase at a slower rate than the total number of new housing units.

Lumber usage in other domestic markets also may increase in 1981—but only moderately, given the continued sluggishness in the economy. Moreover, although the export market for finished lumber shows long-term growth potential, lumber exports may weaken in 1981 because of the softening of business activity overseas, as well as the recent decline in the value of other currencies against the dollar. In fact, the Japanese recently asked U.S. producers to cut back their lumber exports due to a slump in Japanese homebuilding activity and a consequent buildup of excess lumber inventory.

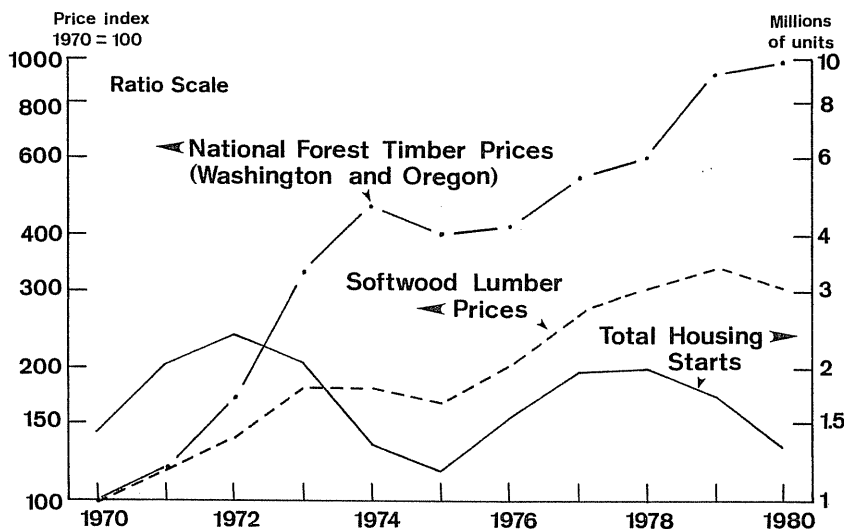
#### **. . . and beyond**

Beyond 1981, the outlook for the lumber industry appears somewhat brighter, because of the expected strengthening of U.S. housing demand over the 1982-85 period. Favorable factors include rising family incomes, the desirability of owning a home for investment as well as shelter purposes, and demographic factors—namely, an increase in the rate of household formation resulting from the post-World War II baby boom. With the development of innovative mortgage-financing schemes, most analysts expect housing starts to average about 1.8 million units during that period. If that demand materializes, and other markets continue to expand, the lumber industry could experience a repeat of the strong performance of the 1975-78 period. It should be remembered, however, that softwood-lumber prices soared at a 24-percent average annual rate during that period.

The possibility of a sharp price increase reflects the unresponsiveness of National Forest timber offerings to market conditions, partly because of the "sustained-yield" model followed by the U.S. Forest Service and other agencies in determining the potential harvest on public lands. The supply function inherent in this model is unresponsive to bid prices, since the volume offered for sale is determined on the basis of biological factors which are independent of any cost considerations. When demand shifts upward, timber

prices feel the full impact of the shift. Moreover, the actual volume available for sale from a given forest may be even lower than the potential if the agency fails to receive enough appropriations to administer the expected volume of sales. Thus, once housing rebounds, consumers could face another resurgence in lumber prices, due in part to supply problems resulting from restrictions on National Forest timber harvests.

Yvonne Levy



FIRST CLASS

Alaska • Nevada • Oregon • Utah • Washington  
 Idaho • Arizona • California • Hawaii

San Francisco  
 Bank of  
 Federal Reserve  
 Research Department

FIRST CLASS MAIL  
 U.S. POSTAGE  
 PAID  
 PERMIT NO. 752  
 San Francisco, Calif.

**BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT**

(Dollar amounts in millions)

Selected Assets and Liabilities	Amount Outstanding 4/15/81	Change from 4/8/81	Change from year ago	
			Dollar	Percent
<b>Large Commercial Banks</b>				
Loans (gross, adjusted) and investments*	146,766	550	7,212	5.2
Loans (gross, adjusted) — total#	124,469	618	6,768	5.8
Commercial and industrial	36,628	142	1,781	5.1
Real estate	51,674	122	5,402	11.7
Loans to individuals	22,787	92	- 1,764	- 7.2
Securities loans	1,355	- 142	599	79.2
U.S. Treasury securities*	6,611	- 6	53	0.8
Other securities*	15,686	- 62	395	2.6
Demand deposits — total#	45,681	2,750	- 978	- 2.1
Demand deposits — adjusted	31,608	931	- 1,592	- 4.8
Savings deposits — total	31,468	- 120	4,701	17.6
Time deposits — total#	75,401	- 10	11,779	18.5
Individuals, part. & corp.	66,632	- 45	11,774	21.5
(Large negotiable CD's)	28,886	- 109	6,379	28.3
<b>Weekly Averages of Daily Figures</b>	<b>Week ended 4/15/81</b>	<b>Week ended 4/8/81</b>	<b>Comparable year-ago period</b>	
<b>Member Bank Reserve Position</b>				
Excess Reserves (+)/Deficiency (-)	n.a.	n.a.		39
Borrowings	40.0	2.3		31
Net free reserves (+)/Net borrowed(-)	n.a.	n.a.		9

\* Excludes trading account securities.

# Includes items not shown separately.

Editorial comments may be addressed to the editor (William Burke) or to the author . . . Free copies of this and other Federal Reserve publications can be obtained by calling or writing the Public Information Section, Federal Reserve Bank of San Francisco, P.O. Box 7702, San Francisco 94120. Phone (415) 544-2184.