



AgEcon SEARCH

RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

Robert B. Phelps
Forest Service, USDA
1984 Agricultural Outlook Conference, Session 26
Washington, D.C.



For Release: Tuesday, November 1, 1983

Few timber products are consumed by individuals in the form in which they are initially manufactured. Instead, most move to various major markets where they are remanufactured or made a part of a product that is ultimately used by individual consumers. Thus, although consumer demand is the underlying force, direct demand for timber products is largely determined by the levels of activity in their primary end-use markets. So before discussing demands for the various products, I would like to briefly review recent trends in these markets and take a look at current estimates of their strength this year and early in 1984.

Domestic Markets

Activity in most major timber products markets in the United States increased fairly rapidly through the first half of 1983. However, early in the fourth quarter trends in several economic indicators, including a slowing in the gross national product and continuing high interest rates, suggest that growth in most markets may moderate somewhat late in 1983 and in 1984.

The gross national product, the most comprehensive measure of total economic activity, rose 9.7 percent at a seasonally adjusted annual rate to \$1,525 billion (1972 dollars) in the second quarter of 1983. This was the most rapid single-quarter growth since the second quarter of 1978 and followed an increase of 2.6 percent at a seasonally adjusted rate in the first three months of the year. Late October estimates by the U.S. Department of Commerce put third-quarter GNP growth at a somewhat lower seasonally adjusted rate of 7.9 percent. Although this estimate is subject to revision, analysts feel that the economy has slowed somewhat. Most also expect that growth to moderate further in the fourth quarter and for the year to average about \$1,535 to \$1,540 billion (1972 dollars), roughly 3.5 percent above the GNP for 1982. Continued growth is expected in 1984.

60th ANNUAL AGRICULTURAL OUTLOOK CONFERENCE • USDA
OCT. 31-NOV. 3 1983 • WASHINGTON, D.C.
60 YEARS OF SERVICE TO AMERICAN AGRICULTURE

Trends in new construction, the largest market for lumber and plywood, vary somewhat with the type of construction. Production of new housing units, which accounts for over a third of the total annual consumption of softwood lumber and plywood, and for substantial amounts of the other major timber products, moved up strongly during the first 8 months of 1983. In August, housing starts reached a seasonally adjusted annual rate of 1,909,000 units, up 6 percent from July and the highest monthly level in more than 4 years. In September, however, starts declined sharply. Apparently in response to the increase in interest rates in the summer and to lagging sales in August, September starts dropped to a seasonally adjusted rate of 1,652,000 units, 13.4 percent below August and the smallest rate since April 1983.

Many analysts had been expecting a downturn in starts since the July increase in mortgage rates and were somewhat surprised that the decline had not begun in August. Most now anticipate a continuing decline in the level of starts in the final quarter of the year. This expectation is the result of a number of elements, including a 9 percent decline in the September seasonally adjusted level of new housing permits (which follows a 7 percent drop in August), a 5 percent decline in seasonally adjusted new home sales reported for August, and continued high mortgage interest rates. Because of rising starts and declining sales the unsold inventory of new single-family housing at the end of August was 297,000, up some 20 percent from August 1982, and estimated to be equal to a supply of more than 6 months at the current seasonally adjusted rate of sales. Based on these various trends, recent estimates of housing starts for 1983 range from 1,600,000 to 1,800,000 units with the consensus at about 1,700,000. Although this is still about 300,000 below the 2 plus million units started several years in the 1970's, it is more than half again larger than in 1981 and 1982 and would be the most units built since 1979. Shipments of mobile homes, a type of dwelling that many first-time home purchasers have turned to in recent years as costs for conventional houses increased, have also been rising and will be sharply higher than in 1982.

Analysts' estimates of 1984 housing starts vary, however, most currently see new home construction and sales continuing to be constrained by high interest rates early in the year. And although they expect some improvement in the second half, most forecast starts for the year to be near or only slightly above the total for 1983. Mobile home shipments are expected to follow the same general trends.

Through the first 9 months of 1983, one-family units composed about 63 percent of all private starts (seasonally adjusted basis), slightly above 1982 when 62 percent of the private units started were one-family. An increase in the proportion of this type of unit has special significance for the timber products industry because average per unit use of lumber, plywood, and other wood-based panel products is much higher than in multi-family units and mobile homes.

In contrast to housing, nonresidential construction activity declined sharply through the first 4 months of 1983. Since then, however, there have been marked improvements and in August the seasonally adjusted annual rate of expenditures for new nonresidential construction totaled \$104.7 billion (1977 dollars). This is almost 10 percent above the April volume, but still about 2 percent below August 1982. Much of the decline early in the year was in expenditures for nonresidential building construction--the major wood-using segment of the nonresidential market. Although interest rates remain relatively high, consumer expenditures for durable and nondurable goods have been rising and industrial capacity utilization has been increasing, reaching a 2-year high in September. As a result, recent surveys indicate that contract awards for future nonresidential construction were rising late in the summer. These data in conjunction with surveys of anticipated expenditures for new plant and equipment indicate probable increases in the months ahead. However, unless last quarter expenditures are particularly strong, expenditures for all of 1983 are unlikely to reach the total for 1982. Investment in plant and facilities should move up more rapidly in 1984 as the general economy continues to improve and production and consumption rise.

The index of industrial output--an important indicator of the demand for pallet lumber, container board, and some grades of paper--rose to a seasonally adjusted value of 153.7 (1967=100) in September. This was 1.5 percent above the index for August; and a continuation of the strong upward trend in evidence since the low reached in November 1982. Output of the furniture and fixtures industry--a major market for hardwood lumber, particleboard, and plywood--also increased rapidly, rising 19 percent in the first 7 months of the year to an all-time high before dropping in August to about the same level as in May. Container production, an important paperboard market, has been rising since late in 1982.

The August increase in total industrial output pushed the index to the highest level in more than 2 years. Moreover, economists feel that production in most industries will continue to rise in the months ahead although perhaps at a somewhat slower pace than in the first three quarters of 1983.

In summation, recent trends in the domestic markets for most timber products have been upward with good prospects for continued though possibly somewhat slower growth in the last quarter of 1983 and in early 1984.

International Markets

The United States is the world's leading importer of timber products--chiefly lumber, woodpulp, and paper and board from Canada and veneer and plywood from southeast Asia. The total value of these imports in 1982 was about \$8.4 billion, 3.3 percent of the value of all U.S. imports. In terms of roundwood equivalent, more than a fifth of our apparent consumption of timber products has been imported in most recent years.

The United States is also a major timber products exporter. In 1982, the total value of timber product exports was \$7.2 billion--about 3.5 percent of our exports. Although we ship a variety of wood products to many countries, our principal export markets are Japan for softwood logs and lumber, pulp chips, wood pulp, and paper and board products, and western Europe for wood pulp, paper and board products, and lumber and plywood.

International demand for many U.S. timber products, which had been generally trending up in the late 1970's, began to decline in 1980 as economic growth slowed in our major overseas markets. These trends have continued through mid-1983. Particularly important has been the long slump in Japanese housing, the principal market for most of the softwood logs and lumber imported from the United States. Also important has been the relatively weak but slowly improving economic conditions in some of our major European markets, particularly the United Kingdom and the Federal Republic of Germany and the strengthening exchange rate for the U.S. dollar. The outlook for international trade appears somewhat improved for most products in 1983, however, exports to most countries will likely be only marginally above 1982. International wood products specialists expect a continued slow improvement in 1984 if the economies of our major trading partners improve.

Timber Products Production, Trade, and Consumption

Softwood Lumber

In response to the sharply higher levels of housing starts, softwood lumber production in the first 7 months of 1983 was about 29 percent above that of the same months in 1982 according to data from the National Forest Products Association. Current expectations about housing and other markets indicate the likelihood of some slowing of output in the final months of the year, however, and production for all of 1983 is estimated at about 25.5 billion board feet some 21 percent above the 21.0 billion board feet produced in 1982 and the largest volume produced since 1979 (table 1.).

Imports, chiefly from Canada, are also expected to show some slowing late in the year, but overall to be up 27 percent to 11.6 billion board feet in 1983. This volume is second only to the 11.9 billion board feet imported in 1978. Exports are likely to increase about 5 percent to 1.7 billion board feet.

Based on the estimates of production, imports, and exports discussed above, apparent consumption (i.e., production plus imports minus exports) in 1983 is estimated at 35.4 billion board board feet--about 24 percent above 1982, and the highest volume consumed in U.S. domestic markets since 1979.

Table 1.--Wood products production, consumption, and trade

(1980-82 actual, 1983 projections)

Product	Year	Domestic Production	Imports	Exports	Apparent Consumption
Softwood lumber					
(billion bd. ft.)	1980	25.3	9.6	2.0	32.8
	1981	22.9	9.2	1.9	30.2
	1982	21.0	9.1	1.6	28.5
	1983	25.5	11.6	1.7	35.4
Hardwood lumber					
(billion bd. ft.)	1980	7.1	.3	.5	6.9
	1981	6.3	.3	.5	6.1
	1982	4.8	.2	.4	4.6
	1983	5.7	.2	.5	5.4
Softwood plywood					
(billion sq. ft. 3/8-inch basis)	1980	15.5	1/	.4	15.1
	1981	15.5	1/	.7	14.9
	1982	14.1	1/	.5	13.7
	1983	18.4	.1	.6	17.9
Hardwood plywood					
(billion sq. ft., 3/8-inch basis)	1980	1.0	1.2	1/	2.2
	1981	1.0	1.5	1/	2.4
	1982	.9	1.1	1/	2.0
	1983	1.1	1.6	1/	2.7
Particleboard ^{2/}					
(billion sq. ft., 3/4-inch basis)	1980	3.5	.3	.1	3.7
	1981	3.5	.3	.1	3.6
	1982	2.9	.3	.1	3.1
	1983	3.8	.3	.1	4.0
Hardboard					
(million tons)	1980	2.0	.2	1/	2.1
	1981	1.9	.2	1/	2.0
	1982	1.7	.2	1/	1.8
	1983	2.2	.2	.1	2.3
Insulation board					
(million tons)	1980	1.1	1/	1/	1.1
	1981	.8	1/	1/	.8
	1982	.8	1/	1/	.8
	1983	1.1	.1	1/	1.2
Pulpwood					
(million cords)	1980	88.6	1.6	3.7	86.5
	1981	85.3	1.5	3.0	83.9
	1982	83.4	1.4	2.4	82.5
	1983	90.0	1.5	2.0	89.5

1/ Less than 50 million square feet.

2/ Includes medium-density fiberboard.

3/ Less than 50 thousand tons.

Note: The projections shown for 1983 are based on the trends in the major markets discussed in this paper and should not be viewed as forecasts of actual volumes. Data presented are subject to rounding.

Present expectations about housing and other important markets indicate that a small rise in production, imports, and consumption is likely in 1984. Exports are also expected to increase.

On the strength of rising demand, softwood lumber prices increased rapidly through the first half of 1983. However, at mid-year prices peaked and have been declining over the past three months. The producer price index of softwood lumber in September stood at an index level of 361.4 (1967=100) (table 2). This was about 9 percent below the high for the year reached in June, but still 12 percent above the average for 1982. In October, prices were continuing to decline and no appreciable increase is likely for many grades if housing construction trends down in the last quarter.

Hardwood Lumber

Because of increased activity in its major markets, hardwood lumber production, orders, and shipments during the first 7 months of 1983 were sharply above 1982 levels. Output for the year is estimated at 5.7 billion board feet--19 percent above 1982.

Hardwood lumber imports through July were slightly above those in the first 7 months of 1982 and only a little strengthening is expected in the last half. The total for the year is thus estimated at 0.2 billion board feet. Data through July showed that exports were 20 percent higher than in the first 7 months of 1982. The year's total is expected to be 0.5 billion board feet, about 0.1 billion above the volume exported in 1982.

Apparent hardwood lumber consumption in 1983, based on the above estimates of production and trade, is estimated at 5.4 billion board feet, 17 percent above 1982. Anticipated growth in the important hardwood markets suggests that some increase in production and consumption is likely in 1984. Imports and exports are also expected to show a small rise.

In contrast to softwoods, hardwood lumber prices, as measured by the producer price index, have trended steadily up in 1983. Prices in September (index value 291.2, (1967=100)) were about 9 percent above those in January and 11 percent above the 1982 average. Some further increases can be expected, in late 1983 and in 1984, if demand continues up as expected.

Softwood Plywood

According to data from the American Plywood Association, total production of softwood plywood was sharply above year-earlier levels during the first 8 months of 1983. Although the Association expects some slowing in the last quarter, production will likely remain above last quarter 1982. As a result of these trends softwood plywood production in 1983 is estimated at 18.4 billion square feet, 3/8-inch basis, about 30 percent above 1982 output.

Table 2.--Producer price indexes for selected wood products

(1967 = 100)

Product	1980 annual	1981 annual	1982 annual	-----September-----	
				1982	1983
Softwood lumber	345.1	343.0	321.6	320.9	361.4
Hardwood lumber	252.0	255.2	262.4	262.5	291.2
Softwood plywood	308.8	306.5	282.1	282.3	306.3
Hardwood plywood	176.6	179.7	181.0	175.0	182.7
Particleboard <u>1/</u>	156.1	168.6	171.5	170.7	<u>3/</u>
Hardwood <u>2/</u>	187.4	217.9	228.5	232.1	234.7
Insulation board	208.1	242.4	250.9	253.4	265.8

1/ Corestock.2/ Type II, 1/8-inch.3/ Not available.

Source: U.S. Dept. Labor, Bureau of Labor Statistics.

Softwood plywood exports, which declined in 1982, are expected to increase from 0.5 to 0.6 billion square feet. Imports will likely also show a small rise to about 0.1 billion square feet.

With these levels of production and trade, apparent softwood plywood consumption in 1983 is expected to total about 17.9 billion square feet. The increase in housing and particularly in other markets in 1984 should result in an additional increase in production and consumption.

Softwood plywood prices as indicated by the producer price index peaked in July. Since then, prices have generally trended down, and in September the index was 306.3, 7 percent below July, but 8.6 percent above the 1982 average. Some rise is likely in 1984 as demand increases.

Hardwood Plywood

Hardwood plywood production is expected to total about 1.1 billion square feet (3/8-inch basis) in 1983, up about 24 percent from output in 1982. Trade data through late summer indicate that imports are likely to total 1.6 billion square feet, about 45 percent more than in 1982. Exports are expected to remain relatively small.

Given these trends in production and trade, apparent consumption of hardwood plywood in 1983 is estimated at 2.7 billion square feet, about 35 percent above 1982. A small increase in production and imports is likely in 1984 if the important markets follow the trends discussed earlier.

Hardwood plywood prices have also increased in 1983. In September, the producer price index was 182.7 (1967=100), about 4 percent above the index in January, but less than one percent larger than the 1982 average.

Particleboard

Activity in the major markets indicates that combined production of particleboard and medium-density fiberboard in 1983 will be up about 30 percent to 3.8 billion square feet, 3/4-inch basis. Data for the first 7 months of 1983 indicate that imports are likely to be 0.3 billion square feet. Exports are estimated at 0.1 billion square feet. Given these estimates, consumption will amount to 4.0 billion square feet, 28 percent above 1982. A somewhat smaller increase is likely in 1984.

Hardboard and Insulation Board

Hardboard production in 1983 is estimated at 2.2 million short tons (6.6 billion square feet, 1/8-inch basis), about 29 percent above 1982. Imports are expected to total 0.2 million short tons with exports about 0.1 million short tons. Consumption, with these estimates of production and trade, would amount to 2.3 million short tons (6.9 billion square feet, 1/8-inch basis), about 28 percent above 1982.

Markets during the first half of 1983 indicate that insulation board production for the year will total about 1.1 million short tons (2.6 billion square feet, 1/2-inch basis)--about 30 percent more than in 1982. Imports are expected to total about 0.1 million tons and exports to be less than half as large. Consumption is consequently estimated at 1.2 million tons (2.8 billion square feet, 1/2-inch basis), about a third larger than in 1982.

If housing and manufacturing follow the trends outlined earlier, the demands for insulation board and particularly hardboard are expected to increase somewhat in 1984. Prices are also likely to follow the slow upward trends of the past two years, as indicated by the producer price indexes.

Pulpwood

At the end of the first 8 months of 1983, paper and board consumption and production and consequently wood pulp consumption and production were strongly above the year-earlier pace. According to data from the American Paper Institute, the seasonally adjusted annual rate of paper and paperboard production through August was 63.2 million tons, up 7 percent from total output in 1982, and well ahead of the previous high of 62.3 million tons in 1981. Production of wood pulp--which currently constitutes about 78 percent of the fiber raw material consumed in U.S. paper and board mills--was about 4 percent above 1982 production. For many grades of paper and board, production and shipments were at all-time high rates through August, with the expectation of no appreciable downturn in the months ahead. Consequently pulpwood production (roundwood and chips) is expected to rise about 8 percent to 90.0 million cords, a new record volume.

Imports of pulpwood are expected to total 1.5 million cords and exports 2.0 million cords. These volumes are, respectively, about 7 percent above and 15 percent below 1982 imports and exports. Nearly all of the decline in exports is likely to be in chip shipments to Japan.

Apparent consumption for all of 1983, given the above estimates of production and trade, amounts to 89.5 million cords, 8.5 percent more than in 1982 and also a new record high in a trend that has been rising fairly steadily for decades. Prospective increases in economic activity suggest that consumption and production are likely to rise in 1984.

Softwood Log Trade

Softwood log exports during the first 7 months of 1983 were very close to the levels attained in the same period in 1982, as declines in shipments to Japan and China were offset by exports to Korea. Reports from the Far East indicate that exports to China were increasing in late summer, however, no strong upward trend is expected in Japanese imports because of continued depressed markets, especially housing. Exports to other areas are also unlikely to grow appreciably. Exports for the year, therefore, have been estimated at 3.2 billion board feet, 3 percent above shipments in 1982. The outlook for 1984 is also for a small rise. Imports of softwood logs have shown some increase and are expected total about 0.2 billion board feet in 1983.

Hardwood Log Trade

Hardwood log exports for 1983 are estimated at 0.1 billion board feet. Although the volume is small, most of the hardwood log exports in 1983, and in recent years, have been composed of quality oak, walnut, and other preferred species that are in short supply in the United States. These exports have thus been an important contributing factor to the large increase in stumpage and log prices for some domestic species.

Hardwood log imports in 1983 are expected to be close to 30 million board feet, about two thirds more than the volume imported in 1982.

Fuelwood

Current estimates indicate that fuelwood consumed for domestic heating and cooking has risen to more than 42.0 million cords per year in the early 1980's. Various surveys of the forest industries indicate that there have also been large increase in the consumption of fuelwood for industrial heat and power generation in the last few years. Apparently most of the wood being used for domestic purposes is produced by the consumers from urban areas, fence rows, dead trees and other similar sources not normally drawn upon as sources of industrial timber. Most of the growth in use by the forest industries has resulted from increased utilization of logging and mill residues.

Because most of the growth in fuelwood use has come from such sources there has so far been no significant impacts on industrial products such as pulpwood. This may in part reflect the generally depressed demand situation over most of the past 4 years. If the use of fuelwood continues to grow, it will undoubtedly begin to affect other products and especially so in the future when the demands for many of these products are expected to increase in response to rising economic growth.

Summary

Given the trends in consumption, trade, and production for the various products discussed earlier, U.S. production and consumption of all industrial roundwood products, is expected to be sharply above 1982 levels. Total imports and exports, including the pulpwood equivalent of pulp, paper, and board also will be up. Some additional rise in consumption, imports, and production can be expected in 1983 if the various markets behave as discussed earlier. Exports also will likely show an increase.