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U.S. Forest Products Annual Market Review and Prospects, 1999–2000

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Abstract

This report provides general and statistical information on forests products markets in terms of production, trade, consumption, and prices, as well as specifics describing the current state of the U.S. economy. Market developments are described for sawn softwood, sawn hardwood, softwood and hardwood log trade, pulpwood, wood-based panels, paper and paperboard, fuelwood, and forest product prices. The table presents detailed information and projections for 2001.

Keywords: production, trade, prices

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U.S. Forest Products Annual Market Review and Prospects, 1999–2000

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General Economic and Major Market Trends

The U.S. economy performed very well in 1999. Economic activity, as measured by gross domestic product (GDP), rose at an annual rate of 4.2% to \$8,848.2 billion (1996 dollars) (billion equivalent to 10^9), an increase from \$8,495.7 billion (1996 dollars) during 1998. U.S. economic activity as measured by GDP continued to increase strongly in the first quarter of 2000, rising by 4.8%, and prices paid by U.S. residents as indicated by the consumer price index increased by only 2.7%, slightly above the fourth-quarter 1999 level. The current economic expansion, now in its 10th consecutive year, remains strong but is beginning to show signs of slowing. This is reflected by the first 6 months of 2000: the year began with good forward momentum in the economy and housing sector but is now characterized by challenges to further expansion. Overall rates of inflation were higher during the first half of 2000 than they were in 1999. Also, some economic forecasts are calling for slower GDP growth during 2000 along with higher prices and a less than favorable employment outlook. But despite these dampening forces, the economic expansion maintained considerable momentum for the first two quarters of 2000. Advanced estimates of GDP showed a slowdown in economic growth to an annual rate of 4.0% for 2000 as a whole, down from 4.8% in the first quarter of the year.

Despite the economic forecast, the economy remains strong, as indicated by growth in real GDP in the second quarter of 2000, exceeding the 3.7% average rate for the current expansion. Leading economic indicators have declined but remain strong; real personal consumption expenditures (PCE) increased 3.0% in the second quarter of 2000 after increasing 8.3% in the first quarter. Many of the factors usually considered in analyses of PCE continue to show strength, increasing at approximately the same average rate during the first half of 2000 as one year ago. The unemployment rate edged down to 4.2% for all of 1999, from 4.5% in 1998.

The largest contributors to the second-quarter increase in real GDP were private nonresidential fixed investment and personal consumption expenditures. Nonresidential fixed investment increased 19.1%, double its average growth rate of 9.5% during the current expansion, and contributed

2.4 percentage points to GDP growth. Expenditures for services accounted for most PCE growth (3.0%) during the second quarter of 2000. The increase in GDP was slowed by an increase in imports, which subtracted 2.3 percentage points from the GDP growth rate. In addition, industrial production rose only 0.2% in June, after gains of 0.5% in May and 0.8% in April. At 144.6% of its 1992 average, industrial production was 5.8% higher in June 2000 than in June 1999. For the second quarter as a whole, the total industrial production index increased at an annual rate of 7.0%, up from the first-quarter pace of 6.5%. The rate of capacity utilization for total industry edged down to 82.1% in June, a level about even with the 1967–1999 average.

The U.S. economic forecast for 2001 calls for a moderate slowdown in GDP growth, from 3.0% to 3.5%. The unemployment rate is expected to increase slightly, to approximately 4.5%. Consumer prices are expected to rise approximately 2.9%, a slight increase from the 1999 level of an estimated 2.7%. The forecast patterns for 2001 reflect convictions that the recent pattern of strong economic growth, low unemployment, and low inflation is not sustainable.

With a large forest resource and high production and consumption of wood products, the United States continues to play an important role in world forest product markets. The United States has the world's highest consumption of paper and paperboard, approximately 94 million metric tons in 1999, which is mostly supplied by domestic production and imports from Canada (according to American Forest & Paper Association, AF&PA). The U.S. forest products industry harvests more than 490 million cubic meters of softwood and hardwood timber, manufacturing approximately 120 million cubic meters of lumber and 26 million cubic meters of structural panel products in 1999.

New housing construction—which accounts for more than a third of U.S. annual consumption of softwood sawn wood and structural panels, and for substantial volumes of other softwood and hardwood products—remained high through 1999. Starts of single-family units led the increase, while multi-family housing starts declined slightly before climbing in February 2000 to their highest level since February 1999. Total housing starts in 1999, including mobile homes, consisted of 2,024,000 units, as sales of new single-family houses set a new record in 1999 of 904,000 units. The U.S.

home ownership rate reached 67.3%, also a new high. Economic expansion continued into 2000, keeping the housing sector strong during the first 6 months of the year. However, builders have lowered their expectations for housing starts, as mortgage rates for the first half of 2000 exceeded mortgage rates for the same period in 1999. Income growth remains strong, enabling a larger proportion of families to be able to afford homes. Household expenditures continued to grow in 1999, driving the personal savings rate to record lows; at the same time, accumulation of wealth in the stock market lifted household net worth (per capita) to record highs.

After several years of increase, shipments of mobile homes decreased to 348,000 units in 1999, 26,000 units less than in 1998. In the first 3 months of 2000, mobile home shipments were well behind 1999 shipments for this period. The seasonally adjusted shipments for 2000 totaled 295,000 units. This is 6% below shipments made in the fourth quarter of 1999 and 23% below those made in the first quarter of 1999.

Along with the strong new residential construction market in 1999, investment in residential repair and remodeling kept pace, as expenditures rose 7% to \$142.9 billion (1992 dollars), from \$133.7 billion of a year ago. Actual expenditures for improvements and repairs to all properties amounted to an estimated \$44.4 billion during the fourth quarter of 1999 compared with \$35.4 billion in the fourth quarter of 1998.

Investment for new residential construction has been stronger than that for nonresidential structures. Spending for new residential housing units equaled \$251 billion (1992 dollars)

in 1999, compared with \$144 billion (1992 dollars) for non-residential building construction.

Three other indicators of demand for wood products increased in 1999 relative to 1998:

- Industrial production—an important demand determinant for pallet lumber, containerboard, and some grades of paper—rose 3.5% over the 1998 level. During 2000, industrial production rose 6.5% during the first quarter and 7.0% in the second quarter, compared with 1999 figures.
- Furniture and fixtures output—a determinant of high-grade lumber production—rose 3.4%. During 2000, furniture and fixtures increased 3.7% during the first quarter and 2.4% in the second quarter, compared with 1999 figures.
- Paper products output—a determinant of pulpwood and wood residue use, as well as recycled fiber availability and use—increased by 1.0% in 1999. Paper products output increased 0.3% during the first quarter of 2000 and 0.1% in the second quarter.

In summary, housing starts should remain strong though slightly lower in 2000, after a strong showing in 1999; activity in the principal markets for U.S. timber was higher in 1999 than in 1998. After strong growth during the first two quarters of 2000, growth is expected to slow down for the rest of the year. Even though the rate of growth is slowing, most analysts predict that conditions favorable to growth of timber markets will continue. Selected U.S. economic indicators are shown in Table 1.

Table 1—Selected U.S. economic indicators, 1997–2001

Indicator	Actual			Estimated	
	1997	1998	1999	2000	2001
Gross domestic product (billion 1996 dollars)	8,144.8	8,494.7	8,848.2	9,1031 ^a	9,412.6 ^a
New housing starts (million units)	1.474	1.622	1.675	1.593 ^b	1.481 ^b
Mobile home shipments (thousand units)	354	374	348	288 ^b	283 ^b
Nonresidential investment in structures (billion 1992 dollars)	141.1	147.9	143.8	144.3 ^c	144.0 ^c
Total industrial production (Index: 1992 = 100)	127.1	132.4	137.1	138.3 ^a	139.1 ^a
Furniture & fixtures (billion 1992 dollars)	122.5	121.5	125.8	126.1 ^d	127.0 ^d
Paper products (Index: 1992 = 100)	112.9	115.0	116.2	117.7 ^a	118.4 ^a

^a *Federal Reserve Bulletin*, August 2000.

^b National Association of Home Builders, *Housing Economics*, July 2000.

^c National Association of Home Builders, *Housing Economics*, April 2000.

^d *Economic Indicators*, April 2000.

Timber Products Production, Trade, and Consumption

Sawn Softwood

Housing and other construction markets have been vigorous in 2000 and are likely to set another record in terms of softwood lumber consumption. According to the Western Wood Products Association, during the first 4 months of 2000 softwood lumber consumption ran ahead of the 1999 pace; shipment of softwood lumber from Western mills rose 3.3% above 1999 levels. Production has increased in all regions, though southern pine production has been only slightly ahead of 1999 levels. Apparent consumption for all of 1999 was 161.2 million cubic meters, 4.3% above 1998 consumption (154.3 million cubic meters). If U.S. housing construction slumps, timber prices are likely to drift downward after their strong start this year. The implications could be more displacement of western timber supply by Canadian and southern U.S. harvest.

Sawn softwood imports rose 7.1% during the first 4 months of 2000 relative to the same period in 1999. The volume of Canadian imports increased by 5.4% during this period. Canadian imports constituted 95% of all sawn softwood imports. However, other suppliers continued to increase their share of the U.S. market. Total sawn softwood imports were 45.2 million cubic meters in 1999, an increase of 2.6% from 1998.

During the first 4 months of 2000, U.S. exports increased by 3.8% compared with exports in the same period in 1999. If this rate continues throughout 2000, total exports would equal 3.5 million cubic meters. Exports to Canada increased by 20.0% in 1999, exports to the European Union fell 5.0% on a value basis, and exports to the Pacific Rim rose 3.4% on a value basis, compared with 1998 exports.

Production of sawn softwood rose 4.5% in the first 4 months of 2000 compared with the same period in 1999. In 1999, 86.6 million cubic meters of sawn softwood was produced. The production of sawn softwood is forecast to increase slightly during 2000.

Sawn Hardwood

In 1999, production of sawn hardwood increased by 2.8% (34 million cubic meters) because of growth in major markets for this resource. Imports increased 17.0% compared with the same period in 1998. During the first 5 months of 2000, growth in imports exceeded growth in exports. Exports increased 11.4%. Exports to the European Union countries increased 10.4%, and exports to the Pacific Rim nations increased 11.2%. Given the estimated growth rates for production, imports, and exports, along with a strong housing market, apparent consumption for 2000 is forecast to increase slightly from the 1999 volume.

Softwood Log Trade

Softwood log exports to the Pacific Rim fell 13% for the first 5 months of 2000 compared with 1999 exports in the same period, while softwood log exports to the European Union rose 42.2%. Total softwood log exports from the western United States rose 1.7% in 1999 compared with 1998 exports, but this level was well below export levels throughout the 1990s. During 1999, timber harvest from National Forests fell 12.8% in the West. The largest volume of decline occurred in the Pacific Northwest—217 million cubic meters from the 1998 total. The U.S. South has undergone a steady increase in softwood log production as a result of the western harvest decline. In the South, 86% of the 86 million acres of forests is privately owned, insulating the region from various public land policies.

Hardwood Log Trade

Hardwood log exports increased during the first 5 months of 2000, but imports declined substantially. Exports rose 6.6% while imports declined by 13.8%, compared with the same period in 1999. For all of 1999, exports to Canada rose 14.5%. During the first 5 months of 2000, the value of exports to the Pacific Rim increased by 14.0% and the value of exports to the European Union increased by 28.4%. During 1999, hardwood log imports from Canada increased by 2.2% from the previous year. For the first 4 months of 2000, imports from Canada fell 11.2%. Canada traditionally provides approximately 95% of imports.

Pulpwood

Combined roundwood and forest chip production for pulp and wood-based panel mills was 218 million cubic meters in 1999, a decrease of 2.9% from 1998. This includes mill residue used for pulp. The rate of increase for roundwood pulpwood is expected to continue to decline during 2000. Pulpwood supplied from residues is decreasing relative to roundwood. The roundwood portion of pulpwood that is pulped was 188 million cubic meters in 1999, a slight decrease from 1998 (based on 1999 pulpwood receipts data from the American Pulpwood Association and woodpulp production data from AF&PA). Trade patterns have continued to have a significant impact on paper and paperboard production and have affected pulpwood use. Exports of paper, paperboard, and converted products have lagged behind 1999 volumes by 3.6%. Imports of paper and paperboard have exceeded their 1999 volumes by 7.8%.

Softwood Plywood

In 1999, softwood plywood production was 15.8 million cubic meters according to APA—The Engineered Wood Association. This volume has fallen less than 1.0% from 1998. Softwood plywood production for the first two quarters of 2000 declined by 1.0% from 1999 levels for the same

period. The APA—the Engineered Wood Association predicts that plywood production will fall to 15.2 million cubic meters in 2000.

Softwood plywood imports and exports showed various results in 1999 compared with 1998 data: imports rose 62% and exports fell 28.4%. Softwood plywood exports increased and imports decreased during the first 5 months of 2000. Plywood exports to Canada increased by 12.3% during the first two quarters of 2000, and plywood imports from Canada decreased by 13.6% during this period. Based on these trends, 2000 exports are estimated to be 2.0% above 1999 levels, and 2000 imports are estimated to be 3.6% below 1999 levels. Given these estimates, apparent consumption of plywood is estimated to decrease in 2000, as more market share for structural panels is taken by oriented strandboard (OSB).

Oriented Strandboard

According to APA—The Engineered Wood Association, OSB production for the first two quarters of 2000 exceeded production for this period in 1999 by 2.5%. In 1999, 10.3 million cubic meters of OSB was produced compared with 9.9 million cubic meters in 1998. The growth rate from 1998 to 1999 was 3.3%, which is lower than the 6.2% growth rate experienced between 1997 and 1998. OSB capacity has been growing rapidly in the United States and Canada—by 25% in 1996, 5% in 1997, 5% in 1998, and 3% in 1999. Despite the growth in capacity and high demand, prices have declined. This pricing trend for OSB is projected to continue through 2000. In 1999, OSB exports increased by 44% (to 159,000 cubic meters); imports increased by 747,000 cubic meters, a rise of 11.5% from 1998.

Given these estimates, apparent consumption of OSB for 2000 is forecast to be 17.8 million cubic meters, a 1.0% rise from 1999. Because OSB now accounts for 52% of structural panel consumption (49% rise from 1998), OSB consumption is expected to exceed plywood consumption.

Hardwood Plywood

Hardwood plywood production in 1999 was 2.0 million cubic meters, up slightly from 1998. This includes core material such as softwood plywood or OSB. An increase of approximately 2% is estimated for 2000, with total production increasing to approximately 2.04 million cubic meters.

Imports of hardwood plywood increased approximately 12% in 1999 over previous year totals. Imports for hardwood plywood during the first 5 months of 2000 also increased approximately 12%. If this trend holds, hardwood plywood imports would total 2.0 million cubic meters in 2000.

The United States exported a small amount of hardwood plywood in 1999.

Particleboard and Medium-Density Fiberboard

Information from the Composite Panel Association indicates that particleboard and medium-density fiberboard (MDF) shipments rose 0.8% and 1.0%, respectively, in 1999. The combined level of particleboard and MDF production rose 0.8% (to 10.7 million cubic meters) compared with 1998 production. During the first 5 months of 2000, particleboard imports increased by 16.7% and MDF imports increased by 36.3%. In 1999, the value of MDF imports increased by 34.6% and the value of particleboard imports declined by 7.0%.

Hardboard

Based on data from the American Hardboard Association, 1.3 million cubic meters of hardwood was produced in 1999, a 2% increase from 1998 levels. Hardboard imports increased by 39.7% in 1999 and continued strong during the first 5 months of 2000, increasing by 10.5%. Hardboard exports increased by 5.2% in 1999 and by 14.4% during the first 5 months of 2000.

Insulating Board

Available information from the AF&PA showed that 3.1 million cubic meters of insulation board were produced in 1999, unchanged from 1998. Production of insulation board has been flat for several years and the trade patterns constant, resulting in a stable level of apparent consumption of 3.3 million cubic meters.

Fuelwood

Using data from the most recent Department of Energy survey, adjusting for 1999 winter weather and a declining trend in fuelwood use per household, fuelwood consumption was estimated to be 72 million cubic meters in 1999, an increase from 70 million cubic meters during 1998. Most fuelwood is used by households for heating and esthetic enjoyment. Industry uses mill residues rather than roundwood for fuel. A small portion of roundwood fuelwood is used for electric power production. Use for electric power is limited by the low cost of coal and natural gas alternatives. Fuelwood consumption for 2000 is estimated to be below the level for 1999.

Forest Products Prices

Recent trends in wholesale prices of forest products differ across the two broad categories: lumber and wood products (such as sawn lumber, wood-based panels) and pulp and paper products (Fig. 1). Throughout 1997 and 1998, the composite price of lumber and wood products continued to fluctuate around a level reached by the mid-1990s.

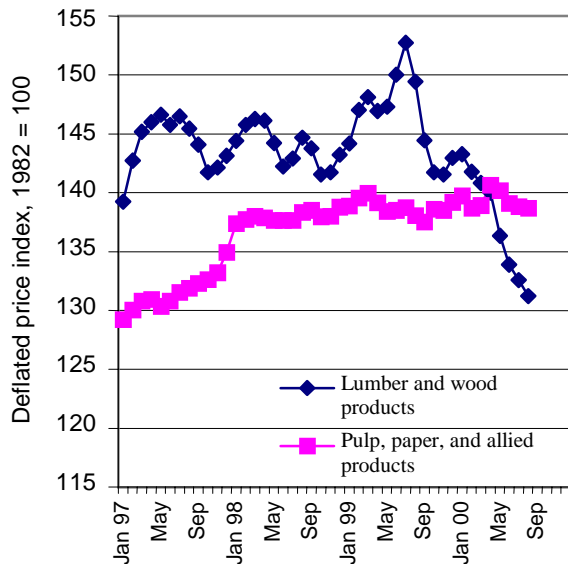


Figure 1— Recent trends in wholesale prices of forest products.

Changes in the price of softwood lumber accounted for much of this change and most of the volatility in the index. In 1999, the deflated composite index reached an all-time high (at a level more than 50% higher than the base year, 1982), followed immediately by a sustained decline that has continued throughout 2000. In constant (deflated) terms, the composite index is now at the lowest level in more than 5 years. Sharp declines in prices paid for softwood lumber products account for much of the decline in the index. If sustained, low prices are likely to contribute to reductions in production.

In contrast, the composite measure of prices in the pulp and paper sector has exhibited considerably less short-term volatility. The period of declining prices from the previous peak (1994–1995) ended in 1997, and by early 1998 the composite index reached the level of the mid-1990s. In deflated terms, the composite index has had little volatility and no trend for nearly 24 months.

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