



United States
Department of
Agriculture

Forest Service

Forest
Products
Laboratory

Research
Paper
FPL-RP-595



U.S. Timber Production, Trade, Consumption, and Price Statistics 1965–1999

James L. Howard



Abstract

This report is part of an annual series that presents current and historical information on the production, trade, consumption, and prices of timber products in the United States. The report focuses on national statistics, but includes some data for individual States and regions and for Canada. The data were collected from industry trade associations and government agencies. They are intended for use by forest land managers, forest industries, trade associations, forestry schools, renewable resource organizations, libraries, organizations, individuals in the major timber producing and consuming countries of the world, and the general public. A major use of the data presented here is tracking technological change over time. One of the major technology shifts occurring in the wood-using industry is the substitution of oriented strandboard (OSB) for plywood in the structural panel sector, as well as a shift in plywood production from the west to the south United States. Some data show these shifts. United States production of structural panels totaled 29.4 billion ft² in 1999. Production of OSB increased from less than 3 billion ft² in 1985 to 11.6 billion ft² in 1999. Plywood production was 20.1 billion ft² in 1985 before falling to 17.8 billion ft² in 1999. The decline in plywood production reflects the continued increase in the OSB share of the traditional plywood market

Keywords: production, consumption, import, export

Acknowledgments

This update required assistance from many dedicated individuals in the Timber Demand and Technology Assessment Unit at the Forest Products Laboratory. Chris McKeever created computer files that will facilitate the production of future papers in this series, helped with literature searches, conducted many statistical procedures, and updated the graphical data. Irene Durbak redesigned Table 11 and provided consultation in the area of foreign trade. David McKeever improved the development of lumber data and provided the information on lumber production. Denise Ingram developed the section on criteria and indicators and their relationship to wood production. Mary Reuter developed the layout, style, and graphics.

April 2001

Howard, James. L. 2001. U.S. timber production, trade consumption, and price statistics 1965 to 1999. Res. Pap. FPL-RP-595. Madison, WI: U.S. Department of Agriculture, Forest Service, Forest Products Laboratory. 90 p.

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U.S. Timber Production, Trade, Consumption, and Price Statistics 1965 to 1999

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Preface

This report includes data for 1965 through 1999. Data for the years prior to 1965 can be found in earlier reports in the series. Since the last publication of this series in 1999 (data compiled through 1997), many agencies have discontinued the collection of various data. This change is indicated on the tables, where applicable. Some data were derived from mathematical calculations, and some show conversions from different units of measurement. A few tables are presented in both inch-pound and metric units of measurement. Throughout the tables and text, billion denotes 10^9 . The references cited in the text and in the tables are listed separately. Text references are listed in Literature Cited. The sources for data in the tables are listed in an annotated bibliography, which is cross-referenced to the tables. This report is available on the Internet through the Forest Products Laboratory home page (<http://www.fpl.fs.fed.us/>). Tables of conversion factors and a map of Forest Service Administrative regions follow.

Factors for converting inch-pound units of measurement to metric units

Inch-pound unit	Conversion factor	SI unit
square foot	0.0929	square meter
cubic foot	0.028317	cubic meter
cubic foot	0.0175	short ton
board foot (hardwood lumber)	0.00236	cubic meter
board foot (softwood lumber)	0.00170	cubic meter
board foot (lumber export and imports)	0.00236	cubic meter
board foot (logs)	0.00453	cubic meter
1,000 square feet (1/8-in. panels)	0.295	cubic meters
1,000 square feet (1/4-in. panels)	0.590	cubic meters
1,000 square feet (3/8-in. panels)	0.885	cubic meters
1,000 square feet (3/8-in. panels)	2.036	surface measure
1,000 square feet (1/2-in. panels)	1.180	cubic meters
1,000 square feet (3/4-in. panels)	1.770	cubic meters
cord (80 ft ³)	2.27	cubic meter
ton (short ton)	0.907	metric ton
pound	0.453592	kilogram
inch	25.4	millimeter
cord	2.2	green ton

Factors for converting standard units to short tons^a

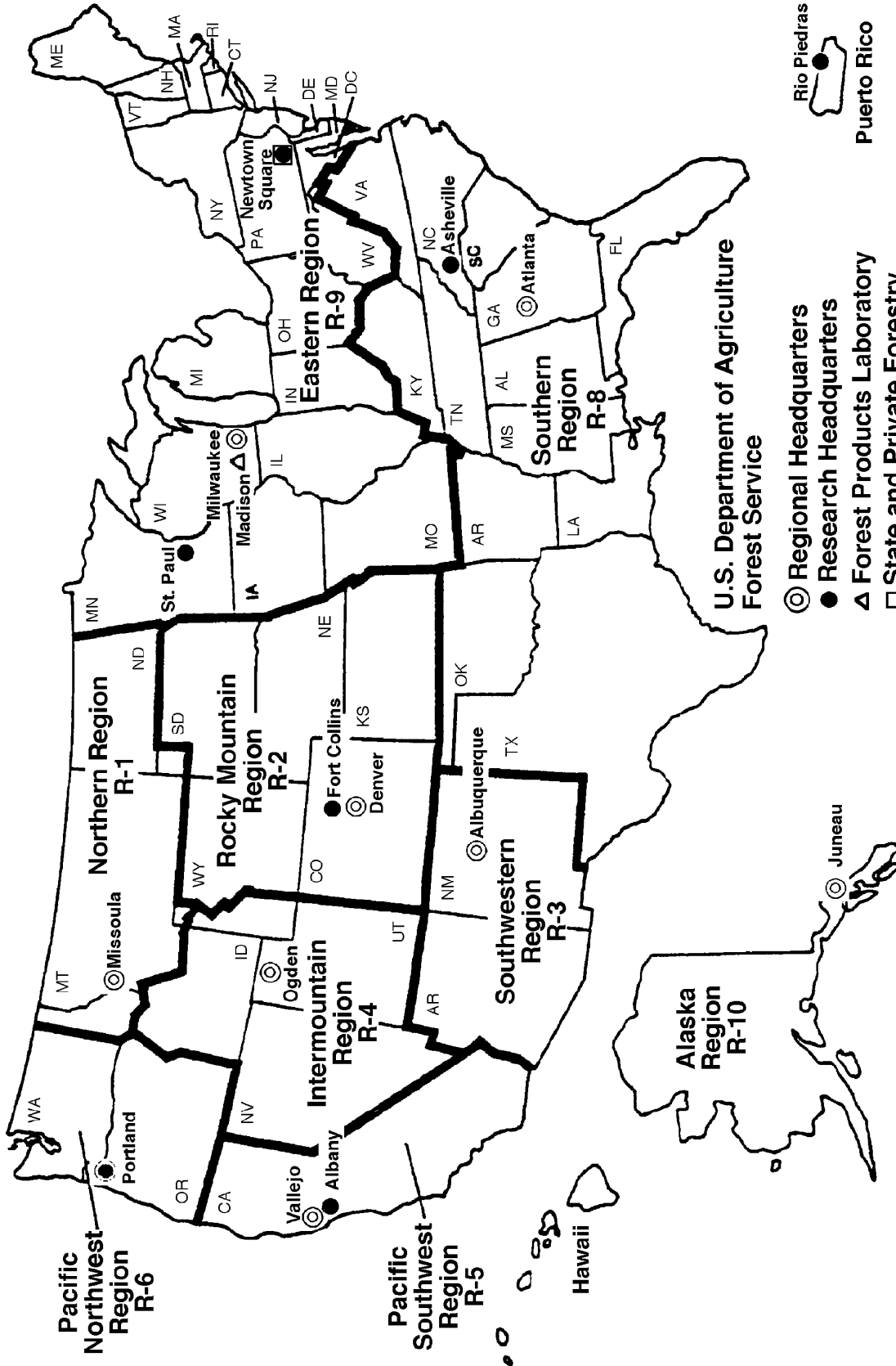
Product	Standard unit	Weight of wood per standard unit (short tons)
Roundwood products		
Softwood	1,000 cubic feet	15.500
Hardwood	1,000 cubic feet	20.000
Softwood	cord (80 cubic feet)	1.400
Hardwood	cord (80 cubic feet)	1.600
Lumber		
Softwood	1,000 board feet	0.974
Hardwood	1,000 board feet	1.680
LVL ^b	cubic foot	17.5
Structural panels		
Softwood plywood	1,000 square feet, 3/8- in. basis	0.544
Waferboard and OSB ^c	1,000 square feet, 3/8- in. basis	0.866
Nonstructural panels		
MDF ^d	square foot	1.406
Hardboard	1,000 square feet, 1/8- in. basis	0.380
Insulation board	1,000 square feet, 1/2- in. basis	0.367
Particleboard	1,000 square feet, 3/4- in. basis	0.578
Hardwood plywood	1,000 square feet, 3/8- in. basis	0.657
Hardwood plywood	1,000 square feet, surface measure	2.0
Pulp, paper, and board	thousand tons	1
Other industrial products	thousand cubic feet	16.5

^aU.S. Department of Agriculture, Forest Service (15,42).

^bLaminated veneer lumber.

^cOriented strandboard.

^dMedium density fiberboard.



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Research Highlights

Economic activity in most of the major timber product markets increased in 1999. New housing construction, which accounts for more than a third of the United States softwood lumber and structural panels consumed and for substantial volumes of other softwood and hardwood products, grew considerably stronger in 1998 and maintained strength in 1999. The consumption of oriented strandboard (OSB) exceeded plywood consumption for the first time during 1998 and remained above plywood consumption during 1999. The total industrial production index, an important demand determinant for pallet lumber, containerboard, and some grades of paper, grew 3.5% in 1999; private nonresidential construction expenditures registered a slight decline.

The United States housing market remained strong during 1999 but some sectors did weaken. Sales of both new and previously occupied homes surged to record levels. More than 2 million new housing units were produced, and close to \$143 billion was spent to maintain and improve the existing housing stock. The single-family housing market was particularly strong, and the U.S. homeownership rate climbed to a new record high. Sales of conventionally built homes (excluding mobile homes) rose by 11.3% to a record 5.2 million units during 1998. That record was broken in 1999 with the sale of 6.1 million units; of these, 5.197 million were previously occupied homes and 909 thousand were new units. In addition, nearly 400 thousand custom homes were built on lots already owned by occupants; many of these were second or vacation homes.

Several other indicators of demand for wood products increased in 1999 relative to 1998. Furniture and fixtures output, a determinant for the use of pallet lumber, containerboard, and some grades of paper, rose 3.4%. Paper products output, which influences pulpwood use, advanced by 1.0%. Total industrial production increased by 3.5%, but production of utilities declined by 2.8%. Softwood lumber production rose by 5.4%. These trends, despite the decline in economic growth during the second quarter, helped the lumber industry exceed 1998 production levels.

Consumption of wood and paper products in the United States required roundwood for the production of products for U.S. consumption and for the production of imported products. The consumption of roundwood to meet the needs of U.S. consumers (including fuelwood) increased 1.4% per year between 1965 and 1995, from 13.2 to 20.0 billion cubic feet. Roundwood consumption declined to 19.1 billion cubic feet in 1997 and then increased to 20.0 billion cubic feet in 1999. Production of wood products, paper products, and fuelwood required an increase in roundwood harvest from U.S. forests of 1.4% per year from 1965 to 1994, from 12.2 to 18.4 billion cubic feet. In contrast to the increase in roundwood needed for product consumption, there was a decline in the roundwood harvested for U.S. production in 1999, from 18.4 to 17.6 billion cubic feet.

Despite record demand from the housing sector, which drove high demand in the lumber industry during 1999, U.S. National Forest sawlog stumpage prices continued to decline in current dollars for Douglas Fir and Southern Pine, before recovering modestly in 1999. Increasing Canadian lumber imports, as well mill closures in the western United States, contributed to the slump in softwood prices.

During 1999, apparent consumption of most timber products increased over 1998 levels. Although production of softwood lumber from the California redwood region decreased by 3.8%, total softwood lumber production increased by 5.4% in 1999. Because of growth in major markets, hardwood lumber production increased by 2.8%. The combined roundwood and forest chip production for pulp and OSB mills declined by 4.0%. Softwood plywood production reversed its trend, increasing slightly in 1999. Shipments of particleboard and medium density fiberboard rose 6.1% and 2.7%, respectively, in 1999.

The composite price for framing lumber increased steadily during 1996 before leveling during 1997, then falling during the last half of 1998. In 1999, the lumber composite price remained below 1998 low levels. The structural panel composite price index duplicated the trend for the framing lumber composite price for 1998 and 1999.

The long-term outlook is one of continued growth in demand for most timber products. Timber volumes supplied by National Forests have fallen sharply in recent years. The National Forest harvest, valued at about \$600 million, was 3.3 billion board feet in 1999, just 3% of the total U.S. timber harvest; this represents a 75% decrease from the peak harvest in 1987. Because sustainable forest management has become the top priority of the Forest Service, it is unlikely that National Forest System harvest will increase significantly in the foreseeable future.

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General Economic Trends

Timber product markets are strong but may weaken in the future

The United States economy performed well in 1998 and continued strong in 1999. Economic activity, as measured by the gross domestic product (GDP), rose at an annual rate of 4.2% in 1999 to \$8,848.2 billion (1996 dollars), an increase

from \$8,495.7 billion (1996 dollars) in 1998. Economic activity as measured by the GDP continued to increase strongly in the first quarter of 2000, increasing by 4.8%, and grew 5.3% in the second quarter.

The current economic expansion, now in its tenth year, continues to be fundamentally strong. Real output increased 4.2% during 1999, continuing the energetic pace of this expansion. The economy stayed strong despite the dip in growth during the second quarter. The slowdown in real GDP growth was mainly accounted for by a deceleration in personal consumption expenditures (PCE) and by a downturn in government spending. Personal consumption expenditures increased 4.6% during the third quarter of 1999, down from 5.1% during the second quarter. Prices paid by U.S. residents for goods and services, the price index for gross domestic purchases, increased 1.9% in the second quarter and 1.7% in the third quarter. This increase was driven by sharply higher energy prices. Reflecting the step-up in prices, the personal saving rate fell from 2.1% to 1.9% during the third quarter.

New housing construction, which accounts for more than a third of U.S. annual consumption of softwood lumber and structural panels and for substantial volumes of other softwood and hardwood products, remained high through 1999 (Tables 1 and 2, Fig. 1). Starts of single-family units led the increase as multi-family housing starts declined by 4%, the first decline since 1993. Housing starts for 1999 totaled 1,663,000 units; sales of new single-family houses set a new record of 907,000 units. The home ownership rate reached 67.2%, another record high. Builders' expectations for housing starts in 2000 remained strong as mortgage rates for

the first 6 months of 1999 declined slightly, compared to the same period in 1998. New housing, repair, and remodeling continue to drive wood product demand. For the first 6 months of 2000, starts were down compared with those of 1999. Sales of new homes declined throughout the second quarter, falling to an annual rate of 829 thousand units in June. Sales of new single-family homes were at a seasonally adjusted annual rate 4% below the May rate of 861,000.

After several years of increase, shipments of mobile homes decreased in 1999 to 348 thousand units, 26 thousand fewer units than were shipped in 1998. Dealer inventories rose slightly in 1999, but most mobile homes produced during this year became home ownership units for U.S. households. In the first 6 months of 2000, mobile home shipments were well behind 1999 shipments for this period. The seasonally adjusted shipments for 2000 totaled 295,000 units.

Investment in residential repair and remodeling rose to \$142.9 billion (current dollars) in 1999, increasing from \$133.7 billion dollars of a year ago. About two-thirds of the improvements were additions and alterations; the balance consisted of replacements of major housing components such as roofs or heating systems. Actual expenditures for improvements and repairs to all properties amounted to an estimated \$44.4 billion during the fourth quarter of 1999

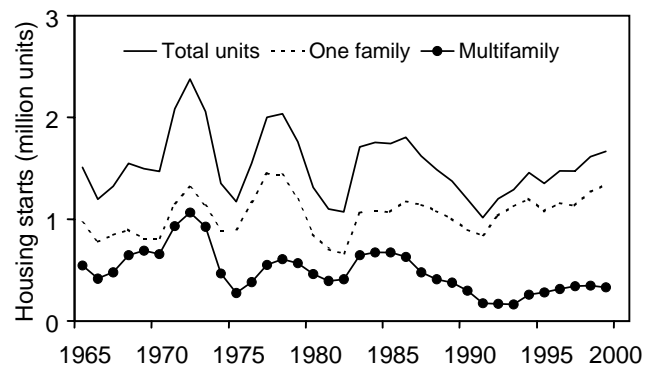


Figure 1—Housing starts by type of unit, 1965–1999.

compared with \$35.4 billion dollars in 1998. Investment for new residential construction was stronger than that for non-residential structures. Spending on new residential housing units was \$251 billion (1992 dollars) in 1999 as compared with \$144 billion dollars for nonresidential building construction.

Industrial production, an important demand determinant for pallet lumber, containerboard, and some grades of paper, rose 3.5% in 1999 over 1998 levels (Table 1, Fig. 2). Output of the furniture and fixtures industry, a major market for hardwood lumber, plywood, and veneer, particleboard, and hardboard, rose 3.4% in 1999. Further increases are likely because of continued growth in the housing sector.

Timber

Industrial roundwood production has risen less than 1%

Industrial roundwood production increased to 17.6 billion cubic feet in 1999, a slight increase from the 17.4 billion cubic feet produced in 1998 (Fig. 3). Roundwood harvest reached a high in 1989 when 18.7 billion cubic feet of industrial roundwood was produced. Lumber and the engineered products sector are the main contributors to the increased volume of roundwood usage. The production of saw logs used in the domestic manufacture of lumber rose slightly in 1999 to 7.6 billion cubic feet. This represented about 40% of total industrial roundwood production. Softwood roundwood

represented about 27% of softwood lumber production and hardwood the other 13%. Pulpwood production, which used about 30% of industrial roundwood, remained unchanged from 1998. Although roundwood pulpwood production leveled in the late 1990s, during this decade the pulpwood share of industrial roundwood production increased by 1 billion cubic feet compared with 1987 pulpwood production. During that time, roundwood used to produce lumber increased slightly.

Lumber

Lumber production shows an upward trend

An estimated 51.0 billion board feet of lumber (softwood plus hardwood) was produced in the United States in 1999 (Table 28). This is the second largest amount produced since 1990, but only approximately

1.0 billion board feet above the record high production of 49.9 billion board feet in 1988 (Table 28, Fig 4.). Since 1965, lumber production has generally taken an upward trend, except for periods of economic slowdown such as the mid-1970s and early 1980s. In the late 1980s, legislation was passed to curtail timber harvesting on federally owned lands in the western United States. Many western mills dependent on Federal timber were forced to reduce production dramatically or to close. This resulted in an overall decline in lumber production, shifts in production to other regions, and increased levels of foreign imports.

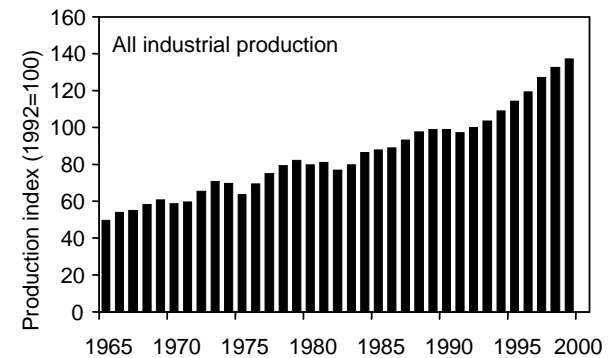
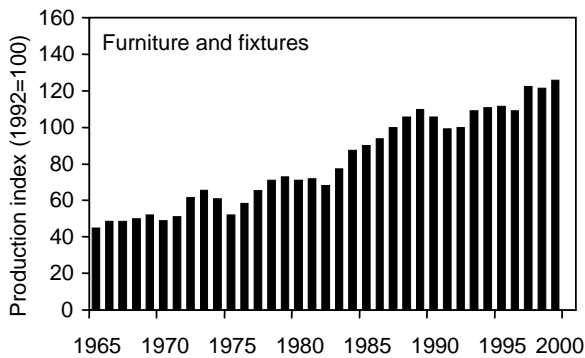
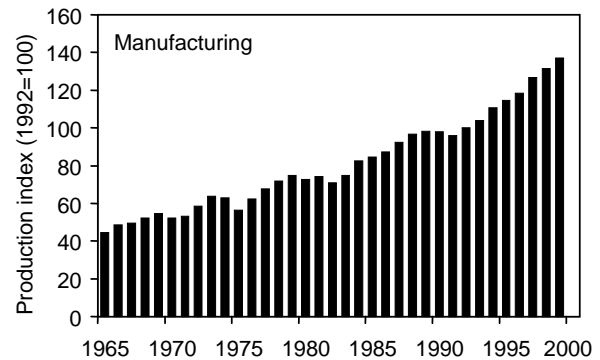
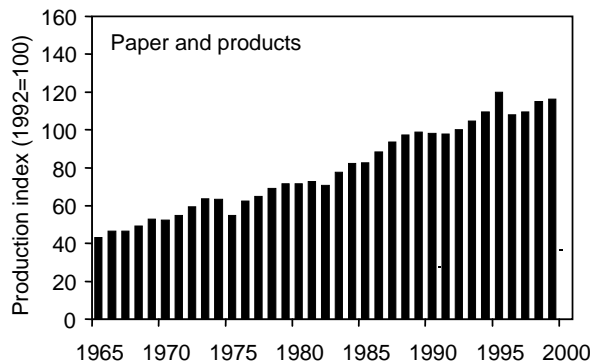


Figure 2—Economic activity in major industrial timber markets, 1965–1999.

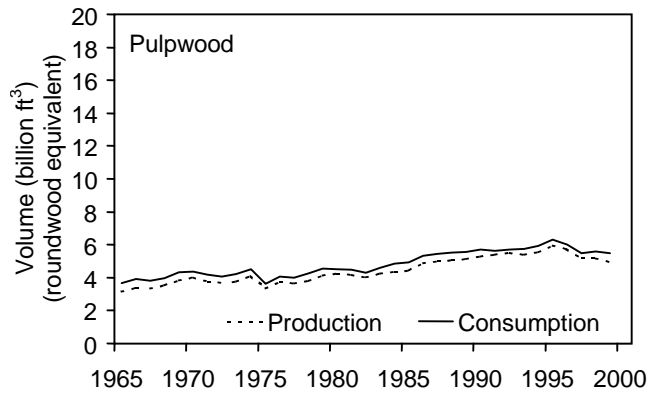
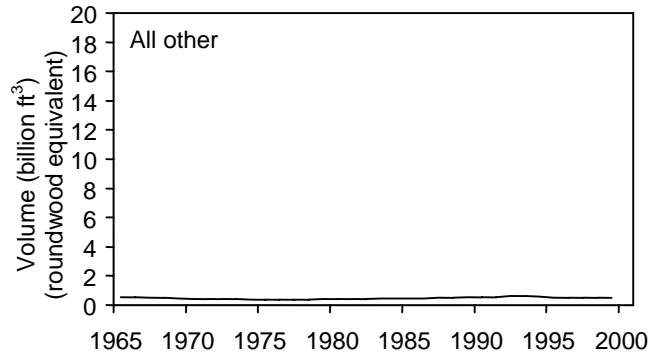
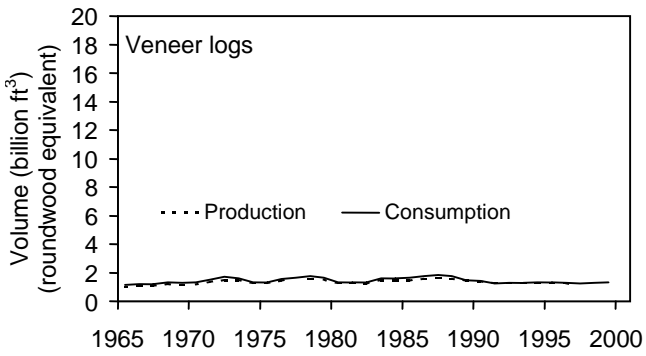
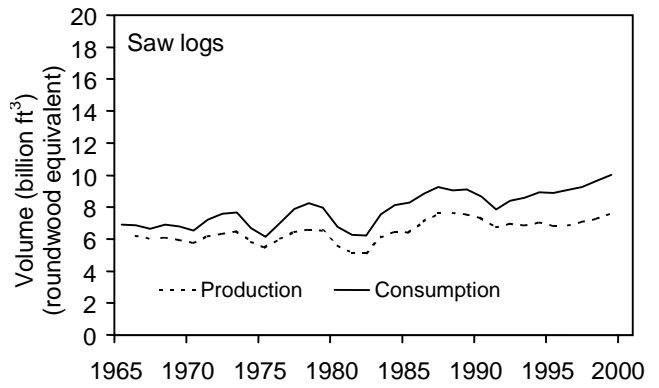
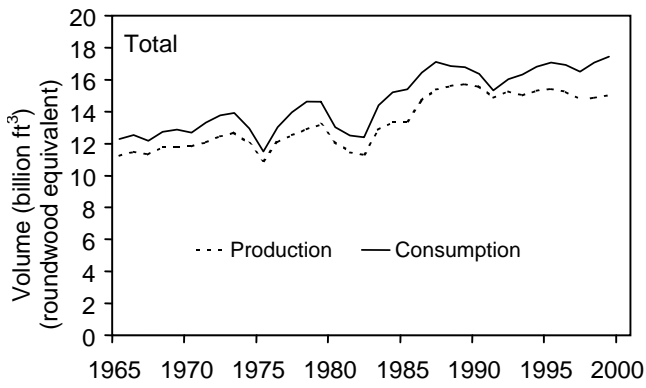


Figure 3—Timber products consumption and production, 1965–1999.

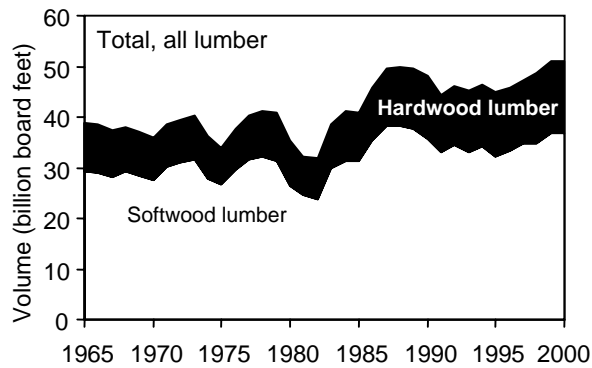


Figure 4—U.S. lumber production by wood type, 1965–1999

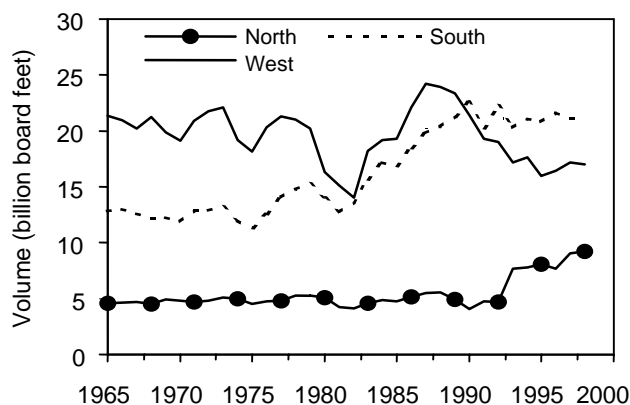


Figure 5—U.S. lumber production by region, 1965–1999.

In 1999, softwood lumber production was about 36.7 billion board feet (Table 28, Fig. 4), 72% of total production. Hardwood lumber production was about 14.3 billion board feet. The overall decline in lumber production in the 1990s was at the expense of softwood lumber. In 1999, softwood lumber production was 3.8% below that of 1988, whereas hardwood lumber production was 18% greater than that of 1988.

In 1999, overall lumber production was greatest in the South (22.1 billion board feet), followed by the West (18.2 billion board feet) and the North (10.2 billion board feet) (Table 29, Fig. 5). The West maintained its traditional stronghold on softwood lumber production, producing nearly 97% (17.0 billion board feet) of total production from softwood species. Softwood lumber production in the South was about 75% of total production, but nearly equal in volume to that of the West. The North produced 2.2 billion board feet of softwood lumber.

Until recently, the West had been the largest lumber-producing region in the United States. In 1966, for example, more than half (55%) of all lumber produced in the United States came from the West. Much of this production came from old-growth timber on federally owned lands on the Pacific Coast (Washington, Oregon, and California). Over the next 25 years, the proportion of lumber coming from the West slowly fell to just under half, as a result of declining levels of timber from public lands and increasing levels of production in the South. Then, in the late 1980s and early 1990s, large areas of federally owned land in the West were legislatively removed from harvest, which exacerbated the situation. In 1990, the South became the Nation's largest lumber producing region, accounting for 36% of all softwood lumber and 78% of all hardwoods. Since 1990, softwood lumber production in the South has increased and that in the West has decreased. Currently both regions produce nearly equal amounts of softwood lumber.

Total lumber production in the North remained fairly steady from 1965 through the early 1990s at about 4.8 billion board feet per year, then increased rapidly to 9.2 billion board feet (Table 29, Fig. 5). Nearly all of this increase was in hardwood lumber production.

Lumber imports to U.S. reach record high

In 1999, lumber imports to the United States from all countries totaled 19.9 billion board feet, an all-time high (Tables 28 and 31). During the same year, exports from the United States to all countries

totaled just 2.5 billion board feet (Tables 28 and 32). The difference, 17.4 billion board feet, was net foreign trade and represented lumber consumption in the United States in excess of that which was produced domestically. Net foreign trade represented about one-fourth of total domestic lumber consumption in 1999. With few exceptions, lumber imports to the United States have grown steadily since 1965. Nearly all of this growth has been in softwood lumber imports. In 1965, softwood lumber imports totaled 4.9 billion board feet. By 1999, softwood lumber imports exceeded 19.2 billion board feet, an increase of 14.3 billion board feet. In contrast, hardwood lumber imports were 0.3 billion board feet in 1965 and 0.7 billion board feet in 1999.

Canada has remained the principal source of lumber imports, providing 93% of total imports in 1999 (Table 31). This percentage has changed little since 1950, ranging from a low of 94% in 1973 to more than 98% in 1991 and 1992. In 1999, nearly 94% of all softwood lumber and 66% of all hardwood lumber imports to the United States were from Canada. Hardwood imports from Canada as a percentage of total hardwood imports fell fairly steadily from 1950 through the 1970s. Since then, Canada's share of the U.S. hardwood lumber import market has risen. Overall, the United States imported nearly 63% of Canadian lumber production.

Lumber exports grew fairly steadily from 1965 through the late 1980s, reaching a record high of nearly 4.5 billion board feet in 1988 (Tables 28 and 32). By 1999, lumber exports had fallen to 2.5 billion board feet. Numerous factors contributed to the decline in lumber exports in recent years. These factors included reduced softwood sawtimber supplies (particularly from the Pacific Coast), changing economic conditions in the major importing countries, the strength of the U.S. dollar in relation to other world currencies, and increased levels of exports from other major timber producing countries. During the mid 1980s and early 1990s, Japan was by far the largest single market for U.S. lumber exports. In 1989, Japan purchased 1.6 billion board feet of lumber (Table 32). Since then, exports to Japan have fallen to just one-fifth their previous level. Canada is currently the largest single market for exported lumber, followed closely by the European Economic Community (EEC); each accounted for 26% of all exports.

More than half (62%) of total exports in 1996 were softwood species, totaling 1.8 billion board feet (Table 28). In the late 1960s and early 1970s, softwood lumber accounted for about 85% of total exports. Then, the softwood lumber share of total exports fell steadily, from around 78% in the 1980s to just over 50% in 1999. The most important softwood lumber export markets in 1999 were Japan, which accounted for about 21% of total softwood lumber exports, Canada (19%), and the EEC (16%). The EEC and Canada were the two largest markets for U.S. hardwood lumber exports.

Lumber consumption remains high

In 1999, lumber consumption in the United States for all uses totaled 68.3 billion board feet, continuing records set through the decade (Table 28). Consumption in 1999 also exceeded levels in the early 1900s, when lumber was the most important raw material used in the United States for construction, manufactured products, and shipping.

Per capita consumption in 1999 was 250 board feet, almost equal to the record high of 251 board feet in 1987, but nevertheless greater than per capita use in the 1960s, 1970s, and early 1980s (Table 28). However, per capita consumption was below averages for most years prior to 1965 and dramatically below that in the early 1900s when consumption exceeded 500 board feet per person.

Overall, about 60% of lumber consumed in 1999 was used for housing—about half for the construction of new units and the remainder for the upkeep and improvement of existing units. New nonresidential construction (including railroads) accounted for about 7% of lumber consumption, manufacturing for 12%, shipping (pallets, containers, and dunnage) for 10%, and 11% for all other uses. The “all other” category includes an unknown amount of lumber used for other construction purposes such as upkeep and improvements to nonresidential buildings.

In 1999, 54.5 billion (about 80%) of the 68.3 billion board feet of lumber consumed in the United States consisted of softwood species (Table 28, Fig. 6). Slight annual variations in the percentage of softwood and hardwood lumber used are common and result from differing levels of activity in various end use markets and variations in species consumption among these markets. About 97% of the lumber used in new housing in 1999 was estimated as softwood species, an increase from 93% in 1962. In contrast, only 28% of the lumber used in shipping was softwood, a decrease from 40% in 1962. The increase in the percentage of softwood lumber for housing is primarily due to a decline in the use of hardwood flooring and a rapid increase in house size, which calls for larger amounts of softwood dimension lumber for framing. The increased use of engineered wood products to substitute for dimension lumber in both residential and nonresidential construction has tended to reduce the softwood percentage of consumption. The rapid and continued growth

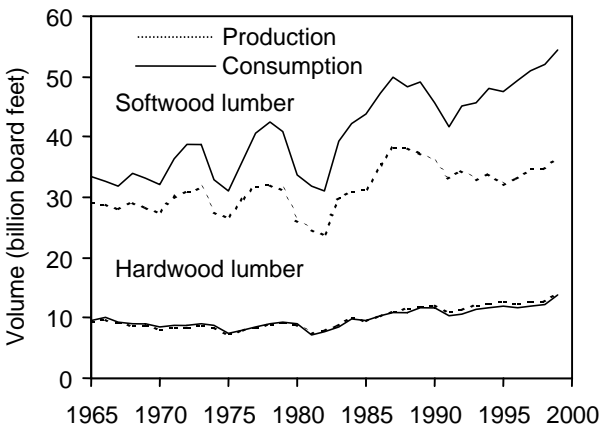


Figure 6—Lumber production and consumption by wood type, 1965–1999.

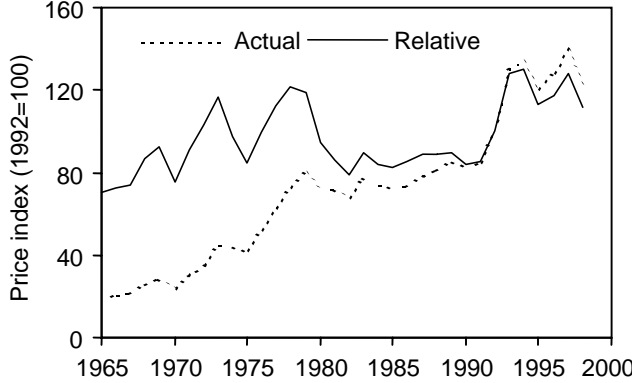


Figure 7—Price indexes for softwood lumber, 1965–1999.

in the use of hardwood pallets for handling and transportation of materials is the principal cause for the increased use of hardwood lumber in shipping. Even with the variations caused by differences in end use markets, softwood lumber consumption as a percentage of total lumber consumption has remained around 80% since the 1960s.

Softwood lumber prices take a downturn

Overall, softwood lumber prices were down in 1999 from a record high set during the previous year. The actual producer price index for softwood lumber was 131.9 in 1999 (1992=100), up from 123 in 1998 (Table 35, Fig. 7). Historically, the producer price index for softwood lumber rose rapidly between 1965 and 1979, from 20.9 to 78.8. This represented an average increase of about 10.6% per year. A mild recession in the early years of the 1980s depressed lumber prices. Prices did not rise and reach record levels until late in the decade. On average, softwood lumber prices increased just 1.9% per year during the 1980s. The price index again began to move upward in the early 1990s, partly as a result of timber harvest reductions in the

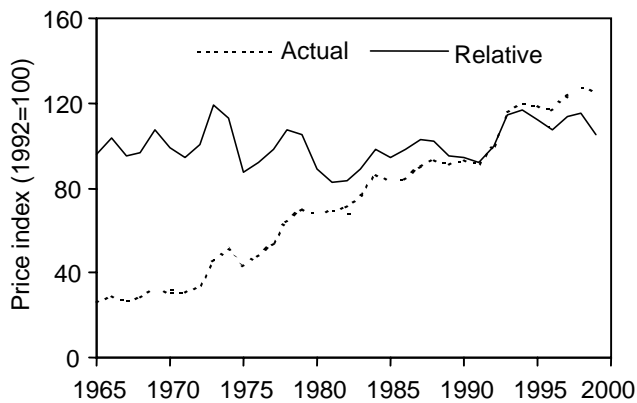


Figure 8—Price indexes for hardwood lumber, 1965–1999.

West and their effect on the sawmill industry. From 1995 to 1997, the softwood lumber producer price index fluctuated—from a low of 120.3 in 1995 to a high of 139.2 in 1997. Overall, the price index increased at a rate of about 5.7% per year between 1965 and 1998.

Hardwood lumber prices, as measured by the hardwood lumber producer price index, have historically been much less volatile than softwood lumber prices. In 1999, the producer price index for hardwood lumber was 126.0, 1.2 points below the record high established a year earlier (Table 35, Fig. 8). Since 1965, hardwood lumber prices have increased at a rate of about 4.9% per year.

The relative producer price index for a given commodity measures the change in its price relative to that of all other commodities and is calculated by dividing the producer price index for the given commodity by that for all commodities. If the relative price index is less than 100, then the given commodity is relatively less expensive than other commodities. If the relative price index is greater than 1, then the commodity is relatively more expensive. In 1999, the relative price of softwood lumber was 109.7, down 20.3 points from 1994 (Table 35, Fig. 7). Relative softwood lumber prices ranged from a low of 70.7 in 1965 to a high of 130.0 in 1994. Relative hardwood lumber price in 1999 was 104.8, down from the 1994 price (Table 35, Fig. 8). Long-term prices for hardwood lumber were more stable than those for softwood, ranging from a low of 82.9 in 1981 to a high of 116.7 in 1994.

Engineered wood products on the rise

Engineered wood products such as glulam, I-joists, and laminated veneer lumber (LVL) are relatively new to the market and are forecast to increase steadily. During 1999,

316 million board feet of glulam was produced in the United States, up 9.1% from 1998 (Table 34, Fig. 9). Slightly more than half of glulam is used for new residential construction

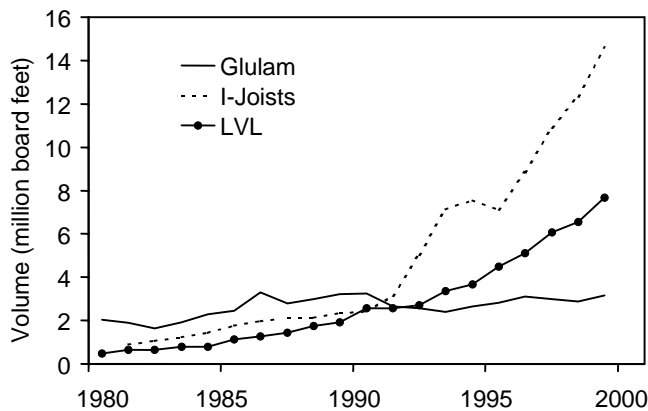


Figure 9—Production of glulam, I-joists, and laminated veneer, 1965–1999.

and remodeling. Nonresidential construction consumes the next largest proportion of glulam production.

During 1999, LVL production was 48 million cubic feet and I-joist production 733 million linear feet. In recent years, the volume of LVL production used for I-joists has kept pace with I-joist production. In 1999, approximately 77% of I-joists were used in new residential floor construction, 6% in residential roofs and walls, approximately 10% in remodeling, and 7% in nonresidential construction. A small volume of I-joists was exported to Japan.

Pulpwood for Pulp Mills

Pulpwood production estimated at 82.9 million cords

Total wood pulp production in U.S. Mills in 1999 was estimated at 62.9 million tons based on data published by the American Forest & Paper Association (AF&PA, *U.S. Wood Pulp Data*). This figure is 2% below 1998 production and 4.6%

below the previous high production of 1995. Most U.S. paper companies have experienced poor financial returns for nearly a decade. With the exception of a short-lived boom in 1995, the 1990s was a decade of low profitability. Plagued by overcapacity and low commodity prices, the industry failed to earn its cost of capital throughout most of the decade. The 1999 capacity survey of the AF&PA predicted that new capacity growth for paper and paperboard in the United States will average just 0.7% per year between 1999 and 2001, the lowest average on record.

On the basis of these pulpwood volumes, the American Pulpwood Association estimated pulpwood (both roundwood and chips) production to be 82.9 million cords in 1999 (Table 24). This volume is about 2.8% below that of 1998 and 19.7% below the record high level established in 1995. The decline in pulpwood production is a continuation of the downward trend that began in 1996, coinciding with the

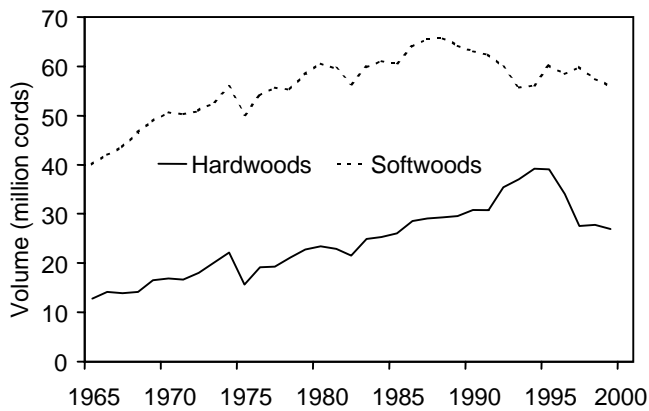


Figure 10—Pulpwood production by wood type, 1965–1999.

decline in pulpwood production. Shutdowns had a strong impact on production: nearly 3.7 million tons of paper and paperboard capacity were removed between 1998 and 1999.

The slowdown in pulpwood production identified in 1998 was confirmed in 1999. Softwood roundwood and chip production was 56.0 million cords in 1999, down 2.6% from 1998 (Table 25, Fig. 10). Output declined in all three major producing regions from 1998 to 1999. In the West, softwood production dropped to 2.5 million cords (slight decline); in the North, to 6.8 million cords (<1% decline); and in the South, to 46.7 million cords (2.9% decline). More than 83% of the softwood roundwood pulpwood came from southern forests.

The output of hardwood roundwood and chips was 26.9 million cords in 1999, down from 27.8 million cords in 1998. Despite this decline, the proportion of total roundwood pulpwood and chips from hardwood species increased, continuing the reversal of the downward trend that started in 1974. Through the 1960s and early 1970s, hardwoods became an increasingly important source of round pulpwood, reflecting changes in pulping technology, the types of pulp produced, and the relative price of different species. During 1999, hardwood pulpwood constituted 32% of total U.S. pulpwood production, a decline from its high point (41% of total production) in 1994. Further erosion in pulpwood demand is likely as capacity to produce paper and paperboard remains flat and the percentage of recycled fiber inches higher.

Pulpwood production continues decline across regions

Association data on pulpwood receipts indicate that pulpwood production in the South was 65.5 million cords in 1999, 2.9% below 1998 production and 19.5% below the high production year of 1995 when 78.3 million cords of pulpwood was produced (Table 25,

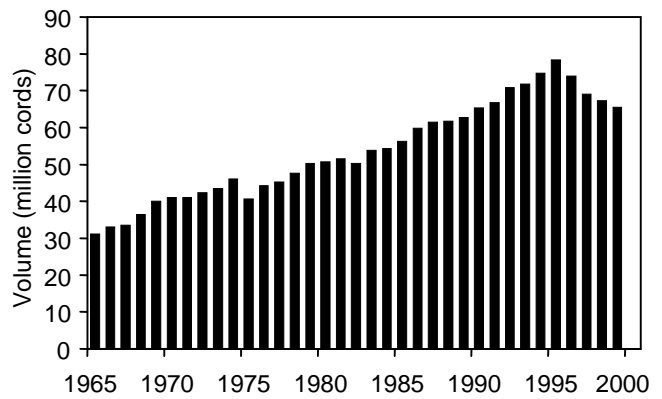


Figure 11—Pulpwood production in U.S. South, 1965–1999.

Fig. 11). The year 1999 marks the fourth consecutive year of small pulpwood declines in the South. The 65.5 million cords of production in 1999 also represents the lowest pulpwood production over the last 9 years. The South has accounted for more than 65% of total U.S. pulpwood production in the past 10 years.

All of the 14 states in the South have contributed to this decline in pulpwood production. However, this decline has been greatest in Georgia and Alabama, which together account for a third of the pulpwood output in the South. This is consistent with the location of the industry within the area. Of the total number of pulpmills in the South, about 52% are located in Alabama and Georgia.

About 71% of the 65.5 million cords of round pulpwood harvested in the South in 1999 was softwoods. This proportion declined over the course of the 1990s. Between 1995 and 1999, southern hardwood roundwood output declined at a faster rate than did that of softwood roundwood. For example, annual hardwood roundwood production declined by an average of 1.9 million cords and softwood roundwood by an average by 0.5 million cords.

Receipts of domestically produced pulpwood in the West continued to decline throughout the 1990s. Softwood production has decreased every year since 1988. Softwood production was 2.5 million cords in 1999, compared with 2.6 million cords in 1998 and 18.4 million cords in 1988 (Table 25, Fig. 12). Chips accounted for roughly the same percentage of pulpwood production in 1999 as they did in 1979, declining slightly since 1995. Of the total production of pulpwood, roundwood, and chips, 81% was from softwood species. Production of hardwood roundwood remained fairly constant from 1995 to 1999.

Data on domestically produced mill receipts indicate that pulpwood (roundwood plus chips) production in the North was 14.3 million cords in 1999, down slightly from 14.7 million cords in 1998 (Table 25, Fig. 13). About 52.4%

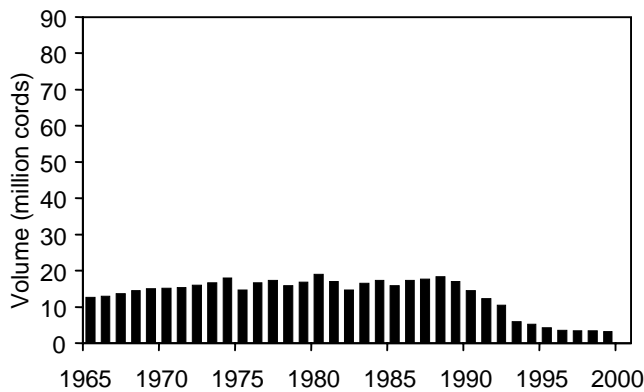


Figure 12—Pulpwood production in U.S. West, 1965–1999.

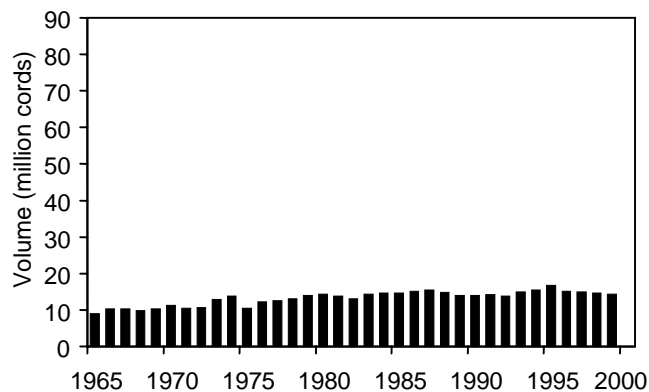


Figure 13—Pulpwood production in U.S. North, 1965–1999.

of total pulpwood was from hardwood species, slightly below the proportion of hardwood in 1998. A high percentage (83%) of total pulpwood output in the North was from roundwood, the largest proportion for any section. The use of chip residues in the North has been declining steadily as in other U.S. regions.

Pulpwood prices also decline

The combination of falling prices and lower volumes removed an estimated \$1 billion dollars from the U.S. woodfiber markets in 1999 compared to 1998, a loss of 14%

(International Woodfiber Report 1999). The decline in prices helped continue the contraction in both softwood and hardwood demand as eight of the Nation's 186 pulpmills shut down in 1999. After increasing in 1998, pulpwood stumpage prices declined in 1999. In 1998, the South held the nation's largest fiber market when the stumpage price for Louisiana pine was \$26.5 per cord (1992 dollars). In 1999, pine and hardwood pulpwood prices in the South fell to \$21.85 per cord (Table 26). Delivered pulpwood price for southern pine was \$67.83 per cord in 1998 before falling 15.9% to \$64.61 per cord in 1999.

Pulpwood prices vary a great deal among species and regions. In general, prices are highest for softwoods, especially the long fiber northern species such as spruce and fir. In some areas, in response to changes in pulping technology and pulpwood availability and quality, the relationship between hardwood and softwood prices has changed. However, softwoods still command a higher price than do hardwoods. For example, in Louisiana during the 1990s, the softwood pulpwood price per cord stayed at a higher level than that of hardwoods for every year in the decade other than 1995, when the price of hardwood pulpwood exceeded that of softwood.

Pulpwood stumpage prices for most species followed the same trends as those for pulpwood prices and slowed during 1999 (Tables 26 and 27). In Louisiana, for example, the price of southern pine pulpwood stumpage fell from \$26.49 (1992 dollars) in 1998 to \$21.85 (1992 dollars) in 1999. Hardwood stumpage prices fell at a steeper rate (35.1%) than did prices for southern pine (21%). Pulpwood and pulpwood stumpage prices have been quite volatile over the last 10 years. Most of this volatility has been due to falling capacity and restructuring of industry, which have lowered demand. The U.S. pulp and paper industry has brought capital spending to levels well under depreciation and amortization, effectively pulling capital out of the industry. Companies have also been consolidating their operations in response to increased global competition and poor financial returns. The result has been a rationalization of marginal mills, further reducing the capacity base.

Pulpwood consumption in mills declines to 86.7 million cords

Apparent pulpwood consumption in U.S. mills was an estimated 86.7 million cords in 1999 (Table 24, Fig. 14), representing a small decline from 86.8 million cords of consumption in 1998. This marked the fourth consecutive year of decline in pulpwood consumption. In total, about 82.9 million cords of pulpwood domestic production plus net imports were required to meet the relatively flat demand for paper, paperboard, and pulp products in 1999. Wood requirements for exports amounted to an additional 3.1 million cords.

Plywood and Veneer

Softwood plywood production in 1999 was estimated at 17.8 billion square feet (3/8-in. basis) based on data published by the American Plywood Association (Table 34, Figs. 15 and 16). Softwood plywood production slightly exceeded 1998 production, marking the first increase since 1994. The rise in production during 1999 could be short lived as OSB continues to increase its share of the market once dominated by plywood. For example, between 1994 and 1999, plywood production declined by 10.2%.

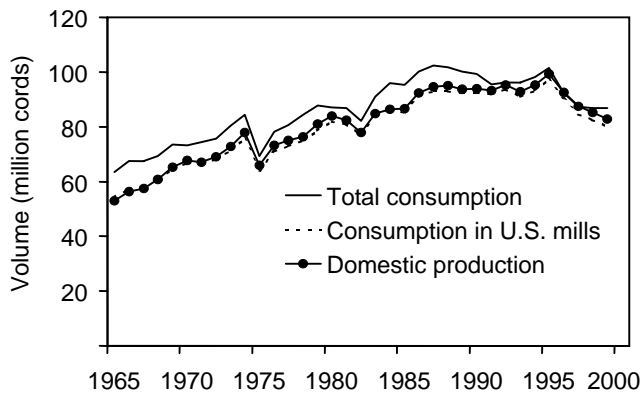


Figure 14—Total pulpwood consumption, 1965–1999.

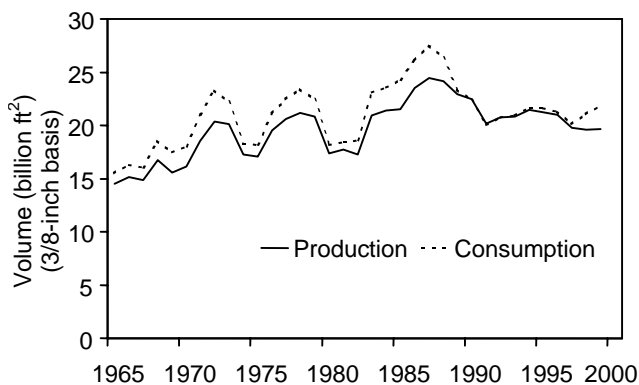


Figure 15—Total plywood production and consumption, 1965–1999.

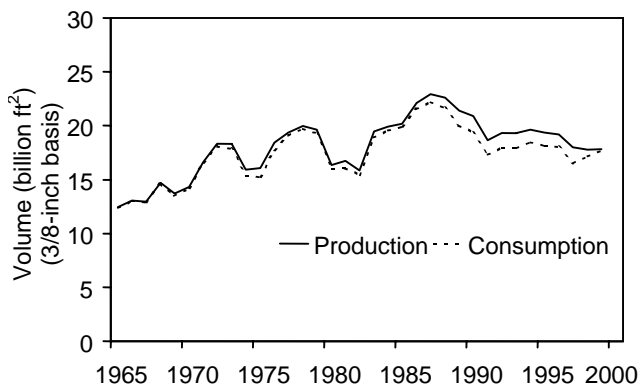


Figure 16—Softwood plywood production and consumption, 1965–1999.

Historically, production of softwood plywood has been concentrated in the West, chiefly in the Pacific Coast States of Washington, Oregon, and California. However, during 1999 these three States accounted for only 21.5% of plywood production. Since the first plywood plant in the South began production, production in that region has grown to

68% of total production. For example, from 1990 to 1999, production in the South increased to 12.1 billion square feet (3/8 in.-basis) while production in the West fell to 3.8 billion square feet. Although production in the South fell somewhat during the last 3 years of the 1990s, the percentage of total U.S. production from southern plants continued to increase. About two-thirds of softwood plywood manufactured in 1999 was from southern pine.

Hardwood plywood production shows slight increase

Hardwood plywood production rose about 2.6% to an estimated 2.0 billion square feet in 1999 (3/8-in. basis) (Table 37, Fig. 17). This volume, the highest since 1972, followed the trend of small annual increases since 1995. Strong demand from the furniture, cabinetry, and fixtures sector was the main factor that fueled the 2.6% growth in production. Stock hardwood plywood accounted for slightly more than half the hardwood plywood produced. Of this amount, eastern producers, aided by their proximity to the hardwood forest resource, produced 53% of hardwood plywood, western producers produced 46%, and the Great Lakes States produced the remainder.

Hardwood plywood producers use a wide range of species for the face veneers of their products. Red oak remains the most popular species, capturing 38% of the market, followed by birch (29%) and maple (17%). Market shares of cores used in hardwood plywood also differ: from veneer piles (63%) to medium density fiberboard (MDF) cores (16%). The use of MDF and particleboard cores has increased steadily since 1991.

Softwood and hardwood plywood prices rise

Softwood plywood prices as measured by the actual producer price index, rose sharply in 1999 (Table 42, Fig. 18), reaching 140.6 (1992=100). This was 15.6% above 1998 levels as measured by the actual producer price index. The extent of the increase, particularly for the types and grades used in construction, will depend primarily on continued strength in the housing markets. The relative softwood plywood price index was 116.9 (Table 42, Fig. 19). This was the highest relative price since 1995.

Hardwood plywood prices showed a slow upward trend in 1999 (Table 42, Figs. 18 and 19). The actual hardwood plywood price as indicated by the actual producer price index for 1999 was 120.3 (1992=100), slightly above the 118.7 level registered a year earlier. The relative index also registered a small increase for 1999.

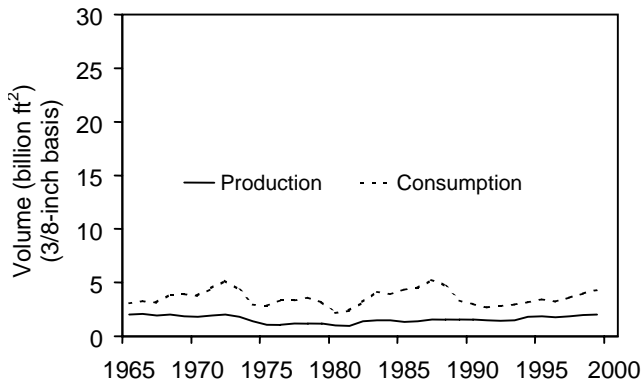


Figure 17—Hardwood plywood production and consumption, 1965–1999.

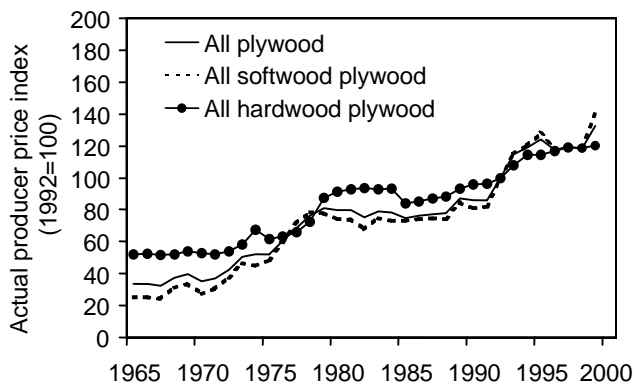


Figure 18—Actual producer price indexes for plywood, 1965–1999.

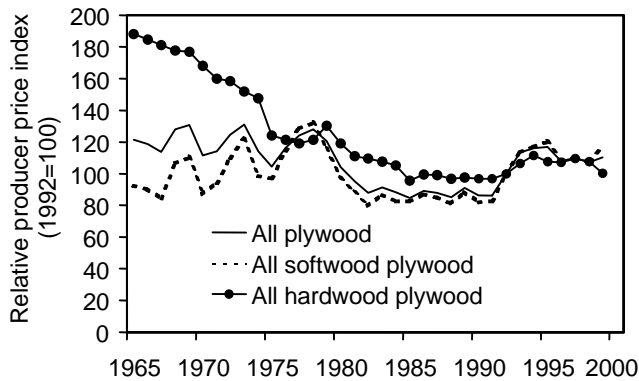


Figure 19—Relative producer price indexes for plywood, 1965–1999.

Softwood plywood imports and exports vary in volume

Imports of softwood plywood were about 469 million square feet (3/8-in. basis) in 1999, an increase of 62% over 1998 imports (Table 37). Imports of softwood plywood are small relative to overall U.S. plywood consumption. Ex-

ports, estimated at about 595 million square feet, registered the second year of decline after 10 years of growth. Exports in 1999 were 28% below exports in 1998. In spite of the increases in exports for most of the 1990s, softwood plywood exports composed only 3% of total domestic production during 1999.

Softwood veneer imports were an estimated 1.6 billion square feet (surface measure) in 1999 (Table 40). This volume was 22.6% greater than that of 1998, and constituted about 40% of total veneer imports. Softwood veneer exports increased to 306.5 million square feet (surface measure) in 1999, a 26.9% increase over 1998.

Hardwood plywood imports rise 10.6%

Hardwood plywood imports were 2.5 billion square feet (3/8-in. basis) in 1999, 10.6% above the 1998 volume. The 1999 volume of imports was the highest since 1988, when 3.3 billion square feet of

hardwood plywood was imported. The increase in hardwood plywood imports followed a growth trend that started in 1992 (Table 37).

During the 1960s and 1970s, Korea was the principal source of hardwood plywood imports to the United States. This changed over the 1990s as Canada, Brazil, Malaysia, and the Russian Federation became major sources. Asia has remained the largest source of hardwood plywood imports, accounting for 58.6% of the total.

Imports of hardwood veneer, used chiefly in the manufacture of hardwood plywood in U.S. mills, totaled 2.3 billion square feet (surface measure) in 1999 (Table 41). This was 5.6% above the 1998 level of imports and 18.5% below the peak import year of 1972. Since 1972, imports of hardwood veneer have taken an upward trend, averaging more than 1.2 billion square feet per year.

Hardwood plywood exports totaled 238 million square feet (3/8-in. basis) in 1999 (Table 37). This was 13.4% above 1998 exports, but the second smallest volume since 1991. The increase in exports represents demand from the European and Canadian markets. Canada, Germany, Spain, and the United Kingdom are the top four markets, representing nearly 60% of U.S. exports of hardwood plywood products. Hardwood veneer exports were an estimated 3.2 billion square feet (surface measure) in 1999, 10.5% above 1998 and the highest volume on record.

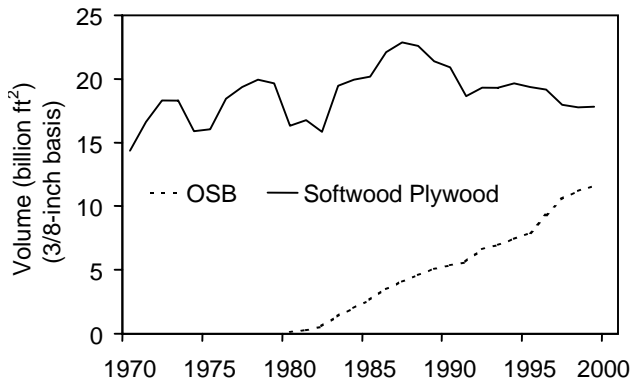


Figure 20—Softwood plywood and OSB production, 1965–1999.

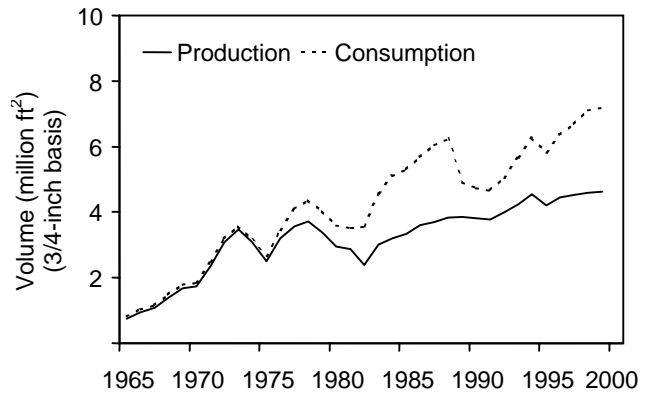


Figure 21—Particleboard consumption and production, 1965–1999.

Softwood plywood consumption rises as OSB increases market share

Consumption of softwood plywood in 1999 was an estimated 17.6 billion square feet (3/8-in. basis) (Table 34, Fig. 20). This was 2.8% above consumption in 1998 and represented the second consecutive year of increase in softwood plywood consumption.

The small rise in consumption from 1998 through 1999 after small declines over the last decade represents the gains made in the plywood market by OSB. Since 1992 when OSB was certified to perform as well as softwood plywood, OSB has been rapidly eroding the market share of softwood plywood. This certification allows OSB to compete directly for the same markets while offering the consumer a lower cost product. However, certain applications are still dominated by the use of softwood plywood, such as underlayment for floors.

The United States has 92 plywood-producing mills and nearly 50 OSB mills (U.S. Industry & Trade Outlook 2000). Nearly 75% of all grades of softwood plywood are produced in the South. The West, the traditional producer of softwood plywood, especially Douglas-fir, is slowly changing to serving niche markets because of the reduced timber supplies from public lands.

Although OSB is increasing market share in the previously dominated softwood plywood market, a strong residential construction market can explain some of the consumption increase for softwood plywood that occurred during 1998 and 1999. Also important are nonresidential construction, manufacturing, and maintenance, repair, and remodeling. The large proportion of single-family houses, which use more plywood per unit than do multi-family structures, also contributed to the overall rise. These factors suggest that future changes in demand for softwood plywood will likely

be closely related to changes in the volumes of residential construction and OSB production.

Hardwood plywood consumption rides an upward trend

In 1999, apparent consumption of hardwood plywood rose 6.9% to an estimated 4.2 billion square feet (3/8-in. basis) (Table 37, Fig. 16). This was 291 million square feet more than hardwood plywood consumption in 1998, following the rising trend of the 1990s. The continued increase in 1999 in part reflected the strong housing market, an important market for hardwood plywood for wall paneling, kitchen cabinets, and door skins. Although mobile home output weakened in 1999, mobile home production as well as furniture output contributed to the demand for hardwood plywood.

In 1999, 60.4% of hardwood plywood consumed in the United States was supplied by imports (Table 37). This was the trend throughout the 1990s as hardwood plywood imports consistently accounted for at least 50% of hardwood plywood consumption.

In 1999, 60.4% of hardwood plywood consumed in the United States was supplied by imports (Table 37). This was the trend throughout the 1990s as hardwood plywood imports consistently accounted for at least 50% of hardwood plywood consumption.

Log trade remains mixed

Total softwood log exports increased 2.9% during 1999 (Table 18). Softwood log exports from the western United States, however, continued a downward

trend as Douglas-fir log exports declined 8.8% compared with 1998 exports. Japan imported the greatest proportion of U.S. softwood log exports (49%), followed by Canada (39%), and South Korea (6%). Canada continued to be the primary source of softwood log imports to the United States in 1999, accounting for 86% of all log imports (Table 16). Hardwood log imports from Canada increased by 2.2% in 1999 as compared to 1998. Total hardwood log imports increased by 4.0% from 1998 to 1999.

Particleboard, Hardboard, and Insulation Board

According to estimates of the National Particleboard Association, production of particleboard in 1999 totaled 4.6 billion square feet (3/4-in. basis), up from 4.5 billion square feet in 1998 (Table 53, Fig. 21). This set a record high level of production for particleboard.

Because of its uniformity, flatness, and dimensional stability, particleboard is used primarily for floor underlayment, kitchen counter underlayment, furniture components, and cabinet components. Part of the continued rise of particleboard production in the 1990s was due to continued strength in the housing industry.

Foreign trade in particleboard was insignificant before the mid-1960s and very light through the early 1970s; however, both imports and exports experienced growth during the 1980s. Imports continued to increase throughout the 1990s, rising to 1.2 billion square feet in 1999. Exports increased during the first half of the 1990s, but had declined to an estimated 135 million square feet (3/4-in. basis) by the end of the decade.

From 1997 to 1999, apparent consumption of particleboard rose 6.9%.

MDF output increases, hardboard declines, and insulation board plateaus

Production of MDF was 1.4 billion square feet (3/4-in. basis) in 1999, a rise from 950 million square feet in 1990. The major market for MDF at present is furniture and cabinetry applications because of its smoothness, dimensional stability, paintability, and decorative effect.

Hardboard production in 1999 was estimated to be 4.3 billion square feet (1/8-in. basis) (Table 56, Fig. 22), 1.9% above 1998 production but 20% below 1996 production. Hardboard production has been on a downward trend since 1983 when 7.3 billion square feet of hardboard was produced.

Hardboard imports amounted to 1.7 billion square feet in 1999, 28.5% above the 1998 total, continuing an upward trend that started in 1995. Imports accounted for 33% of total U.S. hardboard consumption in 1999. After a short-lived growth period during the early 1990s, hardboard exports declined in 1998, then increased slightly in 1999. Although growth is slow, hardboard exports still account for 20.8% of total production.

Consumption of hardboard in 1999 was 5.2 billion square feet, 10.4% above the 1998 total. This increase in consumption is reflected in part by a strong housing sector. Hardboard is used primarily in the construction industry for exterior siding in new residential construction. In 1998, just over

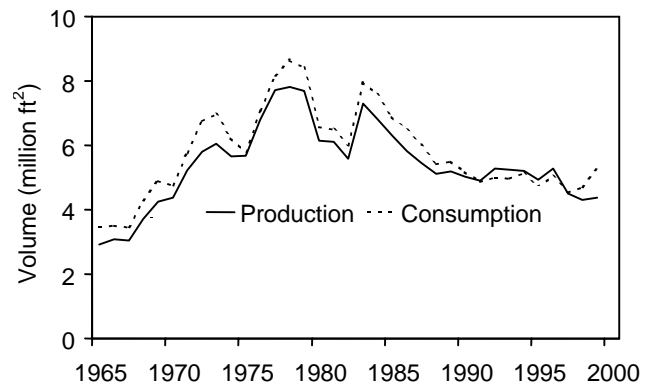


Figure 22—Hardboard consumption and production, 1965–1999.

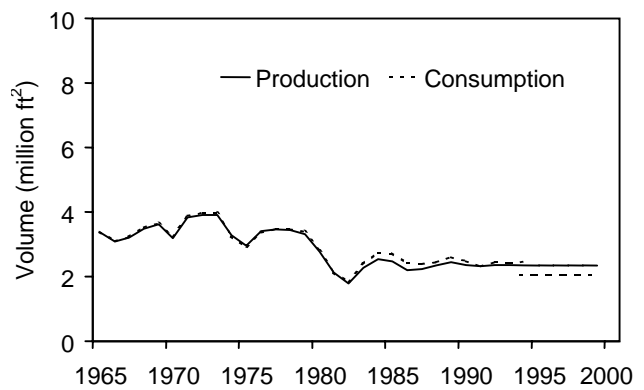


Figure 23—Insulation board consumption and production, 1965–1999.

half of all hardboard consumption was for residential exterior siding.

Production of insulation board in 1999 was about 2.3 billion square feet (1/2-in. basis) or 857 thousand tons (Tables 54 and 55, Fig. 23). Imports and exports of insulation board were relatively small, amounting to 112 and 62 thousand tons, respectively. Production and trade of insulation board has been on a plateau since 1993. The long-run outlook shows no growth. Further developments of structural grades of particleboard at competitive prices could further accelerate particleboard demand for sheathing and other construction uses. MDF should also continue to provide increasing competition for traditional board uses.

Miscellaneous Timber Products

Roundwood production holds steady, fuelwood rises

Production of miscellaneous industrial roundwood products, which include cooperage logs, poles and piling, fenceposts, mine timbers, hewn ties, box bolts, and other products, was estimated to be 485 million cubic feet in 1999.

This volume has been roughly the same for the last 3 years (Table 5a).

Production of round fuelwood in 1999 was estimated at 2.5 billion cubic feet, a slight rise from 1998. Fuelwood consumption dropped sharply in the first five decades of the 20th century because of the substitution of oil, gas, coal, and electricity in home cooking, heating, and industrial uses. In recent years, however, substantial markets have developed for fireplace wood. Projected increases in income, population, and residential construction indicate continued growth for fuelwood.

Turpentine and rosin production continue to decline

Total domestic turpentine production declined 16.4% to 20.7 million gallons in 1999 (Table 59), the smallest volume in the past two decades. This decline reflects the volatility that marked turpentine production during the 1990s.

Only crude (100%) turpentine was produced in 1999. Historically, gum and steam-distilled turpentine constituted about 15% of total production. Since 1988, the industry has declined and crude turpentine has dominated production. The principal sources of turpentine are longleaf and slash pine in the southern United States. The substance obtained from these and other species of trees consists of 75% to 90% resin and 10% to 25% oil. Crude commercial turpentine is valuable mainly as a source of resin.

Domestic production of rosin in 1999 declined for the second consecutive year. Rosin production fell from 308.4 thousand tons in 1997 to 271.7 thousand tons in 1998 and 231.1 thousand tons in 1999. Production in 1999 was 33.4% below the record high of 308.4 thousand tons set in 1997. Historically, gum and steam rosin constituted about 15% of the industry. Since the mid-1980s, tall oil rosin has dominated the industry. Tall oil rosin is the rosin remaining after substantially all the fatty acids ($\leq 5\%$) have been removed by fractional distillation or other suitable means.

Sustainable Forest Management Criteria and Indicators

The Montreal Criteria and Indicators (C&I) of sustainable forest management include 7 criteria and 67 indicators that measure the diverse sets of values that society places on forest resources (USDA Forest Service 1997). The support and development of the C&I for the United States reflects the evolution of forest policies and priorities in forest management among the diverse stewards of U.S. forest resources. Six indicators under Criterion 6, Maintenance and Enhancement of Long-Term Multiple Socio-Economic Benefits to Meet the Needs of Societies, assess the production and consumption of forest products.

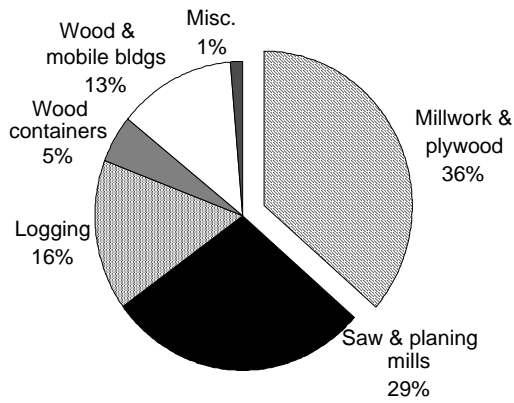
A subset of the production and consumption indicators parallel and complement the standard measures in this report. These indicators are as follows:

- Value and volume of wood and wood products production, including value-added through downstream processing (indicator 29)
- Supply and consumption of wood and wood products, including consumption per capita (indicator 31)
- Value of wood and [non-wood products] production as a percentage of GDP (indicator 32)
- Degree of recycling of forest products (indicator 33)

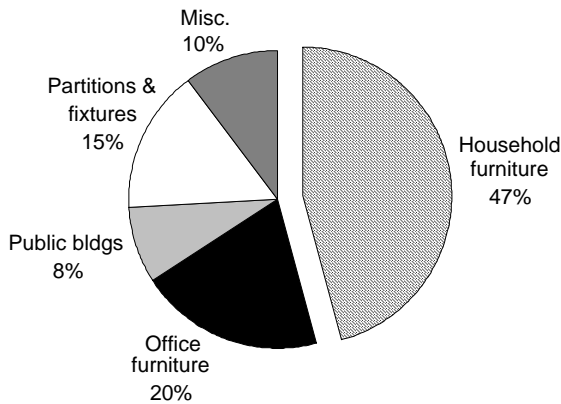
Measures of production, consumption, and value are important to the goals underlying sustainable forest management. These types of measures reflect the importance of forest resources in supplying raw materials for manufacturing and the value that society places on the production of wood and wood products. Strategies to achieve sustainable forest management must reflect the role of forest resources in maintaining a dynamic and strong economy as a primary component of meeting the needs of society.

Value and Volume of Wood and Wood Products Production

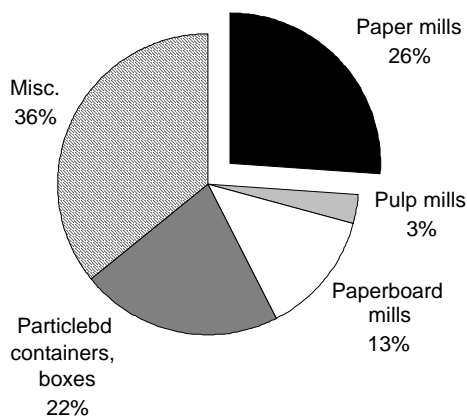
The total volume of wood products production continues to grow, reflecting the value society places on wood raw materials. However, the mix of wood products reflects changing needs for specific types of products as well as technological change to accommodate increased competition for forest resources and to maintain an affordable supply of goods and services for consumers. The total volume of wood products (in roundwood equivalent inputs) in the United States, including fuelwood, increased from 12 billion cubic feet in 1965 to 17.5 billion cubic feet in 1999 (Table 5a). Of that production, approximately 62% and 38% was softwood and hardwood, respectively, in 1999, based on roundwood equivalent inputs (Tables 6 and 7). The value of shipments for all wood furniture and paper products production surpassed \$322 billion in 1996 (Department of Commerce 1999) up from \$206 billion in 1987. Value-added from all wood, furniture (including non-wood furniture), and paper products surpassed \$141 billion in 1996, up from \$98 billion in 1987 (Department of Commerce 1999). Although lumber and wood products value-added accounted for 29% of total value-added or \$41.5 billion, the highest value-added continues to come from the paper and allied products sector of forest products (Fig. 24). In 1996, this sector produced more than \$72 billion of value-added, primarily through the production of paper, paperboard containers, and boxes. Furniture and fixtures represented 19% of valued-added, or more than \$27 billion.



Value-added by wood and wood fiber products in 1996. Lumber and wood products. (\$41.5 billion or 29% of total value-added)



Furniture and fixtures (\$27 billion or 19% of total value-added)



Paper and allied products (\$72.3 billion or 51% of total value-added)

Figure 24—Categories of value-added products.

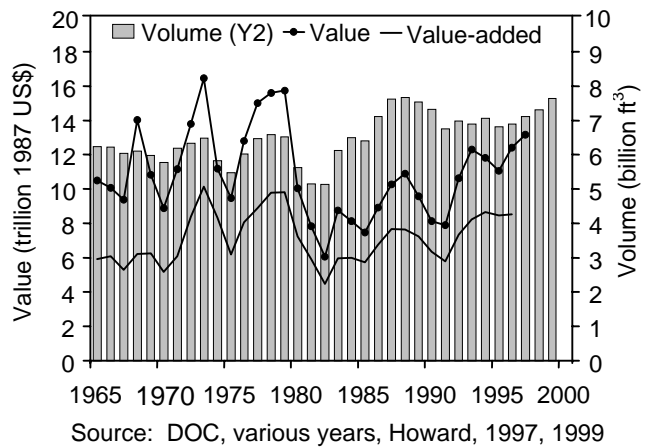


Figure 25—Volume, value, and value-added of sawnwood production, 1965–1999 (U.S. Department of Commerce (various years), Howard 1997, 1999).

The total volume of sawnwood production decreased in proportion to that of other wood products—from 42% of industrial roundwood production in 1965 to 31% in 1999 (Table 8). Nevertheless, the volume of sawnwood production increased by 24% over this 30-year period; the lowest volume was 2.0 billion cubic feet in 1982 and the highest almost 3.3 billion cubic feet in 1988. On average, the value of sawnwood production has continued to increase in real terms (net of inflation), although in effect it is still recovering from sharp declines in the early 1980s (Fig. 25). Meanwhile, the value added by sawnwood production remained fairly stable during the 1990s at around \$8 billion in real terms. The volume of sawnwood production increased by as much as 2.5 billion cubic feet from a 17-year low in 1982 to a high of 7.6 billion cubic feet in 1999. Rising real lumber prices are significant drivers in the introduction of new technologies to use more species, smaller dimension wood, and residues to make composite structural panels and engineered wood components such as OSB, I-beams, laminated beams, and truss framing.

The production of plywood, veneer, and other wood-based panels increased by 130% from 1965 to 1999 (Table 8). Although 1999 levels of plywood production were below the peak level of 23.8 billion square feet (3/8 in.-basis) in 1987 (Table 34), the total value of plywood shipments increased to more than \$8 billion in 1996 and made up more than 10% of the total value-added of all wood products (Department of Commerce 1999).

Pulp and paper products provide the highest value among wood commodities produced in the United States. The steady increase in pulp and paper production reflects significant linkages between increased income and increased demand for pulp and paper products. Paper and board products by weight increased more than 139% since 1965 (Table 43). The value-added of pulp and paper production fluctuated

widely during some periods, but it averaged just under \$32 billion near the end of the 1990s (Department of Commerce 1999). The increase in pulp and paper volumes with fairly stable values reflects advances in recycling as well as efficiency gains and lower production costs. These contributions to the conservation of forest resources provide more alternatives to forest resource management by extending the resource.

Supply and Consumption of Wood and Wood Products

In addition to knowing the historical and current levels of production, we need to assess our ability to maintain, increase, or decrease levels of production in response to the changing needs of society. The rationale for this indicator is that we will know to what extent we have met and can continue to meet wood demands with our available supply. The additional information gained with this measure compared to the production and value indicators is that a supply reflects all sources of wood, domestic and international. However, no C&I variables directly measure the balance of trade in wood products; thus, potential dependence on outside sources (a possible indicator of management away from sustainable levels) is not evident.

The deficit in U.S. production as compared to U.S. consumption of industrial wood products (in roundwood equivalents) increased net imports from just over 1 billion cubic feet in 1965 to almost 2.4 billion cubic feet in 1999 (Table 5a). This figure includes wood imports of more than 4.2 billion cubic feet and exports of 1.8 billion cubic feet. Imports (in roundwood equivalents) constituted more than 25% of the volume consumed in 1999, compared with less than 13% in 1965 (Table 8a). Softwood lumber remains the primary import into the United States; approximately 63% or 2.5 billion cubic feet (in roundwood equivalents) of total wood imports in 1997 (Tables 5a and 6a).

The roundwood equivalent of the total consumption of wood products in the United States has steadily increased over the last 30 years from 13.2 to 20 billion cubic feet. Fluctuations in wood products flow reflect periods of economic downturns and recovery because the demand for wood and wood products generally tracks basic macroeconomic indicators, such as those summarized in Table 1. Slower rates of increase in the consumption of wood products since 1990 have resulted in relatively stable trends in per capita wood consumption at about 75 cubic feet over the previous decade (Fig. 26). Per capita consumption by the wood products sector shows a fairly stable proportion of individual consumption of most products, with slight decreases in plywood and veneer consumption (Fig. 27).

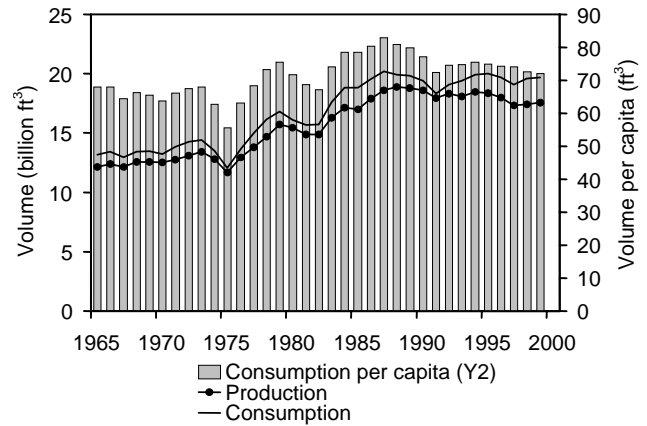


Figure 26—Supply and consumption of roundwood, 1965–1999.

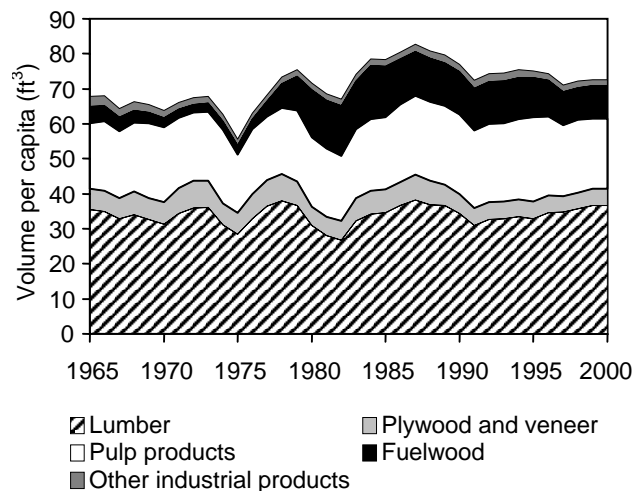


Figure 27—U.S. per capita consumption of wood products, 1965–1997 (Howard 1990).

Value of Wood and Non-Wood Production as Percentage of GDP

The rationale for this indicator is that the percentage of production that an industry contributes to total domestic production reflects its value to society through contributions to national income and its competitiveness among other economic sectors. The value-added of wood production as a percentage of gross domestic product (GDP) has remained fairly stable at approximately 2% in real terms over the past three decades (USDA Forest Service 1997). The total value of shipments of wood and wood products as a percentage of GDP averaged more than 4.5% annually in the latter part of the 1990s. Note that a simple measure of percentage of GDP might mask the move towards unsustainable levels of production if the resource is becoming scarce from overexploitation. If assessed relative to biophysical measures of land availability, rates of fragmentation, and timber productivity, this measure will provide a more comprehensive picture of

sustainable forest management levels of production and consumption.

Recycling of Forest Products

The rationale for recycling is that resource use and the conservation of forest resources are affected by the re-use, recycling, and recovery of materials as well as direct consumption of resources. The value of a resource can be reflected in the level of recycling of products from that resource (USDA Forest Service 1997).

Traditionally, recovery and recycling in the forestry sector has been associated primarily with paper and paper products, namely newsprint and office waste paper. The majority of available data reflects these products. Recently, research and data on the recycling of solid wood materials from demolished structures, construction sites, and mill residues reflect the increasing value that society places on forest resources. Paper and paperboard recycling has increased steadily over the last few decades, with significant increases in the 1990s. As of 1999, paper and paperboard was being recovered in the United States at a rate of almost 45%, up from 22% in 1970, while utilization of recovered paper exceeded 39%, up from 25% in 1965 (Tables 46 and 47).

Literature Cited

- AF&PA.** U.S. wood pulp data. [monthly] Washington, DC: American Forest & Paper Association.
- Department of Commerce.** 1999. Statistics for industry groups and industries. Annual survey of manufactures. M(AS-1). Washington, DC: U.S. Department of Commerce, Economics and Statistics Administration, Bureau of the Census. <http://www.census.gov/prod/www/abs/industry.html>
- International Woodfiber Report.** 1999. Gilroy, CA: Miller Freeman, Inc.. Vol. 5 no. 6.
- Luppold, G.; William, D.; Gilbert, P.** 1994. Factors affecting regional changes in hardwood lumber production. *Forest Products Journal*. 44(6): 8-14.
- USDA Forest Service.** 1997. Report of the United States on the criteria and indicators for the sustainable management of temperate and boreal forests. Washington, DC: U.S. Department of Agriculture, Forest Service.
- U.S. Industry & Trade Outlook.** 2000. The McGraw-Hill Companies and U.S. Department of Commerce/International Trade Administration. New York, NY: The McGraw-Hill Companies, Inc.

Table 1—Measures of economic growth, population, and prices, 1965–1999

Year	Gross domestic product ^a		Disposable personal income ^a		Expenditures for new construction ^b		Non-residential fixed investment ^c	Number of housing starts ^d	Mobile homes ^d	Popula-tion ^a	Index of industrial production ^e				Producer price index all commodities ^f	Consumer price index all items ^a
	Billion current dollars	Billion 1992 dollars	Billion current dollars	Billion 1992 dollars	Billion current dollars	Billion 1992 dollars	Billion dollars	Thousand units	Thousand units	Millions	Total industrial production	Manufac-turing	Furniture and fixtures	Paper and products	1992=100	1992=100
											1992=100	1992=100	1992=100	1992=100		
1965	719.1	2,874.8	493.9	2,000.2	81.9	387.0	321.8	1,473	217	194.3	49.5	44.5	44.8	43.1	27.6	22.4
1966	787.8	3,060.2	533.7	2,106.6	85.8	373.6	359.1	1,165	217	196.6	53.8	48.6	48.3	46.5	28.4	23.1
1967	833.6	3,140.2	571.9	2,198.4	87.2	368.0	353.6	1,292	240	198.7	55.0	49.5	48.3	46.5	28.5	23.8
1968	910.6	3,288.6	621.4	2,298.2	96.8	387.0	355.6	1,508	318	200.7	58.1	52.3	50.0	49.2	29.2	24.8
1969	982.2	3,388.0	668.4	2,373.6	104.9	392.1	369.0	1,467	413	202.7	60.7	54.6	52.3	53.0	30.4	26.2
1970	1,035.6	3,388.2	727.1	2,465.6	105.9	372.3	353.9	1,434	401	205.1	58.7	52.1	49.0	52.4	31.5	27.7
1971	1,125.4	3,500.1	790.2	2,564.0	122.4	403.8	343.6	2,052	497	207.7	59.5	53.0	51.0	54.7	32.5	28.9
1972	1,237.3	3,690.3	855.3	2,680.8	139.1	432.2	362.7	2,357	576	209.9	65.3	58.5	61.5	59.4	34.0	29.8
1973	1,382.6	3,902.3	965.0	2,869.4	153.8	439.2	388.6	2,045	567	211.9	70.6	63.7	65.6	63.6	38.4	31.7
1974	1,496.9	3,888.2	1,054.2	2,847.0	155.2	391.1	379.3	1,338	329	213.9	69.6	62.8	61.0	63.2	45.6	35.1
1975	1,630.6	3,865.1	1,159.2	2,895.0	152.6	352.0	346.1	1,160	213	216.0	63.4	56.5	52.2	54.9	49.8	38.4
1976	1,819.0	4,081.1	1,273.0	3,008.0	172.1	378.7	362.4	1,538	246	218.0	69.3	62.3	58.3	62.4	52.1	40.7
1977	2,026.9	4,279.3	1,401.4	3,105.1	200.5	408.5	385.7	1,987	277	220.2	74.9	67.7	65.2	64.8	55.4	43.2
1978	2,291.4	4,493.7	1,580.1	3,264.2	239.9	439.1	404.9	2,020	276	222.6	79.3	71.9	71.2	69.2	59.6	46.5
1979	2,557.5	4,624.0	1,769.5	3,353.9	272.9	446.5	417.2	1,745	277	225.1	82.0	74.8	72.9	71.7	67.2	51.7
1980	2,784.2	4,611.9	1,973.3	3,373.3	273.9	403.9	476.1	1,292	222	227.7	79.7	72.8	71.1	71.6	76.6	58.7
1981	3,115.9	4,724.9	2,200.2	3,452.3	289.1	396.3	506.5	1,084	241	230.0	81.0	74.2	71.7	72.7	83.6	64.8
1982	3,242.1	4,623.6	2,347.3	3,483.0	279.3	369.1	484.4	1,062	240	232.2	76.7	70.8	68.2	70.8	85.3	68.7
1983	3,514.5	4,810.0	2,522.4	3,579.9	311.6	403.9	462.9	1,703	296	234.3	79.5	74.8	77.2	77.6	86.4	71.0
1984	3,902.4	5,138.2	2,810.0	3,842.0	369.0	463.1	522.0	1,750	295	236.3	86.6	82.5	87.6	82.3	88.5	74.1
1985	4,180.7	5,329.5	3,002.0	3,958.6	401.4	490.9	541.4	1,742	284	238.5	88.0	84.7	90.0	82.6	88.1	76.7
1986	4,422.2	5,489.9	3,187.6	4,087.0	429.9	507.3	513.2	1,805	244	240.7	89.0	87.2	93.8	88.3	85.5	78.1
1987	4,692.3	5,648.4	3,363.1	4,154.1	441.6	502.5	506.1	1,621	233	242.8	93.2	92.4	99.7	93.5	87.7	81.0
1988	5,049.6	5,862.9	3,640.8	4,318.1	455.6	499.6	535.5	1,488	218	245.0	97.4	96.8	105.8	97.3	91.2	84.3
1989	5,438.7	6,060.4	3,894.5	4,403.7	469.8	495.4	540.0	1,376	198	247.3	99.1	98.3	109.6	98.7	95.7	88.4
1990	5,743.8	6,138.7	4,166.8	4,484.6	468.5	479.0	656.1	1,193	188	249.9	98.9	98.1	105.7	98.3	99.2	93.2
1991	5,916.7	6,079.0	4,343.7	4,486.5	424.2	429.6	618.1	1,014	171	252.7	97.0	95.9	99.0	97.8	99.4	97.1
1992	6,244.4	6,244.4	4,613.7	4,613.7	452.1	452.0	630.6	1,200	211	255.4	100.0	100.0	100.0	100.0	100.0	100.0
1993	6,553.0	6,386.4	4,790.2	4,666.9	482.7	465.0	658.6	1,288	254	258.1	103.4	103.8	109.0	104.7	101.5	103.0
1994	6,935.7	6,608.7	5,021.7	4,778.2	519.5	480.6	688.8	1,457	304	260.7	109.1	110.6	110.9	109.5	102.7	105.7
1995	7,253.8	6,742.9	5,320.8	4,945.8	538.1	478.1	726.0	1,354	340	263.0	114.4	114.5	111.6	119.8	106.4	108.6
1996	7,575.9	6,907.4	5,588.5	5,088.2	583.6	506.7	780.8	1,475	363	265.5	119.4	118.3	108.9	108.0	109.0	111.8
1997	8,110.9	7,269.8	5,886.6	5,222.7	618.2	520.1	837.4	1,474	354	267.9	127.1	126.8	122.5	109.4	108.8	114.4
1998	8,511.0	7,551.9	6,027.8	5,348.5	655.4	538.4	918.6	1,617	373	270.3	132.4	131.4	121.4	115.0	110.4	116.2
1999	9,254.6	8,867.1	6,639.2	6,361.2	705.1	555.7	964.9	1,663	349	273.2	137.2	137.2	125.8	116.3	120.2	118.7

^aU.S. Council of Economic Advisors (30,31).

^bU.S. Department of Commerce, Bureau of the Census (58).

^cU.S. Council of Economic Advisors (30).

^dU.S. Department of Commerce, Bureau of the Census (46); Privately owned housing starts and manufacturers' shipments of mobile homes.

^eU.S. Federal Reserve System, Board of Governors (66).

^fU.S. Department of Labor, Bureau of Labor Statistics (63).

Table 2—Number of households and housing market indicators, 1965–1999

Year	Number of households ^a	New home mortgage interest rates ^b	New housing units								Expenditures for residential upkeep and improvements ^f	
			New housing starts									
			Total units	Total starts ^c	One family		Multifamily		Mobile homes			
					Number starts ^d	Floor area ^e	Number starts ^d	Floor area ^e	Number shipments ^d	Floor area ^e		
Millions	Average percent	Thousand units	Thousand units	Thousand units	Average square feet	Thousand units	Average square feet	Thousand units	Average square feet	Million current dollars	Million 1992 dollars	
1965	57.4	5.81	1,727	1,510	965	1,498	545	1,053	217	650	11,442	52,009
1966	58.4	6.25	1,413	1,196	780	1,544	416	1,076	217	660	11,691	50,830
1967	59.2	6.46	1,562	1,322	845	1,585	477	1,094	240	670	11,687	49,312
1968	60.8	6.97	1,863	1,545	900	1,642	645	1,123	318	670	12,703	50,812
1969	62.2	7.81	1,913	1,500	811	1,616	689	1,095	413	684	13,535	50,504
1970	63.4	8.45	1,870	1,469	815	1,482	654	995	401	732	14,770	52,007
1971	64.8	7.74	2,582	2,085	1,153	1,520	932	1,011	497	780	16,299	53,792
1972	66.7	7.60	2,955	2,379	1,311	1,555	1,068	1,035	576	780	17,498	54,342
1973	68.3	7.96	2,625	2,058	1,133	1,660	925	1,031	567	882	18,512	52,891
1974	69.9	8.92	1,682	1,353	889	1,695	464	1,021	329	910	21,114	53,184
1975	71.1	9.00	1,384	1,171	896	1,645	275	1,000	213	952	25,239	58,154
1976	72.9	9.00	1,794	1,548	1,166	1,700	382	940	246	966	29,034	63,811
1977	74.1	9.02	2,279	2,002	1,451	1,720	551	938	277	1,000	31,280	63,707
1978	76.0	9.56	2,312	2,036	1,433	1,755	603	902	276	1,010	37,461	68,610
1979	77.3	10.78	2,037	1,760	1,194	1,760	566	938	277	1,050	42,231	69,118
1980	80.8	12.66	1,535	1,313	852	1,740	461	979	222	1,050	46,338	68,345
1981	82.4	14.70	1,341	1,100	705	1,720	395	980	241	1,015	46,351	63,582
1982	83.5	15.14	1,312	1,072	663	1,710	409	990	240	1,000	45,291	59,830
1983	83.9	12.57	2,009	1,713	1,068	1,725	645	942	296	1,035	49,295	63,936
1984	85.4	12.38	2,051	1,756	1,084	1,780	672	914	295	1,060	70,597	88,578
1985	86.8	11.55	2,029	1,745	1,072	1,785	673	922	284	1,080	82,127	100,400
1986	88.5	10.17	2,049	1,805	1,179	1,825	626	911	244	1,110	94,329	111,237
1987	89.5	9.31	1,854	1,621	1,146	1,905	475	980	233	1,140	98,413	111,959
1988	91.1	9.19	1,706	1,488	1,081	1,995	407	990	218	1,175	106,864	117,176
1989	92.8	10.13	1,574	1,376	1,003	2,035	373	1,000	198	1,195	108,054	113,981
1990	93.3	10.05	1,381	1,193	895	2,080	298	1,005	188	1,205	115,432	118,029
1991	94.3	9.32	1,185	1,014	840	2,075	174	1,020	171	1,225	107,692	109,111
1992	94.6	8.24	1,411	1,200	1,030	2,095	170	1,040	211	1,255	115,569	115,569
1993	95.3	7.20	1,542	1,288	1,126	2,095	162	1,065	254	1,295	121,899	117,436
1994	96.0	7.49	1,761	1,457	1,198	2,100	259	1,035	304	1,330	130,625	120,837
1995	97.3	7.87	1,694	1,354	1,076	2,095	278	1,080	340	1,355	124,971	110,987
1996	98.7	7.80	1,838	1,475	1,161	2,120	314	1,070	363	1,380	131,362	114,035
1997	99.9	7.71	1,828	1,474	1,134	2,150	340	1,095	354	1,420	133,577	112,344
1998	101.0	7.07	1,990	1,617	1,271	2,190	346	1,065	373	1,450	133,693	109,405
1999	102.2 ^g	7.04	2,012	1,663	1,332	2,225	331	1,105	349	1,472 ^g	142,900	113,412 ^g

^aU.S. Department of Commerce, Bureau of the Census (50). 1992 - 1997 numbers were revised.

^bU.S. Council of Economic Advisors (31; Effective rate (in the primary market) on conventional mortgages, reflecting fees and charges as well as contract rate and assumed, on the average, repayment at the end of 10 years). Rates beginning 1973 not strictly comparable with prior years.

^cData for privately owned housing starts from 1986 to present.

^dU.S. Department of Commerce, Bureau of the Census (46, 48, 58); U.S. Department of Commerce, Bureau of Economic Analysis (61).

^eU.S. Department of Agriculture, Forest Service estimates based on data from the Manufactured Housing Institute; U.S. Department of Commerce, Bureau of the Census, and U.S. Department of Housing and Urban Development (59).

^fU.S. Department of Commerce, Bureau of the Census (53). 1984 - 1997 numbers were revised.

^gPreliminary

Table 3—Average hourly earnings^a in timber-based industries and all manufacturing in the United States, 1972–1999^b

Year	Lumber and wood products except furniture		Logging camps and logging contractors		Sawmills and planing mills		Millwork, plywood, and structural members		Paper and allied products		Furniture and fixtures		Manufacturing	
	U.S. dollars	Index 1992=100	U.S. dollars	Index 1992=100	U.S. dollars	Index 1992=100	U.S. dollars	Index 1992=100	U.S. dollars	Index 1992=100	U.S. dollars	Index 1992=100	U.S. dollars	Index 1992=100
1972	3.33	35.3	4.25	38.0	3.29	34.3	3.37	35.5	3.95	30.2	3.08	34.2	3.82	33.3
1973	3.61	38.2	4.56	40.8	3.62	37.7	3.62	38.2	4.20	32.1	3.29	36.5	4.09	35.7
1974	3.89	41.2	4.91	44.0	3.88	40.5	3.91	41.2	4.53	34.7	3.53	39.2	4.42	38.6
1975	4.26	45.1	5.28	47.3	4.34	45.3	4.26	44.9	5.01	38.3	3.78	42.0	4.83	42.1
1976	4.72	50.0	6.03	54.0	4.86	50.7	4.67	49.3	5.47	41.9	4.34	48.2	5.68	49.6
1977	5.10	54.0	6.58	58.9	5.28	55.1	5.04	53.2	5.96	45.6	4.34	48.2	5.68	49.6
1978	5.60	59.3	7.25	64.9	5.83	60.8	5.55	58.5	6.52	49.9	4.68	51.9	6.17	53.8
1979	6.07	64.3	7.97	71.4	6.32	65.9	5.95	62.8	7.13	54.6	5.06	56.2	6.70	58.5
1980	6.55	69.4	8.64	77.4	6.70	69.9	6.41	67.6	7.84	60.0	5.49	60.9	7.27	63.4
1981	6.99	74.0	9.11	81.6	7.19	75.0	6.89	72.7	8.60	65.8	5.91	65.6	7.99	69.7
1982	7.43	78.7	9.79	87.6	7.73	80.6	7.33	77.3	9.32	71.3	6.31	70.0	8.49	74.1
1983	7.80	82.6	10.17	91.0	8.20	85.5	7.64	80.6	9.93	76.0	6.62	73.5	8.83	77.1
1984	8.03	85.1	10.70	95.8	8.42	87.8	7.81	82.4	10.41	79.6	6.84	75.9	9.19	80.2
1985	8.22	87.1	10.92	97.8	8.52	88.8	8.06	85.0	10.83	82.9	7.17	79.6	9.54	83.2
1986	8.34	88.3	10.82	96.9	8.58	89.5	8.23	86.8	11.18	85.5	7.46	82.8	9.73	84.9
1987	8.40	89.0	10.68	95.6	8.58	89.5	8.35	88.1	11.43	87.5	7.67	85.1	9.91	86.5
1988	8.61	91.2	10.78	96.5	8.75	91.2	8.55	90.2	11.69	89.4	7.94	88.1	10.18	88.8
1989	8.84	93.6	11.13	99.6	9.03	94.2	8.73	92.1	11.96	91.5	8.25	91.6	10.48	91.4
1990	9.08	96.2	11.22	100.4	9.22	96.1	9.04	95.4	12.31	94.2	8.52	94.6	10.83	94.5
1991	9.24	97.9	11.06	99.0	9.37	97.7	9.28	97.9	12.72	97.3	5.76	63.9	11.18	97.6
1992	9.44	100.0	11.17	100.0	9.59	100.0	9.48	100.0	13.07	100.0	9.01	100.0	11.46	100.0
1993	9.61	101.8	11.37	101.8	9.78	102.0	9.65	101.8	13.42	102.7	9.27	102.9	11.74	102.4
1994	9.84	104.2	11.44	102.4	10.05	104.8	9.89	104.3	13.77	105.4	9.55	106.0	12.06	105.2
1995	10.12	107.2	11.64	104.2	10.31	107.5	10.12	106.8	14.23	108.9	9.82	109.0	12.37	107.9
1996	10.44	110.6	11.76	105.3	10.59	110.4	10.51	110.9	14.68	112.3	10.15	112.7	12.78	111.5
1997	10.76	114.0	12.16	108.9	10.85	113.1	10.89	114.9	15.06	115.2	10.55	117.1	13.17	114.9
1998	11.10	117.6	12.48	111.7	11.12	116.0	11.25	118.7	15.51	118.7	10.90	121.0	13.49	117.7
1999	11.46	121.4	13.24	118.5	11.40	118.9	11.59	122.3	15.97	122.2	11.23	124.6	13.91	121.4

^aFor production or nonsupervisory workers.

^bU.S. Department of Labor, Bureau of Labor Statistics (60,63).

Table 4—Average employment in lumber producing and lumber dependent industries in the United States, in thousand people, 1972–1999^a

Year	Lumber producing			Lumber dependent								
	Logging	Sawmills and planning mills, general	Millwork	Wood kitchen cabinets	Wood containers	Wood buildings and mobile homes	Misc. wood products	Lumber, plywood, and millwork	Lumber and other building materials	Residential building construction	Operative builders	Special trade contractors
1972	69.0	182.0	78.5	38.1	45.8	110.5	86.3	N/A	268.3	577.6	93.6	1,950.6
1973	75.9	185.9	83.3	41.9	47.5	115.0	91.1	N/A	286.1	594.2	101.8	2,086.7
1974	80.7	191.3	75.1	38.5	46.3	82.2	90.0	N/A	287.6	576.0	92.1	2,029.0
1975	73.5	169.6	67.6	31.5	38.9	63.1	78.1	N/A	267.9	479.9	68.3	1,778.8
1976	81.5	184.4	75.2	36.9	41.2	71.4	84.5	N/A	283.4	513.8	67.2	1,805.8
1977	84.2	189.3	80.8	44.2	42.0	82.1	87.0	N/A	302.1	578.1	75.4	1,982.7
1978	84.8	192.3	85.5	50.0	44.4	87.3	91.3	N/A	325.5	637.3	81.9	2,172.6
1979	88.5	196.4	84.5	54.1	46.9	83.4	92.7	N/A	337.5	625.1	83.3	2,292.6
1980	87.5	178.2	76.3	48.4	42.5	65.6	87.9	N/A	325.3	554.3	66.6	2,278.3
1981	82.1	168.4	74.8	47.0	41.2	66.7	87.5	N/A	315.1	508.1	59.7	2,228.6
1982	75.4	148.1	70.4	42.0	37.6	60.0	78.9	77.2	298.3	446.9	47.9	2,119.2
1983	82.9	160.3	81.1	48.7	37.8	69.3	81.2	83.1	320.9	492.9	54.8	2,173.6
1984	87.5	166.5	90.3	57.0	41.0	73.5	84.4	92.9	346.8	578.9	57.9	2,461.7
1985	84.4	160.2	95.0	60.4	40.9	72.0	83.3	97.2	363.2	622.6	58.4	2,652.2
1986	84.1	158.3	100.9	65.4	40.8	69.4	84.2	100.1	380.4	665.4	57.0	2,770.6
1987	85.4	163.7	109.0	70.8	41.9	69.0	87.4	106.5	412.8	692.3	53.5	2,901.4
1988	88.0	165.8	111.7	72.7	43.8	68.0	89.8	116.2	436.6	710.6	46.6	3,005.2
1989	86.9	163.2	109.6	73.6	44.7	64.4	87.3	119.4	441.0	680.9	41.9	3,072.1
1990	84.6	160.1	106.6	72.3	45.1	59.4	84.8	117.9	432.8	642.8	38.0	3,051.0
1991	78.7	148.0	97.9	64.6	44.0	54.1	80.2	109.7	417.1	553.7	30.7	2,783.3
1992	78.7	144.6	100.3	65.7	43.5	56.4	80.8	110.1	429.3	528.2	27.2	2,704.1
1993	81.1	145.2	103.3	68.8	45.9	64.2	83.8	113.1	450.6	560.8	27.2	2,835.6
1994	82.1	150.3	110.2	74.7	49.3	73.5	87.7	119.5	491.9	604.7	27.9	3,058.4
1995	82.5	148.0	111.4	76.0	51.2	81.4	87.8	123.5	512.6	608.8	26.6	3,201.1
1996	80.7	143.5	113.9	78.4	52.4	89.1	88.6	126.0	535.2	642.0	26.2	3,383.6
1997	82.2	144.6	117.4	81.4	54.5	93.4	89.1	130.0	562.6	672.5	26.6	3,582.3
1998	80.0	144.1	121.4	87.6	55.8	99.7	87.6	134.3	576.7	706.1	27.5	3,803.6
1999	79.0	141.7	124.8	95.6	56.8	102.9	85.4	142.2	612.3	767.3	29.9	4,084.2

^aU.S. Department of Labor, Bureau of Labor Statistics (60,63).

Table 5a—Production, imports, exports, and consumption of timber products, by major product, 1965–1999 (million cubic feet, roundwood equivalent)^a

Year	Industrial roundwood use																							
	All products		Total				Lumber				Plywood and veneer				Pulpwood-based products				Other industrial products, and consumption ^c	Logs		Pulpwood chip ^d		Fuel-wood production and consumption
	Production	Consumption	Production	Imports	Exports	Consumption	Production	Imports	Exports	Consumption	Production	Imports	Exports	Consumption	Production	Imports ^b	Exports ^b	Consumption		Imports	Exports	Imports	Exports	
1965	12,153	13,196	11,231	1,604	554	12,281	6,233	823	148	6,908	1,071	69	3	1,137	3,176	701	213	3,665	560	11	191	—	7	915
1966	12,382	13,403	11,520	1,679	641	12,558	6,222	826	182	6,867	1,118	82	4	1,196	3,392	755	232	3,915	565	15	223	—	17	845
1967	12,160	12,952	11,333	1,612	772	12,172	6,037	809	197	6,648	1,100	81	7	1,175	3,365	709	253	3,822	515	12	315	—	47	780
1968	12,584	13,414	11,784	1,807	877	12,714	6,112	966	181	6,897	1,237	124	6	1,355	3,539	705	280	3,964	485	13	411	—	101	700
1969	12,583	13,480	11,818	1,944	901	12,860	5,965	1,000	182	6,783	1,153	138	16	1,275	3,861	792	320	4,333	455	13	383	—	146	620
1970	12,536	13,222	11,851	1,896	1,061	12,687	5,768	966	197	6,537	1,197	133	12	1,318	4,023	773	413	4,383	425	23	438	—	150	535
1971	12,737	13,827	12,114	2,107	894	13,327	6,182	1,203	184	7,201	1,378	166	8	1,535	3,773	725	336	4,162	415	13	366	—	123	500
1972	13,088	14,248	12,456	2,388	1,070	13,773	6,339	1,485	232	7,592	1,512	206	18	1,700	3,698	690	317	4,070	405	6	502	—	157	475
1973	13,426	14,409	12,705	2,404	1,204	13,904	6,490	1,505	327	7,667	1,496	165	34	1,628	3,775	729	305	4,199	405	5	538	—	216	505
1974	12,806	13,493	12,031	2,086	1,159	12,958	5,826	1,145	297	6,673	1,287	107	45	1,349	4,100	822	393	4,529	395	12	423	—	240	535
1975	11,672	12,070	10,904	1,664	1,068	11,500	5,471	953	263	6,160	1,277	125	64	1,338	3,345	572	314	3,602	385	14	427	—	198	570
1976	12,948	13,639	12,103	2,130	1,193	13,039	6,026	1,307	295	7,038	1,466	154	59	1,561	3,715	655	319	4,052	375	13	520	—	245	600
1977	13,790	14,951	12,530	2,510	1,089	13,951	6,461	1,689	268	7,882	1,552	148	26	1,673	3,641	648	304	3,985	385	25	491	—	261	1,000
1978	14,680	16,129	12,930	2,857	1,183	14,604	6,586	1,939	304	8,221	1,586	167	25	1,729	3,817	733	309	4,243	395	15	545	—	225	1,525
1979	15,706	16,815	13,221	2,769	1,381	14,610	6,516	1,819	366	7,969	1,541	137	32	1,646	4,136	792	359	4,568	405	21	623	—	280	2,205
1980	15,464	16,113	12,081	2,395	1,469	13,008	5,623	1,530	407	6,745	1,272	81	30	1,323	4,250	765	510	4,505	415	20	522	—	278	3,105
1981	14,867	15,682	11,467	2,342	1,307	12,502	5,158	1,493	397	6,254	1,284	99	53	1,330	4,195	734	452	4,476	425	16	405	—	220	3,180
1982	14,861	15,746	11,328	2,371	1,309	12,391	5,133	1,418	332	6,219	1,229	122	35	1,317	4,019	698	429	4,288	435	19	513	114	178	3,355
1983	16,282	17,619	12,891	2,926	1,432	14,384	6,121	1,815	384	7,551	1,495	179	44	1,630	4,270	766	444	4,592	445	26	560	139	156	3,235
1984	17,133	18,827	13,368	3,189	1,349	15,207	6,491	1,975	350	8,116	1,494	161	28	1,627	4,370	880	412	4,838	455	24	559	148	145	3,620
1985	16,994	18,840	13,400	3,366	1,376	15,390	6,404	2,184	317	8,271	1,485	194	25	1,654	4,432	918	419	4,931	465	16	615	53	144	3,450
1986	17,891	19,552	14,644	3,351	1,538	16,456	7,105	2,119	394	8,830	1,598	199	45	1,751	4,881	972	514	5,338	475	13	585	49	151	3,096
1987	18,619	20,179	15,385	3,473	1,755	17,103	7,611	2,173	510	9,274	1,639	240	57	1,823	4,982	1,012	531	5,463	495	13	657	35	158	3,076
1988	18,902	19,921	15,618	3,343	2,106	16,855	7,667	2,050	704	9,014	1,598	201	72	1,728	5,075	1,021	563	5,533	510	11	767	59	218	3,066
1989	18,763	19,800	15,722	3,420	2,383	16,759	7,541	2,228	655	9,115	1,454	114	97	1,471	5,149	1,022	608	5,564	555	6	753	49	271	3,041
1990	18,596	19,380	15,577	3,091	2,307	16,361	7,317	1,909	589	8,637	1,423	97	109	1,410	5,313	1,038	646	5,704	562	4	674	43	288	3,019
1991	17,922	18,338	14,894	2,808	2,393	15,310	6,746	1,714	619	7,841	1,267	83	95	1,255	5,397	969	746	5,620	551	2	602	41	332	3,028
1992	18,324	19,070	15,280	3,090	2,344	16,026	6,983	1,960	561	8,383	1,294	100	106	1,288	5,516	992	801	5,706	610	7	524	31	351	3,044
1993	18,095	19,418	15,011	3,465	2,143	16,334	6,887	2,240	532	8,595	1,293	100	100	1,293	5,423	1,065	724	5,764	621	15	460	46	326	3,084
1994	18,440	19,934	15,306	3,632	2,139	16,800	7,052	2,395	512	8,935	1,320	94	86	1,328	5,576	1,102	758	5,920	576	18	429	23	354	3,134
1995	18,367	20,019	15,430	3,917	2,265	17,082	6,815	2,522	460	8,877	1,303	107	89	1,321	5,972	1,226	888	6,310	513	13	451	49	377	2,937
1996	17,997	19,658	15,258	3,899	2,239	16,918	6,886	2,616	449	9,053	1,281	97	87	1,291	5,753	1,114	865	6,002	500	18	422	53	416	2,739
1997	17,332	19,061	14,790	3,864	2,136	16,519	7,103	2,619	452	9,270	1,213	114	103	1,224	5,183	1,063	775	5,472	485	20	384	47	422	2,542
1998	17,422	19,588	14,899	3,979	1,812	17,065	7,298	2,690	350	9,638	1,201	131	55	1,276	5,187	1,082	679	5,590	485	30	316	47	412	2,523
1999	17,574	19,980	15,032	4,231	1,825	17,438	7,629	2,810	404	10,035	1,208	160	46	1,322	4,962	1,167	627	5,503	485	47	326	47	422	2,542

^aU.S. Department of Agriculture, Forest Service (16, 69); Data may not add to totals because of rounding; Data have been revised.

^bIncludes pulpwood and the pulpwood equivalent of wood pulp and paper and board.

^cIncludes cooperage logs, poles and piling, fence posts, hewn ties, round mine timbers, box bolts, excelsior bolts, chemical wood, shingle bolts, and miscellaneous items.

^dPrior to 1989, pulpwood chips are not included in total production.

Table 5b—Production, imports, exports, and consumption of timber products, by major product, 1965–1999 (thousand cubic meters, roundwood equivalent)^a

Year	Industrial roundwood use																				Fuel-wood production and consumption				
	All products		Total				Lumber				Plywood and veneer				Pulpwood-based products				Other industrial products, production			Logs		Pulpwood chip ^d	
	Production	Consumption	Production	Imports	Exports	Consumption	Production	Imports	Exports	Consumption	Production	Imports	Exports	Consumption	Production	Imports ^b	Exports ^b	Consumption	and consumption ^c	Imports		Exports	Imports	Exports	
	tion	tion	tion	ports	ports	tion	tion	ports	ports	tion	tion	ports	ports	tion	tion	ports ^b	ports ^b	tion	sumption ^c	ports		ports	ports	ports	sumption
1965	344,143	373,660	318,023	45,417	15,690	347,750	176,489	23,312	4,185	195,616	30,318	1,941	74	32,184	89,947	19,855	6,018	103,784	15,858	308	5,413	—	209	25,910	
1966	350,633	379,523	326,215	47,531	18,150	355,595	176,197	23,391	5,149	194,440	31,666	2,318	117	33,867	96,051	21,389	6,583	110,857	15,999	433	6,301	—	491	23,928	
1967	344,323	366,754	320,906	45,634	21,874	344,666	170,941	22,899	5,592	188,248	31,162	2,300	196	33,266	95,287	20,087	7,153	108,221	14,583	349	8,933	—	1,329	22,087	
1968	356,353	379,833	333,681	51,174	24,844	360,011	173,064	27,342	5,118	195,289	35,037	3,498	161	38,374	100,213	19,977	7,933	112,257	13,734	358	11,632	—	2,850	19,822	
1969	356,322	381,708	334,636	55,038	25,523	364,152	168,918	28,310	5,150	192,078	32,645	3,916	453	36,107	109,334	22,441	9,064	122,711	12,884	371	10,855	—	4,129	17,557	
1970	354,989	374,394	335,582	53,692	30,030	359,245	163,340	27,362	5,580	185,122	33,888	3,778	349	37,316	113,906	21,899	11,686	124,118	12,035	654	12,415	—	4,257	15,150	
1971	360,666	391,525	343,024	59,663	25,320	377,367	175,057	34,070	5,208	203,918	39,017	4,692	238	43,471	106,831	20,520	9,506	117,845	11,752	380	10,367	—	3,484	14,159	
1972	370,602	403,475	352,707	67,607	30,290	390,024	179,490	42,063	6,565	214,988	42,814	5,831	519	48,125	104,705	19,536	8,977	115,264	11,468	178	14,229	—	4,444	13,451	
1973	380,187	408,032	359,759	68,077	34,104	393,732	183,771	42,609	9,273	217,108	42,362	4,678	949	46,091	106,910	20,639	8,635	118,913	11,468	152	15,247	—	6,128	14,300	
1974	362,624	382,083	340,669	59,075	32,810	366,934	164,968	32,416	8,422	188,962	36,439	3,039	1,281	38,197	116,108	23,272	11,138	128,242	11,185	347	11,969	—	6,806	15,150	
1975	330,517	341,782	308,782	47,111	30,252	325,642	154,926	26,976	7,458	174,445	36,162	3,551	1,812	37,901	94,712	16,197	8,903	102,006	10,902	387	12,080	—	5,594	16,141	
1976	366,646	386,211	342,707	60,305	33,791	369,221	170,639	37,008	8,364	199,282	41,524	4,369	1,681	44,213	105,204	18,559	9,026	114,738	10,619	370	14,721	—	6,949	16,990	
1977	390,498	423,360	354,805	71,081	30,843	395,043	182,953	47,833	7,581	223,205	43,942	4,194	748	47,388	103,103	18,354	8,610	112,847	10,902	700	13,904	—	7,377	28,317	
1978	415,695	456,734	366,142	80,904	33,495	413,551	186,505	54,918	8,616	232,807	44,923	4,729	694	48,957	108,088	20,818	8,743	120,163	11,185	439	15,442	—	6,369	43,183	
1979	444,746	476,145	374,387	78,412	39,093	413,706	184,521	51,509	10,366	225,665	43,636	3,873	903	46,605	117,110	22,428	10,172	129,365	11,468	602	17,652	—	7,920	62,439	
1980	437,907	456,262	342,098	67,830	41,590	368,338	159,213	43,313	11,536	190,989	36,014	2,285	847	37,452	120,349	21,654	14,436	127,567	11,752	578	14,770	—	7,884	87,924	
1981	420,999	444,066	324,708	66,313	37,003	354,018	146,058	42,289	11,242	177,105	36,358	2,793	1,492	37,659	118,778	20,772	12,790	126,760	12,035	458	11,479	—	6,243	90,048	
1982	420,827	445,879	320,788	67,147	37,060	350,875	145,341	40,156	9,405	176,092	34,805	3,464	989	37,280	113,793	19,761	12,134	121,419	12,318	530	14,531	3,236	5,035	95,004	
1983	461,059	498,920	365,027	82,848	40,561	407,314	173,314	51,405	10,888	213,831	42,326	5,067	1,233	46,160	120,923	21,679	12,577	130,025	12,601	747	15,863	3,950	4,426	91,605	
1984	485,150	533,137	378,548	90,290	38,209	430,629	183,798	55,939	9,905	229,832	42,297	4,559	797	46,060	123,739	24,923	11,677	136,985	12,884	665	15,830	4,204	4,094	102,508	
1985	481,222	533,487	379,447	95,301	38,955	435,794	181,337	61,854	8,968	234,222	42,040	5,500	701	46,839	125,496	26,003	11,878	139,621	13,167	450	17,408	1,495	4,081	97,694	
1986	506,607	553,652	414,662	94,885	43,565	465,983	201,204	60,002	11,156	250,050	45,242	5,626	1,282	49,585	138,208	27,517	14,568	151,157	13,451	356	16,558	1,385	4,275	87,669	
1987	527,233	571,408	435,647	98,353	49,695	484,305	215,532	61,528	14,451	262,609	46,423	6,802	1,605	51,620	141,062	28,653	15,026	154,689	14,017	374	18,613	996	4,483	87,103	
1988	535,238	564,097	442,251	94,667	59,640	477,277	217,114	58,052	19,922	255,244	45,262	5,703	2,042	48,923	143,700	28,921	15,944	156,676	14,442	309	21,733	1,683	6,167	86,820	
1989	531,325	560,690	445,213	96,851	67,486	474,578	213,540	63,097	18,534	258,103	41,164	3,242	2,755	41,650	145,805	28,952	17,208	157,549	15,716	178	21,316	1,381	7,672	86,112	
1990	526,583	548,777	441,094	87,520	65,326	463,288	207,204	54,070	16,689	244,585	40,292	2,733	3,093	39,933	150,436	29,391	18,297	161,530	15,914	105	19,083	1,221	8,165	85,489	
1991	507,507	519,272	421,763	79,516	67,751	433,528	191,026	48,522	17,522	222,025	35,885	2,344	2,681	35,548	152,827	27,436	21,126	159,137	15,603	62	17,035	1,152	9,387	85,744	
1992	518,880	539,993	432,683	87,501	66,388	453,796	197,751	55,510	15,891	237,370	36,653	2,832	3,001	36,485	156,204	28,080	22,695	161,590	17,273	197	14,852	881	9,949	86,197	
1993	512,395	549,850	425,065	98,131	60,676	462,521	195,024	63,426	15,072	243,378	36,628	2,827	2,837	36,618	153,560	30,160	20,499	163,222	17,585	425	13,028	1,293	9,240	87,330	
1994	522,177	564,466	433,431	102,847	60,557	475,721	199,684	67,821	14,493	253,012	37,378	2,657	2,436	37,599	157,888	31,215	21,457	167,646	16,311	500	12,155	653	10,015	88,745	
1995	520,092	566,878	436,936	110,925	64,139	483,722	192,973	71,427	13,024	251,375	36,883	3,035	2,515	37,403	169,099	34,723	25,145	178,677	14,527	364	12,773	1,376	10,682	83,156	
1996	509,620	556,643	432,051	110,413	63,390	479,074	194,991	74,081	12,710	256,362	36,275	2,752	2,458	36,570	162,899	31,547	24,494	169,951	14,159	521	11,938	1,512	11,789	77,569	
1997	490,781	539,738	418,799	109,428	60,471	467,756	201,132	74,168	12,806	262,494	34,357	3,234	2,930	34,660	146,774	30,112	21,933	154,954	13,734	578	10,862	1,337	11,940	71,982	
1998	493,335	554,682	421,891	112,669	51,322	483,238	206,656	76,169	9,917	272,908	33,999	3,700	1,553	36,146	146,881	30,628	19,231	158,278	13,734	839	8,958	1,333	11,662	71,444	
1999	497,641	565,766	425,659	119,802	51,677	493,784	216,032	79,568	11,438	284,162	34,199	4,537	1,316	37,421	140,518	33,047	17,747	155,818	13,734	1,333	9,232	1,317	11,944	71,982	

^aU.S. Department of Agriculture, Forest Service (16, 69); Data may not add to totals because of rounding; Data have been revised.^bIncludes pulpwood and the pulpwood equivalent of wood pulp and paper and board.^cIncludes cooperage logs, poles and piling, fence posts, hewn ties, round mine timbers, box bolts, excelsior bolts, chemical wood, shingle bolts, and miscellaneous items.^dPrior to 1989, pulpwood chips are not included in total production.

Table 6a—Production, imports, exports, and consumption of softwood timber products, by major product, 1965–1999 (million cubic feet, roundwood equivalent)^a

Year	Industrial roundwood use																							Fuel-wood production and consumption
	All products		Total				Lumber				Plywood and veneer				Pulpwood-based products				Other industrial products, production and consumption ^c	Logs	Pulpwood chip			
	Production	Consumption	Production	Imports	Exports	Consumption	Production	Imports	Exports	Consumption	Production	Imports	Exports	Consumption	Production	Imports ^b	Exports ^b	Consumption						
	tion	tion	tion	ports	ports	tion	tion	ports	ports	tion	tion	ports	ports	tion	tion	ports ^b	ports ^b	tion	and consumption ^c	Im-ports	Ex-ports	Im-ports	Ex-ports	
1965	8,499	9,331	8,319	1,297	465	9,151	4,583	771	130	5,223	945	14	2	957	2,313	510	155	2,668	300	2	178	—	—	180
1966	8,646	9,442	8,476	1,325	529	9,272	4,514	756	147	5,123	990	17	4	1,003	2,451	546	168	2,829	310	7	210	—	—	170
1967	8,592	9,235	8,432	1,296	653	9,075	4,408	756	163	5,002	981	16	6	991	2,458	518	184	2,791	285	5	300	—	—	160
1968	9,096	9,788	8,956	1,462	770	9,648	4,583	913	163	5,333	1,111	25	5	1,131	2,602	518	206	2,914	265	5	396	—	—	140
1969	9,029	9,788	8,904	1,542	783	9,663	4,437	930	164	5,202	1,035	29	15	1,049	2,812	577	233	3,155	250	7	371	—	—	125
1970	9,206	9,821	9,101	1,545	929	9,716	4,309	914	180	5,044	1,082	27	9	1,099	3,052	587	313	3,326	230	17	427	—	—	105
1971	9,402	10,348	9,302	1,706	759	10,248	4,702	1,133	149	5,686	1,253	33	7	1,278	2,760	530	245	3,045	230	9	357	—	—	100
1972	9,659	10,681	9,569	1,948	926	10,591	4,849	1,416	197	6,068	1,379	42	17	1,404	2,623	489	225	2,887	230	2	487	—	—	90
1973	9,779	10,679	9,679	1,954	1,053	10,579	4,947	1,418	293	6,072	1,374	34	31	1,377	2,603	501	210	2,894	235	1	520	—	—	100
1974	9,103	9,795	8,993	1,669	977	9,685	4,341	1,075	263	5,154	1,190	22	41	1,171	2,823	565	270	3,118	235	7	404	—	—	110
1975	8,551	8,969	8,431	1,346	928	8,849	4,189	900	229	4,861	1,198	25	59	1,164	2,393	409	225	2,577	235	11	416	—	—	120
1976	9,511	10,226	9,381	1,760	1,045	10,096	4,624	1,255	261	5,618	1,382	32	54	1,360	2,630	463	225	2,868	240	11	505	—	—	130
1977	9,899	11,099	9,709	2,146	946	10,909	4,966	1,637	233	6,370	1,460	31	22	1,469	2,566	456	214	2,808	240	22	477	—	—	190
1978	10,185	11,613	9,900	2,425	997	11,328	5,009	1,870	235	6,644	1,495	37	22	1,509	2,629	505	212	2,922	240	13	528	—	—	285
1979	10,506	11,679	10,096	2,355	1,182	11,269	4,877	1,749	296	6,330	1,452	29	30	1,451	2,920	558	253	3,225	245	19	603	—	—	410
1980	9,563	10,414	8,988	2,061	1,210	9,839	4,011	1,477	320	5,168	1,194	18	27	1,185	3,041	547	365	3,223	245	18	497	—	—	575
1981	9,200	10,135	8,610	1,991	1,056	9,545	3,839	1,441	310	4,971	1,209	21	49	1,181	2,937	514	317	3,134	245	14	380	—	—	590
1982	9,009	9,930	8,389	2,018	1,097	9,310	3,726	1,387	268	4,845	1,134	25	32	1,127	2,782	476	298	2,960	248	16	498	114	—	620
1983	10,122	11,419	9,527	2,469	1,172	10,824	4,577	1,780	298	6,060	1,391	39	41	1,389	2,767	488	291	2,964	249	23	542	139	—	595
1984	10,351	11,947	9,716	2,690	1,094	11,312	4,715	1,931	258	6,389	1,390	36	26	1,401	2,821	555	271	3,105	250	19	539	148	—	635
1985	10,334	12,005	9,729	2,803	1,132	11,400	4,713	2,132	246	6,599	1,392	46	22	1,415	2,772	561	267	3,066	256	11	597	53	—	605
1986	11,109	12,646	10,591	2,766	1,228	12,128	5,259	2,070	303	7,027	1,501	47	42	1,507	3,011	591	321	3,281	257	8	562	49	—	518
1987	11,748	13,184	11,235	2,843	1,408	12,671	5,629	2,103	381	7,352	1,537	62	53	1,546	3,158	632	341	3,449	277	11	633	35	—	513
1988	11,796	12,884	11,288	2,743	1,654	12,376	5,603	1,992	495	7,100	1,497	51	66	1,482	3,182	631	358	3,456	270	9	735	59	—	508
1989	11,672	12,693	11,169	2,873	1,853	12,190	5,423	2,164	504	7,083	1,357	30	90	1,296	3,223	628	386	3,465	294	3	719	48	154	503
1990	11,466	12,277	10,968	2,580	1,769	11,779	5,154	1,865	439	6,580	1,328	26	101	1,253	3,376	644	417	3,603	298	2	639	43	174	498
1991	10,900	11,509	10,402	2,344	1,734	11,011	4,785	1,672	455	6,002	1,178	23	83	1,118	3,433	608	483	3,558	292	1	556	40	157	498
1992	11,062	12,035	10,563	2,575	1,602	11,536	4,981	1,911	389	6,503	1,209	29	91	1,147	3,436	598	509	3,526	323	6	489	31	125	499
1993	10,592	12,041	10,090	2,878	1,429	11,539	4,745	2,180	350	6,575	1,205	29	88	1,146	3,261	611	443	3,430	329	14	422	45	127	502
1994	10,781	12,419	10,268	3,016	1,378	11,906	4,883	2,329	319	6,893	1,219	27	75	1,172	3,336	622	460	3,498	305	15	387	22	138	513
1995	10,639	12,441	10,158	3,230	1,427	11,961	4,603	2,461	276	6,788	1,195	31	77	1,149	3,548	682	534	3,696	272	9	408	47	132	481
1996	10,528	12,413	10,080	3,243	1,359	11,964	4,703	2,550	259	6,994	1,176	30	75	1,130	3,434	599	522	3,512	265	13	381	50	122	448
1997	10,596	12,531	10,180	3,267	1,333	12,114	4,886	2,541	239	7,188	1,105	35	92	1,048	3,456	634	526	3,564	257	13	332	44	144	416
1998	10,577	12,827	10,097	3,336	1,085	12,348	4,866	2,594	166	7,295	1,089	43	46	1,085	3,476	631	465	3,642	257	24	263	45	146	480
1999	10,872	13,310	10,389	3,551	1,113	12,827	5,128	2,688	198	7,618	1,092	62	37	1,118	3,486	714	452	3,748	257	41	266	46	160	483

^aU.S. Department of Agriculture, Forest Service (16, 69); Data may not add to totals because of rounding; Data have been revised.

^bIncludes pulpwood and the pulpwood equivalent of wood pulp and paper and board.

^cIncludes cooerage logs, poles and piling, fence posts, hewn ties, round mine timbers, box bolts, excelsior bolts, chemical wood, shingle bolts, and miscellaneous items.

Table 6b—Production, imports, exports, and consumption of softwood timber products, by major product, 1965–1999 (thousand cubic meters, roundwood equivalent)^a

Year	Industrial roundwood use																									
	All products		Total				Lumber				Plywood and veneer				Pulpwood-based products				Other industrial products, production and consumption ^c		Logs		Pulpwood chip		Fuel-wood production and consumption	
	Production	Consumption	Production	Imports	Exports	Consumption	Production	Imports	Exports	Consumption	Production	Imports	Exports	Consumption	Production	Imports ^b	Exports ^b	Consumption	Production	Consumption ^c	Imports	Exports	Imports	Exports	Consumption	
1965	240,658	264,216	235,561	36,738	13,180	259,119	129,769	21,832	3,692	147,909	26,765	396	65	27,097	65,488	14,448	4,380	75,557	8,495	61	5,044	—	—	—	—	5,097
1966	244,823	267,371	240,009	37,527	14,980	262,557	127,815	21,418	4,162	145,070	28,048	469	103	28,413	69,409	15,448	4,755	80,103	8,778	193	5,959	—	—	—	—	4,814
1967	243,308	261,508	238,777	36,702	18,502	256,977	124,829	21,419	4,605	141,642	27,784	465	181	28,068	69,601	14,665	5,223	79,043	8,070	154	8,493	—	—	—	—	4,531
1968	257,559	277,170	253,595	41,405	21,795	273,205	129,772	25,862	4,624	151,010	31,448	716	139	32,025	73,669	14,677	5,830	82,516	7,504	150	11,202	—	—	—	—	3,964
1969	255,665	277,163	252,125	43,665	22,167	273,624	125,632	26,337	4,657	147,312	29,304	808	422	29,691	79,618	16,331	6,597	89,353	7,079	189	10,492	—	—	—	—	3,540
1970	260,675	278,096	257,702	43,737	26,316	275,123	122,027	25,882	5,086	142,822	30,627	759	259	31,127	86,432	16,615	8,867	94,179	6,513	482	12,103	—	—	—	—	2,973
1971	266,223	293,034	263,392	48,295	21,484	290,203	133,148	32,096	4,222	161,023	35,470	943	212	36,201	78,161	15,003	6,951	86,213	6,513	252	10,100	—	—	—	—	2,832
1972	273,507	302,451	270,959	55,157	26,214	299,902	137,318	40,089	5,578	171,830	39,039	1,176	471	39,743	74,285	13,841	6,360	81,765	6,513	51	13,804	—	—	—	—	2,549
1973	276,906	302,408	274,074	55,332	29,830	299,576	140,075	40,143	8,286	171,932	38,917	950	873	38,994	73,697	14,200	5,940	81,957	6,654	39	14,731	—	—	—	—	2,832
1974	257,770	277,358	254,655	47,265	27,677	274,243	122,933	30,443	7,435	145,941	33,696	614	1,158	33,153	79,940	16,001	7,653	88,288	6,654	207	11,431	—	—	—	—	3,115
1975	242,142	253,962	238,744	38,108	26,289	250,564	118,620	25,496	6,471	137,645	33,926	722	1,678	32,970	67,764	11,580	6,360	72,984	6,654	310	11,779	—	—	—	—	3,398
1976	269,313	289,579	265,632	49,847	29,582	285,897	130,945	35,528	7,377	159,095	39,137	894	1,533	38,497	74,461	13,120	6,377	81,204	6,796	305	14,294	—	—	—	—	3,681
1977	280,305	314,289	274,925	60,765	26,781	308,909	140,612	46,353	6,594	180,371	41,356	869	632	41,593	72,662	12,911	6,057	79,516	6,796	632	13,498	—	—	—	—	5,380
1978	288,417	328,848	280,347	68,660	28,229	320,778	141,832	52,945	6,643	188,135	42,320	1,051	636	42,735	74,458	14,305	6,010	82,754	6,796	358	14,940	—	—	—	—	8,070
1979	297,507	330,728	285,897	66,698	33,476	319,118	138,091	49,536	8,393	179,234	41,110	819	843	41,086	82,690	15,807	7,172	91,325	6,938	536	17,068	—	—	—	—	11,610
1980	270,802	294,902	254,519	58,361	34,261	278,619	113,592	41,833	9,070	146,354	33,805	517	773	33,549	86,102	15,495	10,335	91,262	6,938	517	14,083	—	—	—	—	16,282
1981	260,526	286,998	243,819	56,378	29,906	270,291	108,722	40,809	8,775	140,756	34,233	607	1,394	33,445	83,160	14,565	8,970	88,755	6,938	397	10,767	—	—	—	—	16,707
1982	255,097	281,176	237,541	57,135	31,056	263,620	105,496	39,278	7,585	137,189	32,122	707	910	31,920	78,792	13,466	8,451	83,807	7,021	448	14,109	3,236	—	—	—	17,557
1983	286,618	323,338	269,770	69,915	33,195	306,489	129,618	50,418	8,446	171,590	39,385	1,092	1,150	39,327	78,352	13,810	8,241	83,921	7,057	645	15,358	3,950	—	—	—	16,849
1984	293,099	338,310	275,118	76,179	30,969	320,329	133,526	54,691	7,310	180,906	39,371	1,030	730	39,670	79,874	15,726	7,666	87,934	7,086	529	15,262	4,204	—	—	—	17,981
1985	292,616	339,944	275,485	79,379	32,052	322,812	133,445	60,374	6,965	186,854	39,408	1,290	628	40,070	78,485	15,899	7,555	86,830	7,242	321	16,904	1,495	—	—	—	17,132
1986	314,565	358,103	299,897	78,318	34,780	343,435	148,923	58,626	8,576	198,973	42,513	1,330	1,176	42,667	85,272	16,742	9,103	92,911	7,263	236	15,926	1,385	—	—	—	14,668
1987	332,674	373,327	318,148	80,512	39,859	358,801	159,408	59,555	10,781	208,182	43,534	1,747	1,496	43,785	89,420	17,903	9,645	97,677	7,849	311	17,936	996	—	—	—	14,527
1988	334,029	364,849	319,644	77,665	46,845	350,464	158,666	56,404	14,026	201,044	42,399	1,445	1,869	41,975	90,115	17,879	10,139	97,854	7,654	253	20,810	1,683	—	—	—	14,385
1989	330,526	359,415	316,282	81,359	52,470	345,172	153,563	61,281	14,276	200,568	38,426	842	2,556	36,712	91,266	17,781	10,940	98,108	8,329	95	20,350	1,360	4,347	—	—	14,243
1990	324,696	347,646	310,594	73,054	50,104	333,544	145,955	52,802	12,421	186,336	37,600	732	2,851	35,482	95,589	18,243	11,816	102,016	8,435	58	18,089	1,218	4,927	—	—	14,102
1991	308,641	325,900	294,539	66,362	49,104	311,798	135,498	47,333	12,875	169,955	33,366	645	2,360	31,650	97,201	17,204	13,663	100,742	8,269	34	15,752	1,146	4,453	—	—	14,102
1992	313,241	340,785	299,111	72,920	45,376	326,655	141,038	54,104	11,008	184,134	34,237	822	2,582	32,477	97,296	16,947	14,402	99,841	9,155	167	13,837	880	3,548	—	—	14,130
1993	299,921	340,952	285,706	81,502	40,471	326,736	134,376	61,729	9,907	186,198	34,108	813	2,480	32,441	92,349	17,298	12,532	97,115	9,320	388	11,955	1,275	3,598	—	—	14,215
1994	305,300	351,667	290,773	85,392	39,024	337,141	138,286	65,937	9,022	195,200	34,528	774	2,116	33,186	94,453	17,626	13,024	99,055	8,645	427	10,960	628	3,901	—	—	14,527
1995	301,270	352,300	287,658	91,450	40,421	338,687	130,344	69,679	7,809	192,214	33,845	891	2,189	32,547	100,475	19,301	15,128	104,648	7,699	247	11,560	1,332	3,735	—	—	13,613
1996	298,121	351,485	285,423	91,835	38,471	338,787	133,163	72,222	7,334	198,051	33,293	843	2,134	32,002	97,231	16,976	14,771	99,436	7,504	379	10,791	1,416	3,441	—	—	12,698
1997	300,059	354,828	288,276	92,511	37,742	343,045	138,367	71,942	6,766	203,543	31,281	994	2,597	29,679	97,859	17,952	14,890	100,920	7,279	381	9,412	1,243	4,078	—	—	11,783
1998	299,496	363,234	285,914	94,472	30,734	349,652	137,795	73,462	4,687	206,569	30,825	1,206	1,301	30,729	98,434	17,864	13,165	103,134	7,279	666	7,457	1,275	4,124	—	—	13,583
1999	307,874	376,910	294,189	100,552	31,516	363,225	145,200	76,114	5,607	215,708	30,923	1,762	1,036	31,649	98,704	20,215	12,790	106,129	7,279	1,152	7,542	1,309	4,541	—	—	13,685

^aU.S. Department of Agriculture, Forest Service (16, 69); Data may not add to totals because of rounding; Data have been revised.

^bIncludes pulpwood and the pulpwood equivalent of wood pulp and paper and board.

^cIncludes cooperage logs, poles and piling, fence posts, excelsior bolts, chemical wood, shingle bolts, and miscellaneous items.

Table 7a—Production, imports, exports, and consumption of hardwood timber products, by major product, 1965–1999 (million cubic feet, roundwood equivalent)^a

Year	Industrial roundwood use																								Fuel-wood production and consumption
	All products		Total				Lumber				Plywood and veneer				Pulpwood-based products				Other industrial products, and consumption ^c	Logs		Pulpwood chip			
	Production	Consumption	Production	Imports	Exports	Consumption	Production	Imports	Exports	Consumption	Production	Imports	Exports	Consumption	Production	Imports ^b	Exports ^b	Consumption		Imports	Exports	Imports	Exports		
1965	3,647	3,865	2,912	306	89	3,130	1,650	52	17	1,685	125	55	0	180	864	191	58	997	260	9	13	—	—	735	
1966	3,719	3,961	3,044	353	112	3,286	1,709	70	35	1,743	128	65	0	193	941	210	65	1,086	255	8	12	—	—	675	
1967	3,520	3,717	2,900	315	119	3,097	1,628	52	35	1,646	119	65	1	184	907	191	68	1,030	230	7	16	—	—	620	
1968	3,388	3,625	2,828	345	108	3,065	1,529	52	17	1,564	127	98	1	224	937	187	74	1,050	220	7	15	—	—	560	
1969	3,409	3,692	2,914	402	119	3,197	1,529	70	17	1,581	118	110	1	227	1,049	216	87	1,178	205	6	13	—	—	495	
1970	3,180	3,401	2,750	352	131	2,971	1,459	52	17	1,494	115	107	3	219	970	187	100	1,057	195	6	11	—	—	430	
1971	3,212	3,478	2,812	401	135	3,078	1,480	70	35	1,515	125	132	1	257	1,012	195	90	1,117	185	5	9	—	—	400	
1972	3,272	3,568	2,887	440	144	3,183	1,489	70	35	1,524	133	164	2	296	1,074	201	92	1,183	175	4	15	—	—	385	
1973	3,431	3,730	3,026	450	151	3,325	1,543	87	35	1,595	122	132	3	251	1,173	227	95	1,305	170	4	18	—	—	405	
1974	3,463	3,698	3,038	417	181	3,273	1,484	70	35	1,519	97	86	4	178	1,277	257	123	1,411	160	5	19	—	—	425	
1975	2,923	3,101	2,473	318	140	2,651	1,282	52	35	1,300	79	100	5	174	952	163	90	1,025	150	3	11	—	—	450	
1976	3,192	3,413	2,722	369	149	2,943	1,402	52	35	1,419	84	123	5	202	1,086	192	94	1,184	135	2	15	—	—	470	
1977	3,631	3,852	2,821	364	143	3,042	1,495	52	35	1,513	91	117	4	205	1,075	192	90	1,177	145	2	14	—	—	810	
1978	4,270	4,516	3,030	432	186	3,276	1,578	70	70	1,578	92	130	2	220	1,188	230	97	1,321	155	3	18	—	—	1,240	
1979	4,920	5,135	3,125	414	198	3,340	1,640	70	70	1,640	89	108	2	195	1,216	234	106	1,343	160	2	21	—	—	1,795	
1980	5,623	5,698	3,093	334	259	3,168	1,611	52	87	1,576	78	62	3	138	1,209	218	145	1,282	170	2	24	—	—	2,530	
1981	5,447	5,547	2,857	351	251	2,957	1,319	52	87	1,284	75	77	3	149	1,258	219	135	1,342	180	2	25	—	—	2,590	
1982	5,675	5,816	2,940	354	212	3,081	1,407	31	64	1,374	95	97	3	189	1,236	222	130	1,328	187	3	15	—	—	2,735	
1983	6,004	6,201	3,364	457	260	3,561	1,543	35	86	1,492	104	140	3	241	1,503	278	153	1,628	196	4	18	—	—	2,640	
1984	6,638	6,880	3,653	498	256	3,895	1,775	44	92	1,728	103	125	2	226	1,549	325	142	1,732	205	5	20	—	—	2,985	
1985	6,516	6,835	3,671	562	244	3,990	1,691	52	71	1,673	93	149	3	239	1,660	357	153	1,864	209	5	18	—	—	2,845	
1986	6,631	6,906	4,053	585	310	4,328	1,846	49	91	1,804	96	152	4	244	1,869	381	193	2,057	219	4	22	—	—	2,578	
1987	6,712	6,995	4,149	630	347	4,432	1,982	70	130	1,922	102	179	4	277	1,824	380	190	2,013	218	2	24	—	—	2,563	
1988	6,888	7,036	4,330	600	452	4,478	2,064	58	208	1,914	101	150	6	245	1,892	390	205	2,077	240	2	33	—	—	2,558	
1989	7,091	7,108	4,553	547	530	4,570	2,118	64	150	2,032	97	85	7	174	1,926	395	221	2,099	261	3	34	1	117	2,538	
1990	7,130	7,103	4,609	511	538	4,582	2,163	45	151	2,057	95	71	9	157	1,937	394	229	2,102	264	2	35	0	114	2,521	
1991	7,023	6,829	4,493	465	659	4,299	1,961	42	164	1,839	89	60	11	138	1,964	361	264	2,062	259	1	45	0	174	2,530	
1992	7,262	7,035	4,717	515	742	4,490	2,003	50	172	1,880	85	71	15	142	2,080	393	293	2,181	287	1	36	0	226	2,545	
1993	7,503	7,377	4,921	587	714	4,795	2,142	60	182	2,019	89	71	13	148	2,162	454	281	2,335	292	1	38	1	199	2,582	
1994	7,659	7,515	5,038	616	760	4,894	2,168	67	193	2,042	101	67	11	156	2,240	480	298	2,422	271	3	42	1	216	2,621	
1995	7,728	7,578	5,272	688	838	5,122	2,212	62	184	2,089	107	76	12	172	2,423	545	354	2,614	241	4	43	2	245	2,456	
1996	7,469	7,245	5,178	656	880	4,954	2,183	66	190	2,059	105	67	11	161	2,319	515	343	2,490	235	5	41	3	295	2,291	
1997	6,735	6,530	4,609	597	803	4,404	2,217	79	213	2,082	109	79	12	176	1,727	429	249	1,908	228	7	51	3	278	2,126	
1998	6,845	6,761	4,802	643	727	4,718	2,432	96	185	2,343	112	88	9	191	1,711	451	214	1,947	228	6	53	2	266	2,043	
1999	6,702	6,669	4,643	680	712	4,611	2,501	122	206	2,417	116	98	10	204	1,477	453	175	1,755	228	6	60	0	261	2,059	

^aU.S. Department of Agriculture, Forest Service (16, 69); Data may not add to totals because of rounding; Data have been revised.

^bIncludes pulpwood and the pulpwood equivalent of wood pulp and paper and board.

^cIncludes cooperage logs, poles and piling, fence posts, hewn ties, round mine timbers, box bolts, excelsior bolts, chemical wood, shingle bolts, and miscellaneous items.

Table 7b—Production, imports, exports, and consumption of hardwood timber products, by major product, 1965–1999 (thousand cubic meters, roundwood equivalent)^a

Year	Industrial roundwood use																								Fuel-wood production and consumption ^d
	All products		Total				Lumber				Plywood and veneer				Pulpwood-based products				Other industrial products, production		Logs		Pulpwood chip ^e		
	Production	Consumption	Production	Imports	Exports	Consumption	Production	Imports	Exports	Consumption	Production	Imports	Exports	Consumption	Production	Imports ^b	Exports ^b	Consumption	Production	Imports	Exports	Imports	Exports	Imports	
1965	103,275	109,444	82,462	8,679	2,510	88,631	46,720	1,480	493	47,707	3,553	1,544	10	5,087	24,458	5,407	1,638	28,227	7,362	247	369	—	—	20,813	
1966	105,319	112,152	86,205	10,004	3,171	93,039	48,383	1,973	987	49,369	3,618	1,849	14	5,454	26,642	5,941	1,828	30,754	7,221	241	342	—	—	19,114	
1967	99,686	105,246	82,130	8,931	3,372	87,689	46,113	1,480	987	46,606	3,378	1,835	15	5,198	25,687	5,421	1,930	29,178	6,513	195	439	—	—	17,557	
1968	95,943	102,663	80,086	9,769	3,049	86,805	43,292	1,480	493	44,279	3,589	2,782	23	6,349	26,545	5,299	2,104	29,741	6,230	208	430	—	—	15,858	
1969	96,528	104,545	82,511	11,373	3,356	90,528	43,286	1,973	493	44,766	3,340	3,108	32	6,416	29,716	6,110	2,467	33,359	5,805	182	363	—	—	14,017	
1970	90,057	96,298	77,881	9,955	3,714	84,121	41,313	1,480	493	42,300	3,260	3,019	90	6,189	27,474	5,284	2,819	29,939	5,522	172	312	—	—	12,176	
1971	90,959	98,491	79,632	11,367	3,835	87,164	41,909	1,973	987	42,895	3,547	3,749	26	7,270	28,671	5,517	2,555	31,632	5,239	128	267	—	—	11,327	
1972	92,650	101,024	81,748	12,450	4,076	90,122	42,172	1,973	987	43,159	3,775	4,655	48	8,382	30,420	5,695	2,616	33,499	4,955	127	425	—	—	10,902	
1973	97,153	105,624	85,684	12,745	4,274	94,156	43,696	2,467	987	45,176	3,445	3,727	76	7,097	33,213	6,438	2,695	36,956	4,814	113	516	—	—	11,468	
1974	98,049	104,725	86,014	11,809	5,132	92,691	42,035	1,973	987	43,021	2,743	2,425	123	5,045	36,168	7,271	3,485	39,953	4,531	140	538	—	—	12,035	
1975	82,781	87,820	70,038	9,003	3,963	75,078	36,307	1,480	987	36,800	2,236	2,829	134	4,931	26,948	4,617	2,543	29,022	4,248	77	300	—	—	12,743	
1976	90,384	96,633	77,075	10,458	4,210	83,324	39,694	1,480	987	40,187	2,388	3,475	147	5,715	30,743	5,439	2,648	33,534	3,823	64	427	—	—	13,309	
1977	102,816	109,071	79,880	10,316	4,062	86,134	42,341	1,480	987	42,835	2,586	3,325	116	5,795	30,441	5,443	2,553	33,331	4,106	68	406	—	—	22,937	
1978	120,908	127,886	85,795	12,244	5,266	92,773	44,672	1,973	1,973	44,672	2,602	3,678	58	6,222	33,630	6,512	2,733	37,409	4,389	81	502	—	—	35,113	
1979	139,320	145,417	88,491	11,714	5,617	94,588	46,431	1,973	1,973	46,431	2,526	3,054	60	5,520	34,420	6,621	3,000	38,041	4,531	66	583	—	—	50,829	
1980	159,221	161,361	87,579	9,469	7,329	89,719	45,622	1,480	2,467	44,635	2,209	1,768	74	3,903	34,247	6,160	4,101	36,306	4,814	61	688	—	—	71,642	
1981	154,229	157,068	80,888	9,935	7,096	83,727	37,336	1,480	2,467	36,349	2,125	2,187	98	4,214	35,618	6,207	3,820	38,005	5,097	61	712	—	—	73,341	
1982	160,694	164,703	83,248	10,013	6,004	87,256	39,845	878	1,820	38,903	2,682	2,757	79	5,360	35,001	6,294	3,683	37,613	5,297	83	422	—	—	77,447	
1983	170,014	175,581	95,257	12,933	7,366	100,825	43,696	987	2,442	42,241	2,941	3,975	83	6,833	42,570	7,869	4,335	46,104	5,544	102	505	—	—	74,757	
1984	187,957	194,827	103,430	14,111	7,241	110,301	50,273	1,248	2,595	48,926	2,927	3,530	67	6,390	43,865	9,197	4,010	49,051	5,798	136	569	—	—	84,526	
1985	184,525	193,543	103,963	15,922	6,903	112,981	47,892	1,480	2,003	47,369	2,631	4,210	73	6,768	47,011	10,103	4,324	52,791	5,925	129	504	—	—	80,562	
1986	187,767	195,549	114,765	16,567	8,785	122,548	52,281	1,376	2,580	51,077	2,729	4,296	107	6,918	52,936	10,775	5,465	58,246	6,187	120	633	—	—	73,001	
1987	190,075	198,080	117,499	17,841	9,836	125,504	56,124	1,973	3,670	54,427	2,889	5,055	109	7,835	51,642	10,750	5,381	57,012	6,167	63	676	—	—	72,576	
1988	195,042	199,248	122,607	17,002	12,795	126,813	58,448	1,648	5,895	54,201	2,863	4,257	173	6,948	53,585	11,041	5,805	58,822	6,788	55	923	—	—	72,435	
1989	200,799	201,275	128,930	15,492	15,016	129,406	59,976	1,815	4,257	57,535	2,738	2,400	199	4,939	54,539	11,171	6,268	59,442	7,386	83	966	22	3,325	71,869	
1990	201,887	201,130	130,500	14,466	15,223	129,743	61,249	1,268	4,267	58,250	2,692	2,000	242	4,451	54,847	11,148	6,481	59,514	7,480	46	994	3	3,238	71,387	
1991	198,866	193,372	127,224	13,154	18,648	121,730	55,528	1,189	4,647	52,070	2,519	1,699	320	3,898	55,626	10,232	7,463	58,395	7,333	27	1,283	6	4,934	71,642	
1992	205,639	199,208	133,573	14,580	21,012	127,141	56,714	1,406	4,884	53,236	2,416	2,010	419	4,008	58,908	11,133	8,293	61,748	8,118	30	1,015	1	6,401	72,067	
1993	212,474	208,899	139,359	16,629	20,205	135,784	60,648	1,697	5,165	57,180	2,520	2,014	357	4,177	61,211	12,863	7,967	66,107	8,265	37	1,074	18	5,642	73,114	
1994	216,877	212,799	142,658	17,455	21,533	138,580	61,399	1,885	5,471	57,812	2,850	1,883	320	4,413	63,434	13,590	8,433	68,591	7,666	73	1,195	25	6,114	74,219	
1995	218,822	214,578	149,279	19,475	23,718	145,035	62,629	1,748	5,216	59,161	3,038	2,145	326	4,856	68,624	15,421	10,016	74,029	6,828	117	1,213	43	6,946	69,543	
1996	211,499	205,158	146,628	18,577	24,918	140,287	61,828	1,859	5,376	58,311	2,982	1,909	324	4,568	65,668	14,571	9,723	70,515	6,654	142	1,147	96	8,348	64,871	
1997	190,722	184,910	130,523	16,917	22,729	124,711	62,765	2,226	6,040	58,951	3,075	2,239	334	4,981	48,916	12,161	7,043	54,033	6,455	197	1,449	94	7,862	60,198	
1998	193,839	191,448	135,978	18,198	20,589	133,587	68,862	2,707	5,230	66,339	3,174	2,495	252	5,417	48,447	12,764	6,066	55,145	6,455	174	1,502	58	7,538	57,861	
1999	189,767	188,855	131,470	19,249	20,161	130,558	70,832	3,453	5,831	68,454	3,276	2,775	280	5,772	41,814	12,831	4,956	49,689	6,455	181	1,690	8	7,403	58,297	

^aU.S. Department of Agriculture, Forest Service (16, 69); Data may not add to totals because of rounding; Data have been revised.

^bIncludes pulpwood and the pulpwood equivalent of wood pulp and paper and board.

^cIncludes cooperage logs, poles and piling, fence posts, hewn ties, round mine timbers, box bolts, excelsior bolts, chemical wood, shingle bolts, and miscellaneous items.

Table 8a—Production, imports, exports, and consumption of timber products in tons, by major product, 1965–1999 (million tons, ^a air-dry weight of wood)^b

Year	The weight of wood in products																					Fuel-wood production and consumption						
	All products		Total				Lumber ^c			Plywood and veneer ^d				Panel products ^e			Wood pulp ^f				Other industrial products, production and consumption ^m		Logs		Pulpwood chip			
	Pro-duction	Con-sump-tion	Pro-duction	Im-ports	Ex-ports	Con-sump-tion	Pro-duction	Im-ports	Ex-ports	Con-sump-tion ^g	Pro-duction	Im-ports	Ex-ports	Con-sump-tion ^g	Pro-duction ^h	Im-ports ⁱ	Ex-ports ⁱ	Con-sump-tion	Pro-duction	Im-ports ^k			Ex-ports ^l	Con-sump-tion	Im-ports	Ex-ports	Im-ports	Ex-ports
1965	152.5	162.0	139.5	16.5	7.0	149.0	53.3	5.3	0.9	57.6	8.1	0.7	0.0	8.8	4.5	0.7	0.0	5.2	36.6	9.7	2.9	43.3	33.9	0.2	3.0	—	0.1	13.0
1966	156.0	165.2	144.0	17.5	8.3	153.2	53.4	5.3	1.2	57.5	8.5	0.8	0.0	9.3	4.7	0.5	0.0	5.2	39.4	10.5	3.2	46.7	34.2	0.2	3.4	—	0.3	12.0
1967	151.5	157.6	140.5	16.7	10.6	146.6	51.7	5.2	1.3	55.6	8.3	0.8	0.1	9.1	4.7	0.5	0.0	5.2	39.0	10.0	3.6	45.4	31.2	0.2	4.9	—	0.7	11.0
1968	157.5	162.8	147.5	18.5	13.2	152.8	51.8	6.2	1.1	56.8	9.3	1.2	0.0	10.5	5.6	0.7	0.1	6.3	43.4	10.2	4.0	49.5	29.4	0.2	6.4	—	1.5	10.0
1969	156.1	162.1	147.1	19.9	14.0	153.1	50.7	6.4	1.1	56.0	8.7	1.4	0.1	10.0	6.4	0.8	0.1	7.1	45.6	11.1	4.5	52.2	27.6	0.2	5.9	—	2.2	9.0
1970	152.5	154.7	144.5	18.8	16.5	146.7	49.0	6.2	1.2	53.9	9.0	1.3	0.1	10.2	6.5	0.5	0.1	6.9	44.8	10.4	5.5	49.6	25.8	0.4	6.8	—	2.8	8.0
1971	156.4	163.0	149.4	20.8	14.2	156.0	52.1	7.7	1.2	58.6	10.3	1.7	0.1	11.9	7.8	0.8	0.1	8.4	46.1	10.4	4.8	51.7	25.2	0.2	5.7	—	2.3	7.0
1972	164.7	171.0	157.7	23.8	17.5	164.0	53.3	9.4	1.5	61.3	11.3	2.1	0.1	13.2	8.7	1.2	0.1	9.8	49.1	11.0	5.0	55.1	24.5	0.1	7.8	—	2.9	7.0
1973	169.6	174.2	162.6	24.4	19.8	167.2	54.6	9.6	2.1	62.2	11.1	1.7	0.2	12.6	9.1	1.2	0.2	10.1	50.9	11.9	5.0	57.8	24.5	0.1	8.3	—	4.0	7.0
1974	160.8	163.1	152.8	21.7	19.4	155.1	49.4	7.3	1.9	54.8	9.6	1.1	0.3	10.3	8.3	0.9	0.3	9.0	50.5	12.3	5.9	56.9	23.9	0.2	6.6	—	4.4	8.0
1975	149.4	148.6	141.4	16.9	17.6	140.6	46.0	6.1	1.7	50.3	9.4	1.3	0.5	10.2	8.1	0.3	0.2	8.2	44.2	9.0	5.0	48.3	23.3	0.2	6.6	—	3.7	8.0
1976	164.3	165.2	156.3	21.2	20.3	157.2	50.8	8.3	1.9	57.2	10.7	1.6	0.4	11.9	9.8	0.6	0.3	10.1	49.7	10.6	5.2	55.1	22.7	0.2	8.1	—	4.5	8.0
1977	177.5	182.1	163.5	24.3	19.8	168.1	54.2	10.6	1.7	63.2	11.3	1.5	0.2	12.6	11.0	0.8	0.2	11.6	51.2	11.1	5.2	57.1	23.3	0.4	7.6	—	4.8	14.0
1978	188.3	195.7	167.3	27.6	20.1	174.7	55.5	12.3	2.0	65.8	11.6	1.7	0.2	13.1	11.2	1.1	0.1	12.2	52.3	12.3	5.2	59.5	23.9	0.2	8.5	—	4.2	21.0
1979	201.6	205.2	170.6	27.1	23.5	174.2	55.5	11.6	2.4	64.7	11.4	1.4	0.2	12.6	10.9	1.0	0.2	11.8	53.3	12.8	5.8	60.3	24.5	0.3	9.7	—	5.2	31.0
1980	204.0	203.3	160.0	23.7	24.4	159.3	49.1	9.9	2.8	56.2	9.7	0.8	0.2	10.2	9.0	0.7	0.1	9.6	53.8	12.1	8.0	57.8	25.2	0.3	8.1	—	5.2	44.0
1981	197.6	199.9	152.6	23.3	21.0	154.9	43.9	9.5	2.7	50.7	9.9	1.0	0.4	10.5	8.9	0.7	0.3	9.4	53.8	11.9	7.3	58.3	25.8	0.3	6.3	—	4.1	45.0
1982	198.6	200.1	151.6	22.1	20.7	153.1	43.9	8.9	2.2	50.6	9.6	1.2	0.3	10.6	8.3	0.8	0.1	9.0	52.2	11.0	6.9	56.3	26.4	0.3	8.0	—	3.3	47.0
1983	213.9	219.2	168.9	27.4	22.1	174.2	52.4	11.5	2.6	61.3	11.7	1.8	0.3	13.2	11.3	1.2	0.1	12.4	54.9	12.5	7.4	60.0	27.0	0.4	8.7	—	2.9	45.0
1984	229.2	238.8	178.2	30.8	21.3	187.8	56.8	12.8	2.4	67.1	12.0	1.7	0.2	13.4	11.6	1.4	0.1	12.8	59.0	14.6	7.1	66.5	27.6	0.4	8.7	—	2.7	51.0
1985	224.0	234.9	175.0	32.8	21.9	185.9	56.0	14.2	2.2	68.0	12.1	2.0	0.2	13.9	11.5	1.4	0.3	12.6	55.1	14.9	7.1	62.9	28.2	0.2	9.5	—	2.7	49.0
1986	229.4	239.7	185.4	34.0	23.7	195.7	62.3	13.9	2.7	73.5	13.2	2.1	0.4	14.9	11.8	1.5	0.3	13.0	57.4	15.5	8.4	64.5	28.8	0.2	9.1	0.8	2.8	44.0
1987	239.0	248.4	196.0	36.0	26.6	205.4	67.4	14.5	3.6	78.3	13.7	2.6	0.5	15.8	12.0	1.5	0.4	13.1	59.8	16.7	9.0	67.5	30.0	0.2	10.2	0.6	2.9	43.0
1988	244.9	248.4	201.9	35.5	32.0	205.4	68.2	13.7	5.2	76.7	13.6	2.2	0.6	15.2	12.1	1.3	0.5	12.9	61.0	17.2	9.8	68.5	30.9	0.2	11.9	1.0	4.0	43.0
1989	248.7	250.7	205.7	35.4	33.4	207.7	68.2	15.1	4.7	78.6	13.0	1.3	0.9	13.4	12.7	1.0	0.6	13.1	61.6	17.0	10.5	68.1	33.6	0.1	11.7	0.8	5.0	43.0
1990	246.4	246.4	204.4	32.9	32.9	204.4	66.7	13.0	4.3	75.3	12.8	1.1	1.0	13.0	12.7	1.0	0.8	12.9	62.3	17.1	11.1	68.3	34.1	0.1	10.4	0.7	5.3	42.0
1991	239.9	235.6	196.9	30.2	34.5	192.6	61.3	11.6	4.6	68.3	11.6	1.0	0.9	11.7	12.7	0.8	0.9	12.7	62.5	16.1	12.8	65.8	33.4	0.0	9.3	0.7	6.1	43.0
1992	247.4	244.9	204.4	32.7	35.2	201.9	63.4	13.3	4.2	72.5	11.9	1.2	1.0	12.1	14.2	0.9	1.1	13.9	63.3	16.8	14.2	65.8	37.0	0.1	8.1	0.5	6.5	43.0
1993	247.1	251.2	204.1	36.8	32.7	208.2	63.1	15.3	4.0	74.4	12.1	1.2	0.9	12.3	14.6	1.0	1.2	14.4	63.5	18.4	13.3	68.5	37.6	0.2	7.1	0.8	6.0	43.0
1994	249.7	255.0	205.7	39.1	33.7	211.0	64.8	16.4	4.0	77.3	12.5	1.1	0.8	12.8	15.1	1.6	1.5	15.2	65.1	19.3	14.3	70.1	34.9	0.3	6.7	0.4	6.5	44.0
1995	244.9	250.4	200.9	41.5	36.0	206.4	63.2	17.3	3.6	76.9	12.5	1.3	0.9	13.0	15.0	1.6	1.7	14.9	65.1	20.3	15.9	69.5	31.1	0.2	7.0	0.8	7.0	44.0
1996	246.3	250.5	202.3	40.9	36.7	206.5	64.1	18.2	3.6	78.7	12.5	1.2	0.8	12.8	16.7	1.7	1.7	16.7	64.4	18.7	16.3	66.9	30.3	0.3	6.5	0.9	7.7	44.0
1997	248.7	254.9	204.7	43.5	37.3	210.9	66.1	18.3	3.7	80.7	12.1	1.4	1.0	12.4	17.0	1.9	1.5	17.3	66.4	20.9	17.4	69.9	29.4	0.3	5.9	0.8	7.8	44.0
1998	249.6	261.3	205.5	43.9	32.2	217.2	68.6	18.9	2.9	84.6	12.1	1.6	0.6	13.1	17.4	1.9	1.1	18.2	65.4	20.5	15.1	70.8	29.4	0.5	4.9	0.5	7.6	44.2
1999	253.1	269.3	208.6	48.9	32.7	224.8	71.7	19.9	3.3	88.3	12.4	1.9	0.5	13.8	17.9	2.5	1.1	19.2	64.5	23.6	14.9	73.1	29.4	0.7	5.1	0.3	7.8	44.5

^aConversion factors taken from GTR RM-199 (42), p. 262, table B-7.

^bU.S. Department of Agriculture, Forest Service (16,24); Data may not add to totals because of rounding; Data for wood pulp have been revised; Air-dry weight contains 15% moisture content.

^cIncludes hardwood & softwood pallets. Pallets equate 20% of lumber.

^dIncludes hardwood & softwood plywood and laminated veneer lumber. LVL begins in 1980.

^eIncludes hardboard, particleboard, insulating board, OSB and MDF.

^fExcludes wood pulp used in hardboard and insulating board. Includes wood pulp and other. Wood pulp/1000 added to other/100 (Table 42).

^gExcludes veneer produced and consumed in industries other than the plywood industry.

^hDoesn't include OSB until 1980.

ⁱDoesn't include OSB.

^jDoesn't include OSB, MDF, and Paperboard until 1967.

^kIncludes both wood pulp and the wood pulp equivalent of paper and board except hardboard and insulating board.

^lIncludes pulpwood (except chips), wood pulp, and the wood pulp equivalent of paper and board except hardboard and insulating board.

^mIncludes cooperage logs, poles and piling, fence posts, hewn ties, round mine timbers, box bolts, excelsior bolts, chemical wood, shingle bolts, and miscellaneous items.

Table 8b—Production, imports, exports, and consumption of timber products in tons, by major product, 1965–1999 (thousand metric tons,^a air-dry weight of wood)^b

Year	The weight of wood in products																							Fuel-wood production and consumption				
	All products		Total		Lumber ^c			Plywood and veneer ^d			Panel products ^e			Wood pulp ^f			Other industrial products, production and consumption ^m	Logs		Pulpwood chip								
	Pro-duction	Con-sump-tion	Pro-duction	Im-ports	Ex-ports	Con-sump-tion	Pro-duction	Im-ports	Ex-ports	Con-sump-tion	Pro-duction	Im-ports	Ex-ports	Con-sump-tion ^g	Pro-duction	Im-ports ^h		Ex-ports ⁱ	Con-sump-tion	Pro-duction	Im-ports ^k	Ex-ports ^l	Con-sump-tion		Im-ports	Ex-ports	Im-ports	Ex-ports
1965	138,329	146,933	126,538	14,952	6,348	135,142	48,316	4,786	859	52,243	7,362	626	18	7,971	4,096	613	33	4,676	33,203	8,773	2,660	39,316	30,783	153	2,687	—	91	11,791
1966	141,447	149,793	130,563	15,861	7,515	138,909	48,447	4,850	1,100	52,197	7,679	749	28	8,399	4,249	492	45	4,695	35,730	9,556	2,941	42,345	31,058	215	3,128	—	272	10,884
1967	137,388	142,973	127,411	15,157	9,572	132,996	46,890	4,698	1,188	50,399	7,535	743	47	8,231	4,272	488	43	4,717	35,335	9,056	3,225	41,166	28,309	173	4,435	—	635	9,977
1968	142,829	147,682	133,759	16,784	11,931	138,612	47,017	5,581	1,036	51,562	8,448	1,129	40	9,537	5,122	668	54	5,736	39,376	9,228	3,665	44,939	26,660	178	5,775	—	1,361	9,070
1969	141,613	147,025	133,450	18,073	12,661	138,862	46,003	5,822	1,036	50,789	7,870	1,263	108	9,026	5,796	745	70	6,471	41,385	10,059	4,063	47,381	25,011	184	5,389	—	1,995	8,163
1970	138,343	140,348	131,087	17,015	15,010	133,092	44,416	5,581	1,124	48,873	8,146	1,221	91	9,276	5,850	494	95	6,249	40,626	9,395	5,014	45,007	23,362	325	6,164	—	2,523	7,256
1971	141,897	147,866	135,548	18,834	12,866	141,517	47,289	6,970	1,100	53,159	9,354	1,516	58	10,813	7,052	683	107	7,628	41,829	9,475	4,390	46,915	22,812	189	5,147	—	2,064	6,349
1972	149,355	155,074	143,006	21,614	15,895	148,725	48,368	8,560	1,365	55,564	10,251	1,884	125	12,010	7,862	1,130	135	8,857	44,565	9,952	4,574	49,943	22,263	88	7,064	—	2,634	6,349
1973	153,842	158,021	147,493	22,175	17,996	151,672	49,561	8,713	1,895	56,379	10,109	1,510	226	11,393	8,231	1,122	175	9,177	46,129	10,755	4,499	52,385	22,263	75	7,570	—	3,631	6,349
1974	145,813	147,928	138,557	19,667	17,552	140,672	44,817	6,617	1,718	49,716	8,669	982	308	9,343	7,572	784	236	8,120	45,811	11,112	5,315	51,608	21,713	172	5,942	—	4,033	7,256
1975	135,478	134,802	128,222	15,316	15,991	127,546	41,709	5,493	1,542	45,660	8,546	1,146	431	9,262	7,382	286	205	7,463	40,110	8,198	4,503	43,805	21,163	192	5,997	—	3,315	7,256
1976	149,004	149,817	141,748	19,267	18,454	142,561	46,064	7,524	1,718	51,870	9,744	1,410	400	10,753	8,848	529	234	9,144	45,053	9,619	4,676	49,996	20,614	183	7,308	—	4,117	7,256
1977	161,019	165,183	148,321	22,085	17,920	152,485	49,186	9,645	1,542	57,289	10,268	1,352	183	11,436	10,007	714	217	10,504	46,422	10,026	4,704	51,744	21,163	347	6,903	—	4,371	12,698
1978	170,750	177,539	151,703	25,063	18,275	158,492	50,368	11,122	1,846	59,644	10,557	1,516	165	11,907	10,190	1,019	123	11,086	47,435	11,188	4,700	53,923	21,713	218	7,667	—	3,774	19,047
1979	182,816	186,139	154,699	24,593	21,271	158,022	50,340	10,504	2,200	58,644	10,382	1,247	216	11,413	9,926	952	139	10,739	48,331	11,592	5,260	54,663	22,263	299	8,763	—	4,693	28,117
1980	185,029	184,381	145,121	21,526	22,173	144,473	44,567	8,938	2,529	50,976	8,754	732	208	9,279	8,181	627	133	8,674	48,801	10,942	7,299	52,445	22,812	287	7,333	—	4,672	39,908
1981	179,227	181,311	138,412	21,152	19,069	140,496	39,835	8,585	2,440	45,980	8,950	898	367	9,481	8,078	680	235	8,523	48,788	10,763	6,628	52,923	23,362	227	5,699	—	3,699	40,815
1982	180,172	181,489	137,543	20,087	18,770	138,860	39,838	8,045	2,000	45,884	8,747	1,118	248	9,617	7,523	704	76	8,150	47,325	9,956	6,248	51,033	23,912	263	7,214	—	2,984	42,629
1983	194,045	198,839	153,230	24,815	20,021	158,024	47,543	10,464	2,381	55,627	10,622	1,635	308	11,949	10,279	1,053	95	11,236	49,826	11,292	6,739	54,379	24,462	371	7,875	—	2,623	40,815
1984	207,907	216,598	161,650	27,968	19,277	170,341	51,497	11,605	2,212	60,890	10,857	1,501	205	12,153	10,479	1,255	103	11,632	53,520	13,277	6,472	60,325	25,011	330	7,859	—	2,426	46,257
1985	203,192	213,084	158,749	29,753	19,860	168,641	50,752	12,913	1,955	61,710	10,931	1,849	184	12,596	10,458	1,244	234	11,468	49,986	13,524	6,426	57,083	25,561	223	8,642	—	2,418	44,443
1986	208,045	217,430	168,137	30,839	21,453	177,522	56,550	12,616	2,474	66,693	11,947	1,921	340	13,528	10,682	1,334	240	11,776	52,093	14,062	7,646	58,509	26,111	177	8,221	729	2,533	39,908
1987	216,786	225,331	177,785	32,680	24,134	186,330	61,128	13,154	3,307	70,975	12,438	2,330	428	14,340	10,848	1,335	339	11,843	54,264	15,151	8,163	61,252	27,210	186	9,241	524	2,657	39,001
1988	222,085	225,327	183,084	32,225	28,983	186,326	61,890	12,411	4,696	69,605	12,358	1,991	557	13,792	10,989	1,163	426	11,726	55,368	15,620	8,859	62,129	28,035	153	10,790	887	3,655	39,001
1989	225,606	227,417	186,605	32,101	30,290	188,416	61,846	13,732	4,300	71,278	11,778	1,177	783	12,172	11,516	940	574	11,882	55,828	15,447	9,504	61,771	30,508	88	10,583	716	4,546	39,001
1990	223,468	223,441	185,374	29,840	29,866	185,347	60,471	11,766	3,916	68,321	11,648	1,001	887	11,763	11,539	880	712	11,707	56,510	15,498	10,039	61,969	30,893	52	9,474	643	4,838	38,094
1991	217,603	213,650	178,602	27,347	31,300	174,649	55,575	10,540	4,134	61,981	10,505	866	790	10,581	11,543	717	771	11,489	56,670	14,587	11,585	59,672	30,288	31	8,458	607	5,562	39,001
1992	224,417	222,167	185,416	29,677	31,927	183,166	57,488	12,087	3,817	65,758	10,823	1,053	901	10,976	12,871	774	1,021	12,624	57,433	15,201	12,919	59,715	33,532	98	7,373	464	5,896	39,001
1993	224,115	227,850	185,114	33,378	29,643	188,849	57,270	13,851	3,667	67,454	10,970	1,060	855	11,175	13,237	882	1,083	13,035	57,558	16,692	12,094	62,156	34,136	211	6,468	682	5,475	39,001
1994	226,437	231,297	186,529	35,455	30,595	191,389	58,803	14,915	3,594	70,123	11,353	1,004	743	11,615	13,694	1,436	1,351	13,780	59,047	17,506	12,937	63,616	31,663	248	6,035	346	5,935	39,908
1995	222,094	227,094	182,186	37,665	32,665	187,186	57,290	15,736	3,265	69,761	11,373	1,157	774	11,755	13,571	1,487	1,550	13,509	59,082	18,376	14,405	63,053	28,199	181	6,342	727	6,330	39,908
1996	223,375	227,220	183,467	37,094	33,249	187,312	58,100	16,494	3,241	71,353	11,349	1,052	765	11,636	15,182	1,513	1,557	15,137	58,439	16,974	14,773	60,641	27,485	259	5,927	802	6,986	39,908
1997	225,549	231,198	185,641	39,489	33,841	191,290	59,923	16,589	3,320	73,192	10,955	1,247	915	11,286	15,427	1,679	1,394	15,712	60,209	18,977	15,744	63,442	26,660	287	5,393	710	7,075	39,908
1998	226,398	237,015	186,352	39,787	29,170	196,969	62,192	17,147	2,613	76,726	10,993	1,429	500	11,923	15,788	1,721	978	16,531	59,360	18,613	13,721	64,253	26,660	417	4,448	460	6,911	40,046
1999	229,584	244,266	189,236	44,340	29,658	203,918	65,041	18,028	3,008	80,060	11,222	1,733	435	12,520	16,195	2,255	1,025	17,426	58,457	21,375	13,528	66,304	26,660	662	4,583	286	7,078	40,348

^aConversion factors taken from GTR RM-199 (42), p. 262, table B-7.

^bU.S. Department of Agriculture, Forest Service (16,24); Data may not add to totals because of rounding; Data for wood pulp have been revised; Air-dry weight contains 15% moisture content.

^cIncludes hardwood & softwood pallets. Pallets equate 20% of lumber.

^dIncludes hardwood & softwood plywood and laminated veneer lumber. LVL begins in 1980.

^eIncludes hardboard, particleboard, insulating board, OSB and MDF.

^fExcludes wood pulp used in hardboard and insulating board. Includes wood pulp and other. Wood pulp/1000 added to other/100 (Table 42).

^gExcludes veneer produced and consumed in industries other than the plywood industry.

^hDoesn't include OSB until 1980.

ⁱDoesn't include OSB.

^jDoesn't include OSB, MDF, and Paperboard until 1967.

^kIncludes both wood pulp and the wood pulp equivalent of paper and board except hardboard and insulating board.

^lIncludes pulpwood (except chips), wood pulp, and the wood pulp equivalent of paper and board except hardboard and insulating board.

^mIncludes cooperage logs, poles and piling, fence posts, hewn ties, round mine timbers, box bolts, excelsior bolts, chemical wood, shingle bolts, and miscellaneous items.

Table 9—U.S. annual industrial wood product production by product weight, 1965–1999^a (thousands of short tons)

Year	Total	Softwood		Laminated		Hardwood		Lumber			Medium-density	Pulp	Other	Insulating
		plywood ^b	Oriented strandboard ^b	veneer lumber ^b	plywood and veneer ^c	Softwood lumber ^d	Hardwood lumber ^d	made at pallet plants ^e	Particleboard production ^f	Hardboard production ^g	fiberboard production ^f	paper and board ^h	industrial products ⁱ	board ^j
1965	108,850	6,807	—	—	1,345	28,599	15,929	153	1,059	913	105	43,465	9,240	1,234
1966	113,172	7,140	—	—	1,362	28,162	16,488	182	1,333	964	117	46,971	9,323	1,131
1967	110,976	7,086	—	—	1,257	27,503	15,712	183	1,510	949	130	46,969	8,498	1,178
1968	115,986	8,036	—	—	1,318	28,589	14,740	202	1,956	1,160	145	50,561	8,003	1,276
1969	117,566	7,489	—	—	1,227	27,669	14,727	233	2,365	1,327	161	53,530	7,508	1,330
1970	115,751	7,842	—	—	1,179	26,876	14,057	222	2,434	1,370	179	53,408	7,013	1,173
1971	121,339	9,097	—	—	1,263	29,326	14,254	242	3,317	1,633	198	53,753	6,848	1,410
1972	128,690	10,021	—	—	1,332	30,239	14,334	272	4,330	1,812	220	58,009	6,683	1,439
1973	132,863	10,011	—	—	1,186	30,836	14,837	325	4,866	1,891	245	60,548	6,683	1,437
1974	125,754	8,683	—	—	919	27,046	14,257	360	4,324	1,767	272	60,403	6,518	1,205
1975	113,612	8,777	—	—	690	26,112	12,325	278	3,520	1,775	302	52,393	6,353	1,087
1976	128,193	10,084	—	—	711	29,873	13,462	343	4,485	2,120	394	59,283	6,188	1,251
1977	134,878	10,596	—	—	779	31,923	14,343	413	5,019	2,411	620	61,149	6,353	1,271
1978	139,249	10,918	—	—	778	32,704	15,120	473	5,231	2,445	714	63,085	6,518	1,262
1979	141,870	10,748	—	—	755	32,509	15,706	518	4,748	2,402	713	65,873	6,683	1,215
1980	134,030	8,932	84	53	681	27,530	15,452	452	4,148	1,919	693	66,217	6,848	1,021
1981	129,293	9,161	169	70	641	24,797	12,622	442	4,035	1,908	726	66,931	7,013	780
1982	124,165	8,666	348	70	909	23,222	13,494	400	3,365	1,746	627	63,483	7,178	657
1983	141,708	10,653	838	88	971	29,020	14,794	450	4,231	2,282	849	69,352	7,343	836
1984	149,916	10,897	1,276	88	988	30,434	17,027	500	4,494	2,137	892	72,742	7,508	934
1985	148,675	11,030	1,668	123	881	30,577	16,196	550	4,684	1,969	963	71,459	7,673	904
1986	160,650	12,096	2,196	140	912	34,435	17,680	600	5,067	1,819	1,098	75,964	7,838	806
1987	170,251	12,523	2,548	158	1,000	37,415	19,006	600	5,212	1,705	1,264	79,830	8,168	823
1988	174,510	12,359	2,878	193	1,019	37,224	19,813	600	5,385	1,599	1,320	82,847	8,415	859
1989	175,444	11,695	3,191	210	1,011	36,653	20,345	610	5,425	1,624	1,364	83,257	9,158	901
1990	176,164	11,440	3,386	280	1,009	34,941	20,792	610	5,352	1,570	1,336	85,307	9,273	868
1991	171,482	10,200	3,508	280	982	32,373	18,847	620	5,304	1,530	1,347	86,546	9,092	853
1992	180,125	10,572	4,158	298	934	33,706	19,276	620	5,597	1,648	1,499	90,885	10,065	868
1993	182,205	10,563	4,376	368	992	32,165	20,620	620	5,964	1,640	1,633	92,154	10,247	866
1994	188,569	10,740	4,679	403	1,182	33,297	20,900	640	6,387	1,627	1,759	96,595	9,504	857
1995	187,601	10,591	4,939	490	1,209	31,467	21,337	660	5,906	1,541	1,557	98,582	8,465	857
1996	189,362	10,490	5,821	560	1,171	32,476	21,074	657	6,270	1,650	1,752	98,334	8,250	857
1997	195,566	9,824	6,584	665	1,229	33,844	21,386	628	6,372	1,407	1,948	102,822	8,003	857
1998	196,569	9,721	7,017	718	1,288	33,853	23,470	608	6,459	1,344	1,970	101,262	8,003	857
1999	203,229	9,743	7,258	838	1,323	35,803	24,145	590	6,511	1,371	1,987	104,801	8,003	857

^aSources for recent production data (some earlier data are Forest Service estimates or from Dept. of Commerce):

^bTaken from APA—The Engineered Wood Association (formerly American Plywood Assoc.); see APA Economics Report E-65 (1999).

^cDept. of Commerce (to 1988); 1989–1990 data from Hardwood Plywood & Veneer Association;

later estimates based on trends in value of shipments (Dept. of Commerce); hardwood veneer based on Census of Manufactures data and trend in value of shipments.

^d1965–1976 based on Commerce Department data and Forest Service estimates. Lumber production 1976–1998 from American Forest & Paper Association (AF&PA) Statistical Roundup report (1996 hardwood estimated by Forest Service; 1997–1998 hardwood estimate from Miller Freeman).

[Note that Commerce Dept. reported hardwood lumber production is understood to underestimate actual production as reflected in Forest Service estimates since 1900.]

^eForest Service estimate of lumber cut from roundwood at pallet plants.

Other lumber (e.g., purchased lumber) used by pallet makers is accounted for under hardwood and softwood lumber production.

^fComposite Panel Association (based on production data 1959–1977, and 1995–1997; otherwise based on shipments; 1998 data are estimated).

^gShipments data from American Hardboard Association (1965–1997) and as reported by Miller Freeman (1998); 1998 figure is estimated.

^hAF&PA, formerly API (Statistics of Paper, Paperboard & Woodpulp). Paper and paperboard production includes "Total Paper", "Total Paperboard", and "Building Paper" production. Total production of pulp, paper and paperboard includes market pulp produced for export.

ⁱData through 1988 was obtained from U.S. Timber Production, Trade, Consumption, and Price Statistics reports (USDA Forest Service).

Miscellaneous wood product production for 1996 based on timber product output tables in (draft) 1997 RPA Inventory Data Tables; intervening and subsequent data are extrapolated.

^jDerived using earlier data from Commerce Department MA26A reports (in square feet of product output) to convert tonnage reported in AF&PA and earlier API reports.

Table 10—Industrial wood productivity, 1965–1999^a

Year	Industrial wood productivity (industrial wood product output per unit of roundwood input)		Roundwood equivalents of production						Recovered paper utilization rate (percent)	U.S. population Millions	Per capita industrial wood product production lb/capita
	lb/ft ³	Tons/ton	Total industrial wood product production (from Table 8) Thousand tons	Hardwoods ^b Million ft ³	Softwoods ^c Million ft ³	Totals					
						Million ft ³	Thousand	Thousand			
							short tons ^d	metric tons			
1965	19.38	0.6966	108,850	2,912	8,319	11,231	156,255	141,751	23.5%	194.3	1,120
1966	19.65	0.7053	113,172	3,044	8,476	11,520	160,458	145,564	22.6%	196.6	1,151
1967	19.59	0.7044	110,976	2,900	8,432	11,333	157,552	142,928	21.2%	198.7	1,117
1968	19.69	0.7105	115,986	2,828	8,956	11,784	163,238	148,087	20.4%	200.7	1,156
1969	19.90	0.7171	117,566	2,914	8,904	11,818	163,948	148,730	22.1%	202.7	1,160
1970	19.53	0.7063	115,751	2,750	9,101	11,851	163,875	148,664	22.8%	205.1	1,129
1971	20.03	0.7244	121,339	2,812	9,302	12,114	167,512	151,964	22.8%	207.7	1,168
1972	20.66	0.7472	128,690	2,887	9,569	12,456	172,226	156,240	22.5%	209.9	1,226
1973	20.92	0.7552	132,863	3,026	9,679	12,705	175,923	159,594	23.5%	211.9	1,254
1974	20.91	0.7525	125,754	3,038	8,993	12,031	167,125	151,613	23.7%	213.9	1,176
1975	20.84	0.7544	113,612	2,473	8,431	10,904	150,609	136,630	23.0%	216.0	1,052
1976	21.18	0.7672	128,193	2,722	9,381	12,103	167,084	151,575	23.4%	218.0	1,176
1977	21.53	0.7797	134,878	2,821	9,709	12,530	172,991	156,934	23.4%	220.2	1,225
1978	21.54	0.7784	139,249	3,030	9,900	12,930	178,889	162,285	23.8%	222.6	1,251
1979	21.46	0.7752	141,870	3,125	10,096	13,221	183,002	166,016	23.9%	225.1	1,261
1980	22.19	0.7980	134,030	3,093	8,988	12,081	167,959	152,369	23.5%	227.7	1,177
1981	22.55	0.8123	129,293	2,857	8,610	11,467	159,174	144,400	23.4%	230.0	1,124
1982	21.92	0.7877	124,165	2,940	8,389	11,328	157,621	142,990	23.7%	232.2	1,069
1983	21.99	0.7898	141,708	3,364	9,527	12,891	179,416	162,762	23.4%	234.3	1,210
1984	22.43	0.8035	149,916	3,653	9,716	13,368	186,574	169,256	23.8%	236.3	1,269
1985	22.19	0.7949	148,675	3,671	9,729	13,400	187,048	169,686	23.8%	238.5	1,247
1986	21.94	0.7854	160,650	4,053	10,591	14,644	204,535	185,550	24.7%	240.7	1,335
1987	22.13	0.7935	170,251	4,149	11,235	15,385	214,546	194,632	24.6%	242.8	1,402
1988	22.35	0.7999	174,510	4,330	11,288	15,618	218,165	197,915	25.1%	245.0	1,425
1989	22.32	0.7966	175,444	4,553	11,169	15,722	220,233	199,791	25.7%	247.3	1,419
1990	22.62	0.8062	176,164	4,609	10,968	15,577	218,500	198,219	27.0%	249.9	1,410
1991	23.03	0.8197	171,482	4,493	10,402	14,894	209,193	189,776	29.1%	252.7	1,357
1992	23.58	0.8380	180,125	4,717	10,563	15,280	214,946	194,995	30.9%	255.4	1,411
1993	24.28	0.8592	182,205	4,921	10,090	15,011	212,058	192,375	32.3%	258.1	1,412
1994	24.64	0.8718	188,569	5,038	10,268	15,306	216,293	196,217	33.7%	260.7	1,447
1995	24.32	0.8580	187,601	5,272	10,158	15,430	218,645	198,350	34.4%	263.0	1,427
1996	24.82	0.8763	189,362	5,178	10,080	15,258	216,092	196,034	36.9%	265.5	1,426
1997	26.45	0.9394	195,566	4,609	10,180	14,790	208,185	188,861	36.4%	267.9	1,460
1998	26.39	0.9351	196,569	4,802	10,097	14,899	210,217	190,705	37.1%	270.3	1,454
1999	27.04	0.9611	203,229	4,643	10,389	15,032	211,464	191,836	37.8%	273.2	1,488

^aU.S. Department of Agriculture, Forest Products Laboratory (15).

^bThe average specific gravity for hardwood is .52.

^cThe average specific gravity for softwood is .42.

^dThe weight density of a cubic foot of water in pounds is 62.4. Example: $((0.52 \times 62.4 / 2000) + (0.42 \times 62.4 / 2000)) \times 1000$.

Table 11a—Per capita consumption of timber products, by major product, 1965–1999 (cubic feet, board feet, cords)^a

Year	Industrial roundwood used for										
	All products	Total roundwood	Lumber		Plywood and veneer		Pulp products		Other industrial products ^b	Fuelwood	
	<i>Cubic feet</i>	<i>Cubic feet</i>	<i>Cubic feet</i>	<i>Board feet (lumber tally)</i>	<i>Cubic feet</i>	<i>Board feet (local log rule)</i>	<i>Cubic feet</i>	<i>Cords</i>	<i>Cubic feet</i>	<i>Cubic feet</i>	<i>Cords</i>
1965	67.9	63.1	35.6	193	5.8	27	18.9	0.2	2.9	4.7	0.059
1966	68.1	63.8	34.9	190	6.1	28	19.9	0.2	2.9	4.3	0.054
1967	65.1	61.2	33.5	182	5.9	27	19.2	0.2	2.6	3.9	0.049
1968	66.8	63.3	34.4	187	6.8	31	19.8	0.2	2.4	3.5	0.044
1969	66.4	63.4	33.5	182	6.3	29	21.4	0.3	2.2	3.1	0.038
1970	64.4	61.7	31.9	173	6.4	30	21.4	0.3	2.1	2.6	0.033
1971	66.5	64.1	34.7	189	7.4	34	20.0	0.3	2.0	2.4	0.030
1972	67.9	65.6	36.2	197	8.1	37	19.4	0.2	1.9	2.3	0.028
1973	68.0	65.6	36.2	197	7.7	35	19.8	0.2	1.9	2.4	0.030
1974	63.0	60.5	31.2	170	6.3	29	21.2	0.3	1.8	2.5	0.031
1975	55.8	53.2	28.5	155	6.2	29	16.7	0.2	1.8	2.6	0.033
1976	62.5	59.8	32.3	176	7.2	33	18.6	0.2	1.7	2.8	0.034
1977	67.8	63.2	35.8	195	7.6	35	18.1	0.2	1.7	4.5	0.057
1978	72.4	65.5	36.9	201	7.8	36	19.1	0.2	1.8	6.9	0.086
1979	74.6	64.8	35.4	193	7.3	34	20.3	0.3	1.8	9.8	0.122
1980	70.7	57.0	29.6	161	5.8	27	19.8	0.2	1.8	13.6	0.170
1981	68.1	54.3	27.2	148	5.8	27	19.5	0.2	1.8	13.8	0.173
1982	67.2	52.8	26.8	146	5.7	26	18.5	0.2	1.9	14.4	0.181
1983	74.5	60.7	32.2	175	7.0	32	19.6	0.2	1.9	13.8	0.173
1984	78.9	63.6	34.3	187	6.9	32	20.5	0.3	1.9	15.3	0.191
1985	78.7	64.2	34.7	189	6.9	32	20.7	0.3	1.9	14.5	0.181
1986	81.0	68.1	36.7	200	7.3	34	22.2	0.3	2.0	12.9	0.161
1987	82.9	70.2	38.2	208	7.5	35	22.5	0.3	2.0	12.7	0.158
1988	81.0	68.5	36.8	200	7.1	33	22.6	0.3	2.1	12.5	0.156
1989	79.8	67.5	36.9	201	5.9	27	22.5	0.3	2.2	12.3	0.154
1990	77.4	65.3	34.6	188	5.6	26	22.8	0.3	2.2	12.1	0.151
1991	72.4	60.4	31.0	169	5.0	23	22.2	0.3	2.2	12.0	0.150
1992	74.5	62.6	32.8	179	5.0	23	22.3	0.3	2.4	11.9	0.149
1993	75.0	63.0	33.3	181	5.0	23	22.3	0.3	2.4	11.9	0.149
1994	76.3	64.3	34.3	186	5.1	23	22.7	0.3	2.2	12.0	0.150
1995	75.9	64.7	33.8	184	5.0	23	24.0	0.3	2.0	11.2	0.140
1996	73.8	63.5	34.1	185	4.9	22	22.6	0.3	1.9	10.3	0.129
1997	70.9	61.4	34.6	188	4.6	21	20.4	0.3	1.8	9.5	0.119
1998	72.2	62.9	35.7	194	4.7	22	20.7	0.3	1.8	9.3	0.117
1999	72.8	63.5	36.7	200	4.8	22	20.1	0.3	1.8	9.3	0.116

^aU.S. Department of Agriculture, Forest Service (16,24); U.S. Council of Economic Advisors (31); data may not add to totals because of rounding.

^bIncludes cooperage logs, poles and piling, fence posts, hewn ties, round mine timbers, box bolts, excelsior bolts, chemical wood, shingle bolts, and miscellaneous items.

Table 11b—Per capita consumption of timber products, by major product, 1965–1999 (cubic meters)^a

Year	All products	Industrial roundwood used for					Fuelwood
		Total roundwood	Lumber	Plywood and veneer	Pulp products	Other industrial products ^b	
1965	1.922	1.788	1.007	0.166	0.534	0.082	0.133
1966	1.928	1.807	0.989	0.172	0.564	0.081	0.122
1967	1.844	1.733	0.947	0.167	0.545	0.073	0.111
1968	1.891	1.792	0.973	0.191	0.559	0.068	0.099
1969	1.881	1.795	0.948	0.178	0.605	0.064	0.087
1970	1.822	1.748	0.903	0.182	0.605	0.059	0.074
1971	1.883	1.815	0.982	0.209	0.567	0.057	0.068
1972	1.921	1.857	1.024	0.229	0.549	0.055	0.064
1973	1.925	1.857	1.025	0.218	0.561	0.054	0.067
1974	1.785	1.714	0.883	0.179	0.600	0.052	0.071
1975	1.581	1.506	0.808	0.175	0.472	0.050	0.075
1976	1.770	1.692	0.914	0.203	0.526	0.049	0.078
1977	1.919	1.791	1.014	0.215	0.512	0.050	0.129
1978	2.050	1.856	1.046	0.220	0.540	0.050	0.194
1979	2.113	1.835	1.003	0.207	0.575	0.051	0.277
1980	2.001	1.615	0.839	0.164	0.560	0.052	0.386
1981	1.929	1.537	0.770	0.164	0.551	0.052	0.392
1982	1.904	1.495	0.758	0.161	0.523	0.053	0.409
1983	2.109	1.718	0.913	0.197	0.555	0.054	0.391
1984	2.236	1.802	0.973	0.195	0.580	0.055	0.434
1985	2.229	1.819	0.982	0.196	0.585	0.055	0.410
1986	2.293	1.929	1.039	0.206	0.628	0.056	0.364
1987	2.348	1.989	1.082	0.213	0.637	0.058	0.359
1988	2.294	1.940	1.042	0.200	0.639	0.059	0.354
1989	2.261	1.913	1.044	0.168	0.637	0.064	0.348
1990	2.191	1.849	0.979	0.160	0.646	0.064	0.342
1991	2.050	1.711	0.879	0.141	0.630	0.062	0.339
1992	2.110	1.773	0.929	0.143	0.633	0.068	0.337
1993	2.124	1.785	0.943	0.142	0.632	0.068	0.338
1994	2.161	1.820	0.971	0.144	0.643	0.063	0.340
1995	2.149	1.833	0.956	0.142	0.679	0.055	0.316
1996	2.089	1.797	0.966	0.138	0.640	0.053	0.292
1997	2.008	1.739	0.980	0.129	0.578	0.051	0.269
1998	2.044	1.780	1.010	0.134	0.586	0.051	0.264
1999	2.061	1.798	1.040	0.137	0.570	0.050	0.263

^aU.S. Department of Agriculture, Forest Service (16,24); U.S. Council of Economic Advisors (31); Data may not add to totals because of rounding.

^bIncludes cooperage logs, poles and piling, fence posts, hewn ties, round mine timbers, box bolts, excelsior bolts, chemical wood, shingle bolts, and miscellaneous items.

Table 12—Consumption of selected timber products and other materials used in construction, manufacturing, and shipping, 1965–1999^a

Year	Total lumber		Lumber softwoods		Lumber hardwoods		Total plywood		Plywood softwoods		Plywood hardwoods	
	Consump- tion	Index 1992=100	Consump- tion	Index 1992=100	Consump- tion	Index 1992=100	Consump- tion	Index 1992=100	Consump- tion	Index 1992=100	Consump- tion	Index 1992=100
	<i>Billion board feet</i>		<i>Billion board feet</i>		<i>Billion board feet</i>		<i>Billion square feet (3/8-in. basis)</i>		<i>Billion square feet (3/8-in. basis)</i>		<i>Billion square feet (3/8-in. basis)</i>	
1965	43.0	77.1	33.4	74.0	9.6	89.9	15.5	74.7	12.4	69.3	3.1	109.0
1966	42.7	76.5	32.7	72.6	10.0	93.0	16.3	78.6	13.0	72.5	3.3	117.2
1967	41.4	74.1	32.0	70.9	9.4	87.8	16.0	77.2	12.9	71.8	3.2	111.2
1968	43.0	77.1	34.1	75.6	8.9	83.4	18.5	89.2	14.6	81.6	3.9	136.9
1969	42.3	75.7	33.2	73.7	9.0	84.2	17.5	84.1	13.5	75.3	4.0	139.7
1970	40.8	73.0	32.2	71.5	8.5	79.6	18.0	86.7	14.2	79.3	3.8	133.6
1971	45.0	80.6	36.3	80.6	8.6	80.7	21.0	101.1	16.5	92.2	4.5	157.0
1972	47.5	85.0	38.8	86.0	8.7	81.1	23.3	112.0	18.1	101.0	5.2	182.1
1973	47.9	85.8	38.8	86.0	9.1	84.8	22.2	106.9	17.9	99.8	4.3	151.5
1974	41.6	74.4	32.9	73.0	8.6	80.7	18.3	88.2	15.3	85.5	3.0	105.0
1975	38.5	68.9	31.0	68.8	7.4	69.1	18.2	87.5	15.3	85.1	2.9	102.4
1976	44.2	79.1	36.1	80.0	8.1	75.4	21.1	101.6	17.7	98.9	3.4	118.5
1977	49.3	88.4	40.7	90.3	8.6	80.2	22.5	108.2	19.1	106.5	3.4	118.9
1978	51.5	92.3	42.6	94.4	9.0	83.6	23.4	112.5	19.7	110.0	3.6	128.7
1979	50.1	89.8	40.8	90.5	9.3	86.8	22.5	108.2	19.3	107.5	3.2	112.6
1980	42.8	76.7	33.8	75.0	9.0	83.6	18.2	87.6	16.0	89.2	2.2	77.5
1981	39.3	70.3	32.0	70.9	7.3	67.9	18.5	89.1	16.1	89.7	2.4	85.0
1982	38.8	69.4	31.0	68.6	7.8	72.8	18.6	89.6	15.4	85.9	3.2	113.4
1983	47.9	85.7	39.4	87.3	8.5	79.0	23.1	111.2	18.9	105.5	4.2	147.1
1984	52.1	93.3	42.3	93.7	9.8	91.6	23.6	113.4	19.6	109.3	3.9	139.3
1985	53.4	95.7	43.9	97.4	9.5	88.6	24.3	116.8	19.9	111.0	4.4	153.7
1986	57.4	102.8	47.2	104.6	10.2	95.5	26.1	125.5	21.6	120.2	4.5	158.8
1987	60.9	109.1	50.0	110.8	10.9	101.9	27.5	132.4	22.2	124.0	5.3	185.9
1988	59.2	106.1	48.3	107.2	10.9	101.5	26.4	127.1	21.7	120.9	4.7	166.2
1989	60.6	108.6	49.1	108.8	11.6	107.9	23.3	112.4	20.0	111.5	3.4	118.4
1990	57.4	102.9	45.7	101.4	11.7	109.3	22.4	107.7	19.3	107.8	3.0	107.0
1991	52.1	93.3	41.6	92.3	10.5	97.7	20.1	96.5	17.4	96.8	2.7	95.1
1992	55.8	100.0	45.1	100.0	10.7	100.0	20.8	100.0	17.9	100.0	2.8	100.0
1993	57.2	102.5	45.7	101.3	11.5	107.4	20.9	100.8	17.9	100.1	3.0	105.4
1994	59.8	107.2	48.2	106.8	11.7	108.8	21.7	104.4	18.5	103.0	3.2	113.0
1995	59.5	106.6	47.6	105.5	11.9	111.4	21.6	104.2	18.2	101.2	3.5	122.9
1996	61.3	109.8	49.5	109.7	11.8	109.9	21.2	102.3	18.0	100.5	3.2	113.9
1997	62.9	112.7	51.0	113.1	11.9	111.0	20.1	97.0	16.5	92.1	3.6	127.9
1998	65.4	117.2	52.0	115.3	13.4	125.0	21.2	102.1	17.2	95.8	4.0	141.4
1999	68.3	122.4	54.5	120.9	13.8	129.0	22.0	105.9	17.7	98.6	4.3	151.6

Table 12—Consumption of selected timber products and other materials used in construction, manufacturing, and shipping, 1965–1999^a—Con.

Year	Particleboard ^b		Insulating board		Hardboard		Portland cement ^c		Steel products ^d		Brick	
	Consump- tion	Index 1992=100	Consump- tion	Index 1992=100	Index		Index		Index		Index	
	<i>Million square feet (3/4-in. basis)</i>		<i>Million square feet (1/2-in. basis)</i>		<i>Million square feet (1/8-in. basis)</i>		<i>Thousand tons</i>		<i>Thousand tons</i>		<i>Million bricks</i>	
1965	807	19.8	3,395	138.1	2,921	55.4	70,328	84.9	11,836	172.8	8,089	129.8
1966	998	24.5	3,098	126.0	3,083	58.5	71,570	86.4	11,862	173.2	7,552	121.2
1967	1,114	27.4	3,233	131.5	3,038	57.6	70,315	84.9	11,375	166.1	7,117	114.2
1968	1,420	34.9	3,525	143.4	3,710	70.4	74,740	90.2	12,195	178.1	7,557	121.3
1969	1,714	42.1	3,656	148.7	4,247	80.5	77,047	93.0	11,402	166.5	7,290	117.0
1970	1,757	43.2	3,246	132.1	4,384	83.1	73,407	88.6	10,565	154.3	6,496	104.3
1971	2,382	58.5	3,889	158.2	5,225	99.1	79,005	95.4	8,666	126.5	7,570	121.5
1972	3,086	75.8	3,973	161.6	5,798	110.0	82,808	100.0	8,589	125.4	8,402	134.8
1973	3,434	84.4	3,975	161.7	6,050	114.7	88,459	106.8	10,731	156.7	8,674	139.2
1974	2,998	73.7	3,252	132.3	5,654	107.2	81,125	97.9	11,360	165.9	6,673	107.1
1975	2,686	66.0	2,919	118.8	5,681	107.7	69,078	83.4	8,119	118.6	6,262	100.5
1976	3,463	85.1	3,375	137.3	6,785	128.7	72,833	87.9	7,508	109.6	7,218	115.8
1977	4,130	101.5	3,485	141.8	7,714	146.3	78,730	95.0	7,553	110.3	8,663	139.0
1978	4,537	111.5	3,470	141.2	7,825	148.4	84,838	102.4	9,612	140.4	8,586	137.8
1979	4,207	103.4	3,399	138.3	7,688	145.8	84,860	102.4	9,978	145.7	7,708	123.7
1980	3,700	90.9	2,818	114.6	6,140	116.4	76,059	91.8	8,742	127.7	6,090	97.7
1981	3,598	88.4	2,118	86.2	6,105	115.8	71,901	86.8	8,446	123.3	5,059	81.2
1982	3,118	76.6	1,841	74.9	5,587	106.0	64,602	78.0	6,260	91.4	5,119	82.2
1983	3,956	97.2	2,398	97.6	7,303	138.5	70,849	85.5	6,276	91.6	6,218	99.8
1984	4,473	109.9	2,742	111.6	6,837	129.7	81,928	98.9	6,052	88.4	6,991	112.2
1985	4,607	113.2	2,724	110.8	6,300	119.5	84,779	102.3	6,407	93.6	6,605	106.0
1986	4,912	120.7	2,415	98.3	5,822	110.4	88,946	107.4	5,141	75.1	7,184	115.3
1987	5,143	126.4	2,388	97.2	5,458	103.5	90,458	109.2	5,619	82.1	7,601	122.0
1988	5,300	130.3	2,457	100.0	5,118	97.1	90,299	109.0	6,014	87.8	6,930	111.2
1989	4,056	99.7	2,621	106.6	5,196	98.5	89,081	107.5	7,041	102.8	7,494	120.3
1990	3,858	94.8	2,480	100.9	5,025	95.3	87,675	105.8	7,206	105.2	6,873	110.3
1991	3,802	93.4	2,332	94.9	4,895	92.8	78,058	94.2	7,112	103.9	5,975	95.9
1992	4,069	100.0	2,458	100.0	5,273	100.0	82,845	100.0	6,848	100.0	6,231	100.0
1993	4,553	111.9	2,435	99.1	5,248	99.5	86,388	104.3	6,755	98.6	6,655	106.8
1994	5,051	124.1	2,470	100.5	5,206	98.7	92,698	111.9	7,319	106.9	7,238	116.2
1995	4,756	116.9	2,470	100.5	4,930	93.5	93,392	112.7	6,988	102.0	6,665	107.0
1996	4,973	122.2	2,470	100.5	5,280	100.1	98,728	119.2	7,943	116.0	7,448	119.5
1997	5,139	126.3	2,470	100.5	4,501	85.4	99,812	120.5	7,546	110.2	7,576	121.6
1998	6,606	162.4	2,470	100.5	4,300	81.5	114,329	138.0	8,400	122.7	8,241	132.3
1999	6,653	163.5	2,470	100.5	4,386	83.2	121,279	146.4	8,800	128.5	8,932	143.3

^aAmerican Plywood Association (10,11); National Particleboard Association (20); U.S. Department of Commerce, Bureau of Industrial Economics (61); Wood Technology (73); U.S. International Trade Commission (69). Numbers have been revised since the 1997 publication.

^bIncludes medium-density fiberboard beginning in 1975.

^cU.S. Geological Survey (68).

^dAmerican Iron & Steel Institute (7). Construction, including maintenance; Net shipments.

Table 13—Volume and value of imports and exports of timber products by product, 1999

Product	Standard unit of measure	Imports ^a		Exports		Trade Balance ^d	
		Volume	Value ^b	Volume	Value ^c	Volume	Value ^c
			Million dollars		Million dollars		Million dollars
Logs: ^e	Million board feet						
Softwoods		254.3	91.8	1,665.1	894.0	1,410.8	802.2
Hardwoods		40.0	33.6	373.0	330.2	333.1	296.6
Total		294.3	125.4	2,038.1	1,224.2	1,743.9	1,098.8
Lumber: ^e	Million board feet						
Softwoods		19,177.8	7,526.4	1,430.5	826.9	(17,747.3)	(6,699.5)
Hardwoods		1,430.5	826.9	1,241.8	1,429.3	(188.7)	602.4
Railroad ties		17.3	4.7	194.9	37.3	177.6	32.6
Total		20,625.6	8,358.0	2,867.2	2,293.5	(17,758.4)	(6,064.5)
Veneer:	Million square feet						
Softwoods ^{e,f}	3/8" thickness	1,588.0	104.1	307.5	39.4	(1,280.5)	(64.7)
Hardwoods ^{e,g}		2,358.5	299.3	2,986.8	369.4	628.3	70.1
Total		3,946.5	403.4	3,294.3	408.8	(652.2)	5.4
Plywood: ^e	Million square feet						
Softwoods	3/8" thickness	559.3	166.0	596.0	146.8	36.7	(19.2)
Hardwoods	3/8" thickness	3,779.2	816.8	183.0	63.6	(3,596.2)	(753.2)
Total		4,338.5	982.8	779.0	210.4	(3,559.5)	(772.4)
Particleboard ^e	Million square feet 3/4" thickness	689.4	210.8	79.1	35.9	(610.3)	(174.9)
Med. Dens. Fiberboard ^e	Million square feet 3/4" thickness	618.1	239.2	56.1	29.4	(562.0)	(209.8)
OSB/Waferboard ^e	Million square feet 3/8" thickness	7,358.9	1,479.5	179.6	47.7	(7,179.3)	(1,431.8)
Hardboard ^e	Million square feet 1/8" thickness assumed	1,782.5	159.4	915.9	89.9	(866.6)	(69.5)
Pulpwood:	Thousand cords						
Round ^{h,i}		17.9	4.7	1,114.9	109.0	1,097.0	104.3
Chips ^h		152.4	29.7	1,987.2	482.4	1,834.8	452.7
Total		170.3	34.4	3,102.1	591.4	2,931.8	557.0
Wood pulp ^h	Thousand short tons	6,659.6	2,518.6	5,935.6	2,543.2	(724.0)	24.6
Paper and board: ^{h,i}	Thousand short tons						
Newsprint		7,491.5	3,517.4	776.2	423.3	(6,715.3)	(3,094.1)
Printing & Writing Paper		6,477.1	4,701.6	1,696.4	1,618.4	(4,780.7)	(3,083.2)
Paperboard		1,970.6	919.2	6,072.2	3,003.6	4,101.6	2,084.4
Other paper & board ^j		1,402.5	1,280.7	986.9	1,094.9	(415.6)	(185.8)
Converted products		1,146.3	2,721.6	2,288.5	3,639.7	1,142.2	918.1
Total		18,488.0	13,140.5	11,820.2	9,779.9	(6,667.8)	(3,360.6)
Recovered Paper ^h	Thousand short tons	426.0	60.4	8,265.6	822.0	7,839.6	761.6
Other wood products ^k			4,550.5		1,406.4		(3,144.1)
Total all products ^l			32,262.9		19,482.7		(12,780.3)

^aImports for consumption.

^bCustoms value, which is generally defined as the price actually paid or payable for merchandise when sold for exportation to the United States, excluding U.S. import duties, freight, insurance, and other charges.

^cValue (free alongside ship) at U.S. ports of export, based on the transaction price, including inland freight, insurance, and other charges.

^dNegative amounts, given in parentheses, indicate excess imports

^eU.S. Department of Agriculture, Foreign Agricultural Service (32).

^fU.S. International Trade Commission (69).

^gAmerican Forest and Paper Association (3).

^hAmerican Forest and Paper Association (2).

ⁱIncludes wet machine board and converted paper and paperboard products.

^jIncludes tissue, packaging and industrial papers, wet machine board and construction paper & board

^kIncludes poles and piling, fuelwood, wood charcoal, cork, wood containers

wood doors, and other miscellaneous products. Does not include wood furniture nor printed material.

^lData may not add to totals because of rounding.

Table 14—Value of imports and exports of all commodities^a and timber products,^b 1965–1999

Year ^e	Imports ^c					Exports ^d				
	All commodities		Timber products			All commodities		Timber products		
			Total	Proportion ^f				Total	Proportion	
	<i>Million current dollars</i>	<i>Million 1992 dollars^g</i>	<i>Million current dollars</i>	<i>Million 1992 dollars</i>	<i>Percent</i>	<i>Million current dollars</i>	<i>Million 1992 dollars</i>	<i>Million current dollars</i>	<i>Million 1992 dollars</i>	<i>Percent</i>
1965	21,285	77,120	1,977	7,163	9.3	27,135	98,315	917	3,322	3.4
1966	25,360	89,296	2,165	7,623	8.5	29,884	105,225	1,024	3,606	3.4
1967	26,733	93,800	2,087	7,323	7.8	31,142	109,270	1,150	4,035	3.7
1968	32,970	112,911	2,446	8,377	7.4	33,953	116,277	1,362	4,664	4.0
1969	35,863	117,970	2,734	8,993	7.6	37,462	123,230	1,509	4,964	4.0
1970	39,756	126,210	2,546	8,083	6.4	42,590	135,206	1,816	5,765	4.3
1971	45,516	140,049	2,937	9,037	6.5	43,492	133,822	1,692	5,206	3.9
1972	55,290	162,618	3,632	10,682	6.6	48,887	143,785	2,038	5,994	4.2
1973	69,024	179,750	4,468	11,635	6.5	70,246	182,932	3,006	7,828	4.3
1974	100,140	219,605	4,778	10,478	4.8	97,144	213,035	4,165	9,134	4.3
1975	96,477	193,729	4,141	8,315	4.3	106,102	213,056	4,088	8,209	3.9
1976	121,121	232,478	5,590	10,729	4.6	113,319	217,503	4,695	9,012	4.1
1977	147,976	267,105	6,720	12,130	4.5	117,926	212,863	4,664	8,419	4.0
1978	172,912	290,121	8,028	13,470	4.6	141,126	236,789	4,963	8,327	3.5
1979	205,850	306,324	9,181	13,662	4.5	178,591	265,760	6,854	10,199	3.8
1980	239,943	313,242	8,648	11,290	3.6	216,592	282,757	8,516	11,117	3.9
1981	259,012	309,823	9,042	10,816	3.5	228,961	273,877	7,925	9,480	3.5
1982	242,340	284,103	8,382	9,826	3.5	207,158	242,858	7,151	8,383	3.5
1983	256,680	297,083	10,067	11,652	3.9	195,969	226,816	7,044	8,153	3.6
1984	322,949	364,914	12,235	13,825	3.8	212,056	239,611	7,210	8,147	3.4
1985	343,067	389,406	12,539	14,233	3.7	206,926	234,876	6,699	7,604	3.2
1986	368,251	430,703	13,271	15,522	3.6	206,628	241,670	7,692	8,996	3.7
1987	402,084	458,477	15,268	17,409	3.8	244,417	278,697	9,940	11,334	4.1
1988	437,475	479,688	16,749	18,365	3.8	310,333	340,277	12,782	14,015	4.1
1989	477,400	498,851	19,106	19,964	4.0	362,100	378,370	17,224	17,998	4.8
1990	498,300	502,319	18,806	18,958	3.8	389,300	392,440	18,542	18,692	4.8
1991	491,000	493,964	17,100	17,203	3.5	416,900	419,416	19,500	19,618	4.7
1992	536,500	536,500	18,700	18,700	3.5	440,400	440,400	20,700	20,700	4.7
1993	589,400	580,690	18,874	18,595	3.2	456,800	450,049	16,889	16,639	3.7
1994	668,600	651,022	17,117	16,667	2.6	502,400	489,192	15,320	14,918	3.0
1995	749,600	704,511	19,023	17,879	2.5	575,800	541,165	17,582	16,524	3.1
1996	803,300	736,972	21,264	19,508	2.6	612,000	561,468	18,315	16,803	3.0
1997	877,300	806,342	27,375	25,161	3.1	679,300	624,357	21,386	19,656	3.1
1998	918,800	832,386	28,684	25,986	3.1	670,600	607,529	19,261	17,450	2.9
1999	1,030,400	856,915	32,263	26,831	3.1	683,200	568,172	19,483	16,203	2.9

^aU.S. Council of Economic Advisors (31).

^bU.S. International Trade Commission (69).

^cImports for consumption. Customs value, which is generally defined as the price actually paid or payable for merchandise when sold for exportation to the United States, excluding U.S. import duties, freight, insurance, and other charges.

^dValue (free alongside ship) at U.S. ports of export, based on the transaction price, including inland freight, insurance, and other charges.

^eIncludes revisions for the years 1965 to 1979 and 1984 to 1988.

^fTimber products as a percentage of all commodities.

^gConverted to 1992 dollars by dividing current dollars by the implicit deflators for gross domestic product for imports and exports.

Table 15—Foreign exchange rates by selected country and year, 1975–1999^a

Country	Currency	Foreign currency units per U.S. dollar										
		1999	1998	1997	1996	1995	1994	1993	1990	1985	1980	1975
North America												
Canada	Dollar	1.4858	1.4836	1.3849	1.3638	1.3725	1.3664	1.2902	1.1668	1.3658	1.1693	1.0173
Asia												
China, PR	Yuan	8.2781	8.3008	8.3193	8.3389	8.37	8.6404	5.7795	4.7921	2.9434	^b	^b
Hong Kong	Dollar	7.7594	7.7467	7.7431	7.7345	7.7357	7.729	7.7357	7.7899	7.7911	^b	^b
India	Rupee	43.13	41.36	36.365	35.506	32.418	31.394	31.291	17.492	12.332	7.8866	8.3854
Japan	Yen	113.73	130.99	121.06	108.78	93.96	102.18	111.08	145	238.47	226.63	296.69
Malaysia	Ringgit	3.8000	3.9254	2.8173	2.5154	2.5073	2.6237	2.5738	2.7057	2.4806	2.1767	2.395
Singapore	Dollar	1.6951	1.6722	1.4857	1.41	1.4171	1.5275	1.6158	1.8134	2.2008	^b	^b
South Korea	Won	1,189.84	950.77	950.77	805	772.69	806.93	805.75	710.64	861.89	^b	^b
Sri Lanka	Rupee	70.868	59.026	59.026	55.289	51.047	49.17	48.211	40.078	27.187	16.167	6.95
Taiwan	Dollar	32.322	33.547	28.775	27.468	26.495	26.465	26.416	26.918	39.889	^b	^b
Thailand	Baht	37.887	41.262	31.072	25.359	24.921	25.161	25.333	25.609	27.193	^b	^b
Africa												
South Africa	Rand	6.1191	5.5417	4.6072	4.3011	3.6284	3.5526	3.2729	2.5885	2.2343	0.778	0.7328
Europe												
Austria	Schilling	14.659	12.379	12.206	10.589	10.076	11.409	11.639	11.331	20.676	12.945	17.401
Belgium	Franc	42.974	36.31	35.807	30.968	29.472	33.426	34.581	33.424	59.336	29.237	36.694
Denmark	Krone	6.9900	6.703	6.6092	5.8003	5.5999	6.3561	6.4863	6.1899	10.598	5.6345	5.7351
European Union	Euro	1.0653	^b	^b	^b	^b	^b	^b	^b	^b	^b	^b
Finland	Markka	6.3340	5.3473	5.1956	4.5948	4.3763	5.234	5.7251	3.83	6.1971	3.7206	3.6651
France	Franc	6.9879	5.8995	5.8393	5.1158	4.9864	5.5459	5.6669	5.4467	8.9799	4.225	4.2819
Germany	Deutsche mark	2.0835	1.7597	1.7348	1.5049	1.4321	1.6216	1.6545	1.6166	2.9419	1.8175	2.4553
Greece	Drachma	306.30	295.7	273.28	240.82	231.68	242.5	229.64	158.59	138.4	^b	^b
Ireland	Pound ^c	0.8390	142.48	151.63	159.95	160.35	149.69	146.47	165.76	106.62	205.77	222.16
Italy	Lira	2,062.71	1736.85	1703.81	1542.76	1629.45	1,611.49	1,573.41	1,198.27	1,908.90	856.2	652.4
Netherlands	Guilder	2.3476	1.9837	1.9525	1.6863	1.6044	1.819	1.8585	1.8215	3.3184	1.9875	2.5232
Norway	Krone	7.8017	7.5521	7.0857	6.4594	6.3355	7.0553	7.1009	6.2541	8.5933	4.9381	5.2137
Portugal	Escudo	213.57	180.25	175.44	154.28	149.88	165.93	161.08	142.7	172.07	50.082	25.454
Spain	Peseta	177.25	149.41	146.53	124.64	126.68	133.88	127.48	101.96	169.98	71.758	57.393
Sweden	Krona	8.2740	7.9522	7.6446	6.7082	7.1406	7.7161	7.7956	5.9231	8.6031	4.2309	4.1424
Switzerland	Franc	1.5045	1.4506	1.4514	1.2361	1.1812	1.3667	1.4781	1.3901	2.4551	1.6772	2.5811
United Kingdom	Pound ^c	161.72	165.73	163.76	1.5607	1.5785	153.19	150.16	178.41	129.74	232.58	222.16
Other												
Australia	Dollar ^c	64.54	62.91	74.368	78.283	74.073	73.161	67.993	78.069	70.026	114	130.77
New Zealand	Dollar ^c	52.94	53.61	66.247	68.765	65.625	59.358	54.127	59.619	49.752	97.34	121.16
Index												
United States	Dollar ^{d,e}	94.07	98.85	96.38	87.34	84.25	91.32	93.18	89.09	143.01	87.39	98.5

^aU.S. Federal Reserve System, Board of Governors (66).

^bNot available.

^cValue in U.S. cents.

^dIndex of weighted-average exchange value of U.S. dollar against the currencies of ten industrial countries.

The weight for each of the ten countries is the 1972–1976 average world trade of that country divided by the average world trade of all ten countries combined. Series revised as of August 1978.

^eData prior to 1999 was reported using the G-10 index. Data for 1999 and later is reported using the major currency scale.

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Table 16—Log imports by major species, 1965–1999 (million board feet, log scale)^a

Year	Hardwoods						
	Total	Softwoods	Total	Mahogany	Philippine mahogany or lauan	Birch and maple	Other
1965	68.1	13.5	54.6	12.8	11.0	6.2	24.6
1966	95.6	42.5	53.1	16.1	2.8	6.3	27.9
1967	77.0	33.9	43.1	10.5	4.6	6.6	21.4
1968	79.0	33.1	45.9	8.5	1.9	6.5	29.0
1969	81.9	41.7	40.2	6.5	3.1	7.6	23.0
1970	144.4	106.5	37.9	6.8	0.7	8.2	22.2
1971	84.0	55.7	28.3	3.3	0.2	8.7	16.1
1972	39.3	11.3	28.0	3.6	0.7	7.9	15.8
1973	33.5	8.5	25.0	2.1	3.2	9.2	10.5
1974	76.6	45.6	31.0	3.4	0.9	12.3	14.4
1975	85.5	68.5	17.0	1.6	0.3	7.2	7.9
1976	81.6	67.4	14.2	1.2	0.6	8.7	3.7
1977	154.5	139.5	15.0	2.4	0.5	8.9	3.2
1978	96.9	79.1	17.8	1.5	^b	9.1	7.2
1979	133.0	118.4	14.6	1.1	0.3	8.4	4.8
1980	127.5	114.1	13.4	1.0	^b	7.4	5.0
1981	101.1	87.6	13.5	0.6	^b	8.7	4.2
1982	117.1	98.8	18.3	0.8	^b	10.2	7.3
1983	165.0	142.5	22.5	0.3	0.3	5.1	16.8
1984	146.9	116.8	30.1	0.5	0.3	4.4	24.9
1985	99.2	70.8	28.4	0.3	0.3	2.9	24.9
1986	78.6	52.1	26.4	1.3	1.6	3.0	20.5
1987	82.5	68.7	13.8	0.3	0.3	3.8	9.4
1988	68.1	55.9	12.2	1.7	^b	3.8	6.7
1989	39.3	20.9	18.4	0.8	0.1	6.7	10.8
1990	23.1	12.9	10.2	1.1	^b	3.7	5.4
1991	13.6	7.6	6.0	0.9	^b	2.6	2.5
1992	43.4	36.8	6.6	0.7	0.1	4.4	1.4
1993	93.9	85.7	8.2	1.1	^b	3.9	3.2
1994	110.4	94.3	16.0	1.3	^b	6.3	8.4
1995	80.4	54.5	25.9	1.6	0.3	6.6	17.4
1996	115.0	83.6	31.4	1.7	0.3	11.8	17.7
1997	127.6	84.1	43.5	2.3	0.3	8.1	32.8
1998	185.3	146.9	38.4	2.3	0.3	8.7	27.0
1999	294.3	254.3	40.0	2.3	0.3	10.1	27.3

^aU.S. Department of Commerce, Bureau of the Census (57); U.S. Department of Agriculture, Foreign Agricultural Service (32); U.S. International Trade Commission (69). Data may not add to totals because of rounding.

^bFewer than 50,000 board feet.

**Table 17—Log imports by major region of origin, 1965–1999
(million board feet, log scale)^a**

Year	Total	Mexico and		Africa	Asia	Other ^c	
		Canada	Central America ^b				South America
1965	68.1	20.3	3.4	18.0	14.1	11.7	0.6
1966	95.6	49.4	3.7	21.3	17.4	3.6	0.2
1967	77.0	40.6	3.0	18.3	9.7	4.9	0.5
1968	79.0	39.9	3.1	26.8	6.8	2.1	0.3
1969	81.9	49.5	2.1	18.3	8.3	3.5	0.2
1970	144.4	114.9	2.3	17.6	8.3	1.0	0.3
1971	84.0	64.6	2.2	13.1	3.2	0.9	^d
1972	39.3	17.3	2.6	13.9	3.8	1.4	0.3
1973	33.5	17.8	3.0	2.9	4.8	4.8	0.2
1974	76.6	57.0	—	1.3	4.0	9.1	5.2
1975	85.5	80.3	0.3	—	1.4	0.1	3.4
1976	81.6	78.0	—	—	1.3	0.7	1.6
1977	154.5	150.5	—	—	2.5	0.6	0.9
1978	96.9	85.9	0.4	5.5	4.1	0.5	0.5
1979	133.0	111.2	0.2	17.4	1.5	1.1	1.6
1980	127.5	121.4	0.2	^d	1.3	0.2	4.4
1981	101.1	94.4	0.4	^d	0.7	0.6	5.0
1982	117.1	115.4	0.2	0.1	0.9	0.4	0.1
1983	165.0	161.5	1.0	0.1	0.3	1.7	0.4
1984	146.9	143.1	0.2	0.1	0.7	1.8	1.0
1985	99.2	81.1	0.1	0.5	3.2	13.9	0.4
1986	78.6	61.1	0.1	0.2	1.2	5.4	10.6
1987	82.5	75.6	0.2	0.2	0.3	2.1	4.1
1988	68.1	62.6	0.4	0.2	1.4	2.6	0.9
1989	39.3	20.0	2.3	0.7	2.1	8.1	6.1
1990	23.1	19.3	0.6	0.5	0.5	1.6	0.6
1991	13.6	9.0	0.4	0.2	0.3	1.1	2.6
1992	43.4	40.7	0.8	0.2	0.6	0.6	0.5
1993	93.9	89.3	^d	0.2	0.4	0.6	3.4
1994	110.4	85.0	1.2	0.6	0.6	0.7	22.3
1995	80.4	56.3	1.5	0.6	0.6	0.1	21.3
1996	115.0	94.6	2.1	0.8	0.1	0.1	17.3
1997	127.6	105.7	1.7	1.2	0.1	0.1	18.8
1998	185.3	168.4	0.5	1.2	0.1	0.2	14.9
1999	294.3	280.3	0.6	1.2	0.1	1.3	10.8

^aU.S. Department of Agriculture, Forest Service (33); U.S. Department of Agriculture, Foreign Agricultural Service (32); Western Wood Products Association (71); U.S. International Trade Commission (69).

Data may not add to totals because of rounding.

^bIncludes the West Indies.

^cFor the years 1974–1977, all imports with a value of less than \$500 are included in Other.

^dFewer than 50,000 board feet.

Table 18—Log exports by major species, 1965–1999 (million board feet, Scribner log scale)^a

Year	Softwoods						Hardwoods		
	Total	Total	Douglas-fir	Port-Orford cedar	Western hemlock	Other	Total	Walnut	Other
1965	1,195.0	1,113.6	111.3	39.1	b	963.2	81.4	23.6	57.8
1966	1,391.2	1,315.7	130.5	41.2	b	1,144.0	75.5	12.5	63.0
1967	1,972.1	1,875.1	269.5	34.6	b	1,571.0	97.0	16.1	80.9
1968	2,568.1	2,473.2	396.5	38.4	b	2,038.3	94.9	21.8	73.1
1969	2,396.5	2,316.3	380.6	40.7	b	1,895.0	80.2	20.6	59.6
1970	2,740.9	2,672.0	487.0	54.1	1,436.7	694.2	68.9	17.4	51.5
1971	2,288.8	2,229.8	444.5	40.2	1,214.8	530.3	59.0	12.9	46.1
1972	3,141.4	3,047.5	766.5	46.1	1,450.7	784.2	93.9	15.5	78.4
1973	3,366.1	3,252.2	973.0	29.7	1,469.0	780.5	113.9	15.7	98.2
1974	2,642.4	2,523.7	752.7	35.6	1,244.6	490.8	118.7	7.8	110.9
1975	2,666.9	2,600.6	820.4	38.7	1,169.5	572.0	66.3	8.5	57.8
1976	3,250.0	3,155.7	1,022.4	38.4	1,365.7	729.2	94.3	7.4	86.9
1977	3,069.7	2,980.0	1,007.2	20.7	1,306.8	645.3	89.7	7.6	82.1
1978	3,409.2	3,298.4	1,192.2	29.2	1,443.6	633.4	110.8	8.8	102.0
1979	3,897.0	3,768.2	1,351.0	24.6	1,593.7	799.0	128.8	6.8	122.0
1980	3,260.9	3,109.1	1,272.4	14.0	1,183.1	639.6	151.8	9.4	142.4
1981	2,534.2	2,377.1	1,026.9	16.9	867.5	465.8	157.1	7.7	149.5
1982	3,208.1	3,115.0	1,446.5	12.4	1,124.9	531.2	93.2	4.7	88.4
1983	3,502.1	3,390.6	1,616.4	9.5	1,147.5	617.3	111.5	4.6	106.9
1984	3,494.9	3,369.4	1,588.5	13.0	1,120.0	647.9	125.6	5.5	120.0
1985	3,843.2	3,732.0	1,785.5	14.8	1,304.7	626.9	111.2	5.5	105.7
1986	3,655.6	3,516.0	1,625.8	13.4	1,246.3	630.5	139.7	5.6	134.0
1987	4,109.2	3,959.9	1,864.8	12.7	1,385.3	697.1	149.3	6.2	143.1
1988	4,798.1	4,594.4	2,311.2	19.8	1,435.5	827.9	203.7	8.0	195.7
1989	4,706.0	4,492.7	2,064.2	13.8	1,611.8	802.9	213.3	13.7	199.6
1990	4,213.1	3,993.6	1,891.7	11.0	1,193.7	897.1	219.5	13.6	205.9
1991	3,761.0	3,477.7	1,608.7	9.3	1,049.0	810.8	283.3	11.6	271.7
1992	3,278.8	3,054.8	1,402.9	10.3	890.3	751.3	224.0	12.4	211.6
1993	2,876.4	2,639.2	1,186.6	4.2	673.5	774.9	237.1	9.4	227.7
1994	2,683.6	2,419.7	1,174.9	4.1	535.3	705.4	263.8	11.2	252.6
1995	2,820.0	2,552.1	1,128.2	2.3	660.7	760.9	267.9	7.6	260.3
1996	2,635.7	2,382.4	1,214.8	2.3	486.2	679.1	253.3	6.1	247.2
1997	2,398.0	2,078.0	808.3	2.9	419.5	847.3	320.0	6.4	313.6
1998	1,977.8	1,646.2	732.1	0.7	175.1	738.3	331.5	7.3	324.2
1999	2,038.2	1,665.1	672.7	1.1	222.2	769.1	373.1	8.0	365.1

^aAmerican Forest and Paper Association (3); U.S. International Trade Commission (69).
Data may not add to totals because of rounding.

^bWestern hemlock is included in Other.

Table 19—Log exports by major region of destination, 1965–1999
(million board feet, Scribner log scale)^a

Year	Total	Canada	European Union ^b	Japan	South Korea	China	Other
1965	1,195.0	355.1	29.4	804.4	2.8	c	3.3
1966	1,391.2	266.1	17.2	1,081.4	25.2	c	1.3
1967	1,972.1	335.5	20.5	1,585.5	29.9	c	0.7
1968	2,568.1	341.8	28.7	2,119.2	75.1	c	3.3
1969	2,396.5	324.6	29.6	2,007.3	32.2	c	2.8
1970	2,740.9	291.8	23.1	2,366.1	48.2	c	11.7
1971	2,288.8	339.9	20.5	1,847.1	73.9	c	7.4
1972	3,141.4	519.1	31.9	2,528.0	53.8	c	8.6
1973	3,366.1	417.8	41.5	2,779.5	113.7	c	13.6
1974	2,642.4	332.3	39.1	2,114.2	149.2	c	7.6
1975	2,666.9	277.6	35.3	2,256.4	86.4	c	11.2
1976	3,250.0	362.5	48.6	2,675.1	150.5	c	13.3
1977	3,069.7	350.0	46.0	2,460.1	203.3	c	10.3
1978	3,409.2	368.5	57.5	2,646.1	321.8	c	15.3
1979	3,897.0	407.6	65.4	3,149.1	258.9	c	16.0
1980	3,260.9	317.8	90.4	2,544.2	201.7	87.8	19.0
1981	2,534.2	247.4	56.1	1,774.2	151.6	222.4	82.5
1982	3,208.1	302.5	47.8	1,978.7	277.7	547.0	54.4
1983	3,502.1	347.1	57.4	2,028.0	320.9	723.2	25.6
1984	3,494.9	421.2	52.6	1,759.8	289.1	866.6	105.7
1985	3,843.2	445.4	39.1	1,899.1	327.5	1,069.0	63.1
1986	3,655.6	450.0	76.7	2,089.4	364.5	615.4	59.6
1987	4,109.2	421.4	62.6	2,397.2	492.5	579.3	156.3
1988	4,798.1	378.9	78.8	2,415.6	612.0	1,121.4	191.4
1989	4,706.0	272.7	93.6	2,992.7	761.5	454.3	131.2
1990	4,213.1	395.8	69.2	2,626.2	619.2	361.9	140.8
1991	3,761.0	423.6	53.4	2,126.8	624.7	371.8	160.8
1992	3,278.8	415.0	44.2	2,043.0	416.6	236.9	123.1
1993	2,876.4	389.9	41.1	1,881.9	303.1	131.3	129.1
1994	2,683.6	435.1	56.8	1,821.6	206.1	75.0	89.0
1995	2,820.0	715.7	47.5	1,728.3	235.2	20.2	73.1
1996	2,635.7	518.0	32.1	1,807.5	200.3	15.9	61.9
1997	2,398.0	711.0	42.1	1,347.7	205.6	18.2	73.4
1998	1,977.8	778.5	47.1	1,004.0	61.9	17.8	68.5
1999	2,038.2	787.8	48.2	998.3	130.1	7.8	66.1

^aU.S. International Trade Commission (69). Data may not add to totals because of rounding.

^bEuropean Union includes Austria, Belgium–Luxembourg, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Portugal, Spain, Sweden, and UK.

^cFewer than 50,000 board feet.

Table 20—Average stumpage prices for sawtimber sold from National Forests, by selected species, 1965–1999 (dollars per thousand board feet)^a

Year	Softwoods								Hardwoods					
	Douglas-fir ^b		Southern pine ^c		Ponderosa pine ^d		Western hemlock ^e		All eastern hardwoods ^f		Oak white, red, and black		Sugar maple ^g	
	Current dollars	1992 dollars	Current dollars	1992 dollars	Current dollars	1992 dollars	Current dollars	1992 dollars	Current dollars	1992 dollars	Current dollars	1992 dollars	Current dollars	1992 dollars
1965	42.6	154.3	31.7	114.9	19.8	71.7	19.1	69.2	25.0	90.6	21.3	77.2	—	—
1966	50.0	176.1	38.6	135.9	19.8	69.7	20.5	72.2	29.3	103.2	23.2	81.7	—	—
1967	41.7	146.3	38.3	134.4	22.2	77.9	21.8	76.5	27.0	94.7	16.8	58.9	—	—
1968	61.2	209.6	42.2	144.5	30.2	103.4	35.6	121.9	23.6	80.8	17.3	59.2	—	—
1969	82.2	270.4	51.7	170.1	71.0	233.6	45.1	148.4	30.2	99.3	28.2	92.8	—	—
1970	41.9	133.0	44.1	140.0	32.1	101.9	20.5	65.1	26.9	85.4	26.6	84.4	—	—
1971	49.0	150.8	52.2	160.6	37.6	115.7	20.6	63.4	24.6	75.7	21.2	65.2	—	—
1972	71.7	210.9	65.6	192.9	65.8	193.5	49.0	144.1	34.3	100.9	26.6	78.2	—	—
1973	138.1	359.6	93.4	243.2	92.3	240.4	99.2	258.3	46.0	119.8	43.6	113.5	93.6	243.8
1974	202.4	443.9	76.2	167.1	100.6	220.6	110.8	243.0	45.9	100.7	54.7	120.0	75.9	166.4
1975	169.5	340.4	57.0	114.5	71.2	143.0	68.8	138.2	33.9	68.1	29.7	59.6	42.1	84.5
1976	176.2	338.2	87.0	167.0	101.8	195.4	79.7	153.0	34.9	67.0	43.4	83.3	27.7	53.2
1977	225.9	407.8	100.3	181.0	131.4	237.2	89.3	161.2	37.9	68.4	60.0	108.3	47.4	85.6
1978	250.3	420.0	134.5	225.7	164.7	276.3	113.6	190.6	41.1	69.0	59.2	99.3	60.5	101.5
1979	394.4	586.9	155.2	231.0	239.0	355.7	200.8	298.8	46.8	69.6	68.8	102.4	68.9	102.5
1980	432.2	564.2	155.4	202.9	206.1	269.1	212.7	277.7	52.4	68.4	65.6	85.6	70.1	91.5
1981	350.2	418.9	172.0	205.7	195.2	233.5	163.4	195.5	50.9	60.9	63.2	75.6	67.8	81.1
1982	118.2	138.6	127.2	149.1	66.9	78.4	44.5	52.2	56.4	66.1	70.8	83.0	71.1	83.4
1983	161.6	187.0	140.6	162.7	104.0	120.4	62.2	72.0	60.1	69.6	87.9	101.7	55.1	63.8
1984	132.9	150.2	139.4	157.5	122.7	138.6	61.8	69.8	90.1	101.8	145.0	163.8	80.5	91.0
1985	126.2	143.2	90.7	103.0	101.4	115.1	50.5	57.3	65.4	74.2	94.5	107.3	70.0	79.5
1986	160.7	188.0	103.6	121.2	156.6	183.2	74.7	87.4	69.9	81.8	108.1	126.4	66.2	77.4
1987	190.2	216.9	135.7	154.7	209.3	238.7	105.4	120.2	88.1	100.5	146.8	167.4	80.5	91.8
1988	256.0	280.7	141.9	155.6	182.1	199.7	162.9	178.6	151.3	165.9	146.3	160.4	108.4	118.9
1989	389.8	407.3	313.4	327.5	292.0	305.1	223.3	233.3	135.8	141.9	178.9	186.9	128.6	134.4
1990	466.4	470.2	126.7	127.7	252.2	254.2	203.0	204.6	146.1	147.3	188.3	189.8	135.3	136.4
1991	395.0	397.4	166.1	167.1	237.6	239.0	164.1	165.1	160.1	161.1	163.6	164.6	120.7	121.4
1992	477.2	477.2	198.4	198.4	292.3	292.3	164.6	164.6	166.6	166.6	211.2	211.2	144.6	144.6
1993	317.8	313.1	217.2	214.0	535.2	527.3	363.7	358.3	264.1	260.2	194.6	191.7	219.5	216.3
1994	652.4	635.2	265.9	258.9	291.4	283.7	334.8	326.0	352.1	342.8	317.4	309.1	313.4	305.2
1995	453.5	426.3	248.5	233.5	149.9	140.9	297.1	279.2	313.9	295.0	296.6	278.8	285.6	268.4
1996	453.0	415.6	251.1	230.3	270.0	247.7	289.3	265.4	312.6	286.8	264.4	242.6	213.2	195.6
1997	331.4	304.6	307.3	282.4	270.2	248.3	211.3	194.2	286.9	263.7	264.5	243.1	357.1	328.2
1998	254.2	230.3	287.8	260.7	204.9	185.6	161.4	146.2	240.9	218.2	270.2	244.8	394.8	357.7
1999	314.7	261.7	268.5	223.3	181.0	150.5	95.7	79.6	195.1	162.3	317.4	263.9	448.1	372.6

^aU.S. Department of Agriculture, Forest Service (34,40). Forest Service National Forest prices in this table are for timber sold on a Scribner Decimal C log rule basis, except in the Northeastern states where International 1/4-in. log rule is used. Prices include KV payments and exclude timber sold by land exchanges and from land utilization project lands. Data for the years 1965 to 1983 are statistical high bid prices. Beginning in 1984, data are high bid prices that include specified road costs. 1992 dollars derived by dividing the price in current dollars by the Bureau of Labor Statistics producer price index for all commodities (1992 = 100).

^bWestern Washington and western Oregon.

^cSouthern Region.

^dPacific Southwest Region (prior to January 1979 called the California Region); Includes Jeffrey pine.

^ePacific Northwest Region.

^fEastern and Southern Regions.

^gEastern Region.

Table 21—Volume and value of sawtimber stumpage sold from National Forests, by selected species and region, 1999^a

Species and region ^b	Volume ^c	Value ^d	Average price per thousand board feet	Species and region	Volume	Value	Average price per thousand board feet
	<i>Thousand board feet</i>	<i>Thousand dollars</i>	<i>Dollars</i>		<i>Thousand board feet</i>	<i>Thousand dollars</i>	<i>Dollars</i>
SOFTWOODS, WESTERN				SOFTWOODS, WESTERN—con.			
Cedar				Fir—con.			
Alaska cedar				True fir			
Pacific Northwest	0	0.0	0.00	Rocky Mountain	5,180	181.4	35.02
Alaska	3,313	742.8	224.20	Southwestern	3,191	431.2	135.13
Total	3,313	742.8	224.20	Pacific Southwest	85,649	11,067.1	129.21
Incense cedar				Pacific Northwest			
Pacific Southwest	18,334	3,598.5	196.28	Total	94,597	11,687.5	123.55
Pacific Northwest	18	4.8	274.29	Hemlock			
Total	18,352	3,603.3	196.35	Mountain hemlock			
Port-Orford-cedar				Pacific Northwest			
Pacific Southwest	1	0.1	114.66	Western hemlock			
Western redcedar				Northern			
Northern	3,383	932.1	275.52	Pacific Northwest	9,396	899.0	95.68
Pacific Northwest	907	292.4	322.56	Alaska	31,916	162.7	5.10
Alaska	3,390	258.8	76.34	Total	42,102	1,158.4	27.51
Total	7,680	1,483.3	193.15	Western larch			
Douglas-fir				Northern			
East side				Pacific Northwest			
Northern	53,970	10,582.7	196.08	Total	9,691	1,532.3	158.11
Rocky Mountain	2,433	132.7	54.54	Pine			
Southwestern	1,187	53.2	44.81	Lodgepole pine			
Intermountain	15,195	2,060.5	135.60	Northern			
Pacific Northwest	103,952	22,212.9	213.68	Rocky Mountain	14,308	1,819.0	127.13
Total	176,738	35,042.0	198.27	Intermountain	13,796	1,817.0	131.70
West side				Pacific Southwest			
Pacific Southwest	34,550	5,057.0	146.37	Pacific Northwest	764	60.2	78.80
Pacific Northwest	28,672	9,022.5	314.68	Total	114,121	15,863.6	139.01
Total	63,222	14,079.5	222.70	Ponderosa pine ^e			
Fir				Northern			
Grand fir				Rocky Mountain			
Northern	12,822	2,506.4	195.48	Southwestern	15,953	1,679.3	105.27
Intermountain	621	93.3	150.24	Intermountain	5,494	879.5	160.08
Pacific Northwest	3,977	583.9	146.84	Pacific Southwest	52,793	9,557.0	181.03
Total	17,420	3,183.6	182.76	Pacific Northwest	58,717	7,755.3	132.08
Noble fir				Total			
Pacific Northwest	1,678	424.6	253.04	215,511	31,271.5	145.10	
Shasta fir				Sugar pine			
Pacific Northwest	4,516	1,074.1	237.84	Pacific Southwest	6,632	1,521.5	229.42
Subalpine fir				Pacific Northwest			
Northern	837	65.2	77.90	Total	6,816	1,544.4	226.58
Rocky Mountain	0	0.0	0.00	Western white pine			
Southwestern	0	0.0	0.00	Northern			
Intermountain	1,191	97.8	82.12	Northern	1,025	223.1	217.66
Pacific Northwest	29	1.2	41.38	Southwestern	0	0.0	0.00
Total	2,057	164.2	79.83	Pacific Southwest	2	0.3	200.00
White fir				Pacific Northwest			
Rocky Mountain	742	20.9	28.17	Total	1,876	460.5	245.53
Pacific Northwest	43,461	5,387.5	123.96	Spruce			
Total	44,203	5,408.4	122.35	Black, red, and white spruce			
				Alaska	226	4.7	20.81

Table 21—Volume and value of sawtimber stumpage sold from National Forests, by selected species and region, 1999^a—con.

Species and region ^b	Volume ^c <i>Thousand board feet</i>	Value ^d <i>Thousand dollars</i>	Average	Species and region	Volume <i>Thousand board feet</i>	Value <i>Thousand dollars</i>	Average
			price per thousand board feet <i>Dollars</i>				price per thousand board feet <i>Dollars</i>
SOFTWOODS, WESTERN—con.				SOFTWOODS, EASTERN—con.			
Spruce—con.				Spruce			
Engelmann spruce				Black, red, and white spruce			
Northern	1,176	251.8	214.10	Eastern	1,915	194.9	101.78
Rocky Mountain	9,285	737.1	79.39	Softwoods not specified			
Southwestern	1,211	206.9	170.85	by species			
Intermountain	6,856	1,312.3	191.41	Southern	231	7.7	33.33
Pacific Northwest	74	3.0	40.54	Eastern	490	31.0	63.27
Total	18,602	2,511.1	134.99	Total	721	38.7	53.68
Sitka spruce				Total, eastern softwoods			
Pacific Northwest	204	20.9	102.45	Total, softwoods	1,136,036	191,100.1	168.22
Alaska	15,467	403.7	26.10	HARDWOODS, WESTERN			
Total	15,671	424.6	27.09	Aspen			
Softwoods not specified				Rocky Mountain			
by species				Intermountain			
Rocky Mountain	3,082	113.4	36.79	Total	3,513	63.7	18.13
Intermountain	1,097	96.4	87.88	Hardwoods not specified			
Pacific Southwest	39,240	1,716.6	43.75	by species			
Pacific Northwest	21,159	4,831.0	228.32	Rocky Mountain	334	11.0	32.93
Total	64,578	6,757.4	104.64	Pacific Southwest	123	0.1	0.81
Total, western softwoods	923,407	138,465	3,476	Pacific Northwest	3	0.5	166.67
SOFTWOODS, EASTERN				Total			
Fir				Total, western hardwoods			
True fir				HARDWOODS, EASTERN			
Eastern				Ash			
Eastern	1	0.0	0.00	Southern			
Hemlock				Eastern			
Eastern hemlock				Total			
Southern	99	10.7	108.08	Ash	817	217.5	266.33
Eastern	46	1.2	26.09	Aspen			
Total	145	11.9	82.07	Eastern			
Pine				Basswood			
Eastern white pine				Southern			
Southern	6,543	988.5	151.07	Eastern			
Eastern	547	61.9	113.16	Total			
Total	7,090	1,050.4	148.15	Basswood	150	16.4	109.33
Jack pine				Total			
Eastern				Beech			
Eastern	5,769	423.4	73.39	Eastern			
Red pine				Birch			
Eastern				Paper birch			
Eastern	13,415	2,258.8	168.38	Eastern			
Red and eastern white pine				Yellow birch			
Eastern				Eastern			
Eastern	1,980	346.2	174.85	Eastern	720	179.5	249.31
Southern pine				Cherry			
Southern				Black cherry			
Southern	176,995	47,527.1	268.52	Southern			
Eastern	1,621	246.4	152.04	Eastern			
Total	178,616	47,773.5	267.47	Total			
Not specified				Southern			
Northern				Eastern			
Northern	0	0.0	0.00	Total			
Southwestern				Southern			
Southwestern	0	0.0	0.00	Eastern			
Eastern				Total			
Eastern	2,977	537.5	180.55	Southern			
Total	2,977	537.5	180.55	Eastern			
				Total			
				Southern			
				Eastern			
				Total			

Table 21—Volume and value of sawtimber stumpage sold from National Forests, by selected species and region, 1999^a—con.

Species and region ^b	Volume ^c <i>Thousand board feet</i>	Value ^d <i>Thousand dollars</i>	Average price per thousand board feet <i>Dollars</i>	Species and region	Volume <i>Thousand board feet</i>	Value <i>Thousand dollars</i>	Average price per thousand board feet <i>Dollars</i>
HARDWOODS, EASTERN—con.				HARDWOODS, EASTERN—con.			
Maple				White oak:			
Red maple				Southern	3,274	665.0	203.12
Southern	5	0.9	178.00	Eastern	238	55.8	234.45
Eastern	1,510	179.8	119.07	Total	3,512	720.8	205.24
Total	1,515	180.7	119.27	Not specified:			
Sugar maple				Southern	6,664	1,203.1	180.54
Southern	0	0.0	0.00	Eastern	19,959	3,510.6	175.89
Eastern	3,913	1,753.4	448.10	Total	26,623	4,713.7	177.05
Total	3,913	1,753.4	448.10	Poplar:			
Not specified				Yellow poplar:			
Southern	168	24.0	142.86	Southern	1,405	265.8	189.18
Eastern	0	0.0	0.00	Eastern	1,385	208.8	150.76
Total	168	24.0	142.86	Total	4,742	697.3	147.04
Oak:				Yellow poplar, basswood and cucumber:			
Chestnut oak:				Southern	5,106	665.6	130.36
Southern	923	137.8	149.30	Hardwoods not specified by species:			
Eastern	779	101.9	130.81	Southern	11,355	833.9	73.44
Total	1,702	239.7	140.83	Eastern	11,506	1,882.8	163.64
Red and black oak:				Total	22,217	2,248.2	101.19
Southern	7,565	2,528.6	334.25	Total, eastern hardwoods	84,159	16,419.8	195.11
Eastern	1,821	843.9	463.43	Total, hardwoods	88,132	16,495.1	187.16
Total	9,386	3,372.5	359.31	Total, softwoods and hardwoods	1,224,167	207,595.2	169.58

^aU.S. Department of Agriculture, Forest Service (40); Data may not add to totals because of rounding; The stumpage prices shown in this table do not necessarily indicate values for any specific tract of public or private timber, and prices received for individual tracts may vary widely because of differences in timber quality, degree of competition timber accessibility, variations in special costs, methods of allocating overhead costs by species, or other factors; Excludes pulpwood and miscellaneous products and also excludes timber sold by land exchanges and from land in utilization projects.

^bAdministrative regions of the Forest Service.

^cScribner Decimal C log rule except in the Northeastern states timber where international 1/4-in. log rule is used.

^dHigh bid prices, which include specified road costs KV payments.

^eIncludes small amounts of Jeffrey pine.

Table 22—Average stumpage prices for sawtimber sold from private lands in Louisiana, by selected species, 1965–1999 (dollars per thousand board feet, Doyle log scale)^a

Year	Southern pine		Ash		Gums		Oaks	
	Current dollars	1992 dollars ^b	Current dollars	1992 dollars	Current dollars	1992 dollars	Current dollars	1992 dollars
1965	28.40	102.90	22.60	81.88	17.50	63.41	16.20	58.70
1966	34.30	120.77	23.00	49.46	19.50	68.66	17.90	63.03
1967	36.80	129.12	23.30	50.11	19.50	68.42	17.70	62.11
1968	40.70	139.38	25.60	52.03	20.00	68.49	19.00	65.07
1969	50.10	164.80	31.80	60.00	22.60	74.34	21.50	70.72
1970	46.40	147.30	28.10	53.63	21.00	66.67	20.40	64.76
1971	56.00	172.31	26.60	48.63	21.90	67.38	20.80	64.00
1972	66.30	195.00	28.50	47.98	23.80	70.00	23.10	67.94
1973	84.20	219.27	41.50	65.25	32.30	84.11	30.20	78.65
1974	90.90	199.34	48.20	76.27	36.80	80.70	35.50	77.85
1975	81.60	163.86	45.70	83.24	35.40	71.08	34.10	68.47
1976	101.10	194.05	45.80	73.40	37.20	71.40	37.30	71.59
1977	119.90	216.43	49.70	76.70	39.70	71.66	40.60	73.29
1978	156.20	262.08	59.40	85.84	46.20	77.52	46.50	78.02
1979	211.50	314.73	74.20	103.49	51.90	77.23	53.40	79.46
1980	189.20	247.00	70.20	98.04	53.10	69.32	55.50	72.45
1981	185.00	221.29	70.20	96.56	52.00	62.20	55.60	66.51
1982	144.60	169.52	71.10	100.42	53.70	62.95	57.50	67.41
1983	160.70	186.00	103.80	133.76	67.30	77.89	71.60	82.87
1984	158.80	179.44	109.00	132.44	68.00	76.84	72.70	82.15
1985	118.20	134.17	88.30	106.90	57.30	65.04	62.50	70.94
1986	112.30	131.35	87.90	99.55	53.70	62.81	64.70	75.67
1987	147.30	167.96	c	c	59.30	67.62	79.00	90.08
1988	161.00	176.54	134.20	147.15	62.10	68.09	101.20	110.96
1989	169.10	176.70	133.80	139.81	65.30	68.23	98.30	102.72
1990	182.60	184.07	141.10	142.24	81.90	82.56	106.50	107.36
1991	194.30	195.47	123.60	124.35	67.60	68.01	89.00	89.54
1992	222.60	222.60	289.30	289.30	78.10	78.10	136.90	136.90
1993	273.30	269.26	c	c	c	c	153.00	150.74
1994	330.50	321.81	c	c	c	c	205.00	199.61
1995	394.75	371.01	c	c	c	c	252.75	237.55
1996	338.75	310.78	c	c	c	c	203.00	186.24
1997	455.25	418.43	c	c	c	c	289.75	266.31
1998	433.75	392.96	c	c	c	c	276.50	250.49
1999	394.25	327.87	c	c	c	c	285.00	237.02

^aLouisiana Department of Agriculture, Office of Marketing (18).

^bDerived by dividing the price in current dollars by the Bureau of Labor Statistics producer price index for all commodities (1992 = 100).

^cNot available.

Table 23—Veneer log production,^a by softwoods and hardwoods, 1965–1999 (million board feet, local log rule)^b

Year	All species ^c	Softwoods ^d	Hardwoods ^e
1965	6,275	5,425	850
1966	6,315	5,610	705
1967	6,305	5,610	695
1968	6,880	6,150	730
1969	6,430	5,750	680
1970	6,250	5,595	655
1971	7,215	6,515	700
1972	7,810	7,070	740
1973	7,750	7,090	660
1974	6,560	6,045	515
1975	6,535	6,145	390
1976	7,415	7,010	405
1977	7,805	7,360	445
1978	8,005	7,560	445
1979	7,515	7,085	430
1980	6,430	6,040	390
1981	6,460	6,095	365
1982	6,230	5,885	345
1983	7,480	7,110	370
1984	7,685	7,335	350
1985	7,810	7,510	300
1986	8,285	7,960	325
1987	9,075	8,700	375
1988	8,950	8,580	370
1989	8,495	8,119	376
1990	8,331	7,942	389
1991	7,489	7,081	408
1992	7,800	7,339	461
1993	7,800	7,333	467
1994	7,958	7,456	502
1995	10,685	10,165	520
1996 ^f	10,157	9,842	315
1997 ^f	10,367	9,967	400
1998 ^f	10,367	9,967	400
1999 ^f	10,367	9,967	400

^aIncludes small volumes of imported logs.

^bData may not add to totals because of rounding.

^cU.S. Department of Agriculture, Forest Service (41).

^dU.S. Department of Commerce, Bureau of the Census (54).

^eU.S. Department of Commerce, Bureau of the Census (44).

^fPreliminary.

Table 24—Pulpwood consumption, production, imports, exports, and equivalent wood volume of imports and exports of paper, board, and wood pulp, 1965–1999 (thousand cords)^a

Year	U.S. total consumption	Consumption in U.S. mills							Paper, board, and wood pulp (pulpwood equivalent)					
		Total	Domestic production					Net imports	Net					
			Total	Roundwood		Residue ^b	Imports		Exports	Net				
				Total	Softwoods					Hardwoods	Imports	Exports		
1965	63,519	54,034	52,884	39,129	28,201	10,928	13,755	1,150	1,305	155	9,485	13,487	4,001	
1966	67,429	57,399	56,294	41,809	29,900	11,910	14,484	1,105	1,385	280	10,030	14,367	4,337	
1967	67,377	58,419	57,469	41,441	29,967	11,474	16,028	950	1,590	640	8,958	13,789	4,831	
1968	69,214	60,969	60,734	43,535	31,690	11,845	17,199	235	1,425	1,190	8,245	13,643	5,398	
1969	73,428	64,577	65,257	47,499	34,239	13,260	17,758	-680	980	1,660	8,851	14,956	6,105	
1970	73,308	66,732	67,577	49,467	37,212	12,255	18,110	-845	1,120	1,965	6,576	14,310	7,734	
1971	74,286	66,601	66,906	46,295	33,533	12,763	20,610	-305	1,225	1,530	7,685	14,375	6,690	
1972	75,685	68,068	69,023	45,311	31,784	13,527	23,712	-955	1,020	1,975	7,616	14,263	6,646	
1973	80,294	71,421	72,891	46,269	31,496	14,773	26,622	-1,470	1,200	2,670	8,873	15,483	6,610	
1974	84,452	75,787	77,957	50,394	34,268	16,126	27,563	-2,170	965	3,135	8,665	17,057	8,392	
1975	69,231	63,941	65,821	41,029	29,035	11,993	24,792	-1,880	765	2,645	5,290	12,172	6,882	
1976	78,092	71,094	73,249	45,527	31,856	13,671	27,722	-2,155	1,115	3,270	6,998	14,019	7,021	
1977	80,486	72,952	74,972	44,538	31,022	13,516	30,434	-2,020	1,350	3,370	7,534	14,548	7,014	
1978	84,346	75,073	76,453	46,722	31,778	14,943	29,731	-1,380	1,675	3,055	9,272	16,205	6,933	
1979	87,651	78,680	81,065	50,699	35,389	15,310	30,366	-2,385	1,405	3,790	8,971	16,847	7,876	
1980	87,055	81,921	84,031	52,107	36,941	15,166	31,925	-2,110	1,590	3,700	5,134	16,256	11,122	
1981	86,814	81,003	82,468	51,390	35,685	15,704	31,079	-1,465	1,490	2,955	5,811	15,579	9,768	
1982	82,127	76,912	77,862	49,093	33,829	15,264	28,769	-950	1,405	2,355	5,215	14,302	9,087	
1983	91,044	84,504	84,829	51,612	33,413	18,199	33,217	-325	1,715	2,040	6,540	16,312	9,772	
1984	95,854	86,282	86,377	52,324	33,945	18,379	34,054	-95	1,825	1,920	9,572	18,697	9,125	
1985	95,325	85,380	86,600	52,698	33,097	19,602	33,901	-1,220	650	1,870	9,945	19,198	9,253	
1986	100,144	91,187	92,502	57,723	35,630	22,094	34,779	-1,315	630	1,945	8,957	19,974	11,017	
1987	102,445	93,005	94,590	58,538	37,172	21,367	36,052	-1,585	430	2,015	9,440	20,882	11,442	
1988	101,737	93,000	95,030	59,342	37,359	21,984	35,688	-2,030	735	2,765	8,737	20,779	12,042	
1989	100,276	92,615	93,831	59,924	37,755	22,169	33,907	-1,216	988	2,204	7,661	20,341	12,679	
1990	99,361	92,561	93,936	61,758	39,559	22,199	32,178	-1,376	917	2,293	6,801	19,847	13,046	
1991	95,483	91,925	93,246	62,701	40,213	22,488	30,545	-1,321	1,025	2,346	3,558	18,304	14,746	
1992	96,146	93,643	95,239	63,489	39,918	23,571	31,749	-1,596	857	2,453	2,503	18,451	15,947	
1993	96,089	90,996	92,759	62,122	37,621	24,501	30,637	-1,764	745	2,509	5,094	19,485	14,392	
1994	98,142	93,259	95,327	63,698	38,312	25,387	31,629	-2,068	544	2,612	4,883	19,965	15,082	
1995	101,568	97,272	99,258	68,455	40,778	27,677	30,803	-1,986	303	2,290	4,296	21,468	17,172	
1996	92,367	90,367	92,560	64,752	38,738	26,014	27,808	-2,193	334	2,527	1,999	18,411	16,412	
1997 ^c	87,336	84,674	87,400	56,703	35,205	21,498	30,697	-2,726	357	3,083	2,662	18,528	15,866	
1998	86,819	82,555	85,335	56,315	34,947	21,368	29,020	-2,780	231	3,011	4,264	17,915	13,651	
1999 ^d	86,766	79,972	82,912	53,222	32,464	20,758	29,690	-2,940	144	3,084	6,793	19,756	12,963	

^aU.S. Department of Commerce, Bureau of the Census (52,56,57); U.S. Department of Agriculture, Forest Service (17,36,37,38); American Pulpwood Association (12); American Forest and Paper Association (2, 4); U.S. International Trade Commission (69). Data may not add to totals because of rounding.

^bChips produced from roundwood and byproducts from primary processing plants, such as slabs, edgings, and veneer cores.

^cRevised.

^dPreliminary.

Table 25—Pulpwood production from softwoods and hardwoods, by region,^a 1965–1999 (million cords)^b

Year ^c	All sections			North			South			West		
	Total	Soft-woods	Hard-woods	Total	Soft-woods	Hard-woods	Total	Soft-woods	Hard-woods	Total	Soft-woods	Hard-woods
1965	52.9	40.1	12.8	9.0	4.1	4.9	31.2	23.8	7.4	12.7	12.2	0.5
1966	56.3	42.1	14.2	10.3	4.4	5.9	33.1	25.4	7.7	12.9	12.3	0.6
1967	57.5	43.6	13.9	10.3	4.5	5.8	33.6	25.9	7.7	13.6	13.2	0.4
1968	60.7	46.6	14.1	9.8	4.3	5.5	36.5	28.3	8.2	14.4	14.0	0.4
1969	65.3	48.8	16.5	10.3	4.1	6.2	40.0	30.2	9.8	15.0	14.5	0.5
1970	67.6	50.7	16.9	11.3	4.6	6.7	41.1	31.4	9.7	15.2	14.7	0.5
1971	66.9	50.3	16.6	10.5	4.0	6.5	41.1	31.5	9.6	15.3	14.8	0.5
1972	69.0	51.0	18.0	10.7	4.0	6.7	42.3	31.7	10.6	16.0	15.3	0.7
1973	72.9	52.7	20.2	12.8	4.6	8.2	43.4	32.1	11.3	16.7	16.0	0.7
1974	78.0	55.8	22.2	13.9	5.1	8.8	46.1	33.6	12.5	18.0	17.1	0.9
1975	65.8	50.1	15.7	10.4	4.2	6.2	40.7	31.7	9.0	14.7	14.2	0.5
1976	73.2	54.1	19.1	12.2	4.8	7.4	44.3	33.2	11.1	16.7	16.1	0.6
1977	75.0	55.7	19.3	12.5	4.9	7.6	45.2	34.2	11.0	17.3	16.6	0.7
1978	76.5	55.3	21.2	13.0	5.2	7.8	47.7	35.0	12.7	15.8	15.1	0.7
1979	81.1	58.3	22.8	14.0	5.5	8.5	50.2	36.7	13.5	16.9	16.1	0.8
1980	84.0	60.6	23.4	14.3	5.7	8.6	50.7	36.9	13.8	19.0	18.0	1.0
1981	82.5	59.6	22.9	13.9	5.6	8.3	51.6	37.7	13.9	17.0	16.3	0.7
1982	77.9	56.3	21.6	13.1	5.9	7.2	50.2	36.6	13.6	14.6	13.8	0.8
1983	84.8	59.9	24.9	14.4	5.6	8.8	53.9	38.5	15.4	16.5	15.8	0.7
1984	86.4	61.1	25.3	14.7	6.0	8.7	54.4	38.7	15.7	17.3	16.4	0.9
1985	86.6	60.6	26.0	14.6	5.8	8.8	56.2	39.9	16.3	15.8	14.9	0.9
1986	92.5	64.0	28.5	15.2	5.7	9.5	59.9	42.0	17.9	17.4	16.3	1.1
1987	94.6	65.6	29.0	15.4	5.8	9.6	61.5	43.2	18.3	17.7	16.6	1.1
1988	95.0	65.7	29.3	14.8	5.4	9.4	61.8	42.9	18.9	18.4	17.4	1.0
1989	93.8	64.3	29.5	14.0	5.1	8.9	62.8	43.3	19.5	17.0	15.9	1.1
1990	93.9	63.1	30.8	14.0	5.0	9.0	65.4	44.6	20.8	14.5	13.5	1.0
1991	93.2	62.4	30.8	14.2	5.2	9.0	66.8	45.8	21.0	12.2	11.4	0.8
1992	95.2	59.8	35.4	13.9	5.0	8.9	70.9	45.0	25.9	10.4	9.8	0.6
1993	92.8	55.7	37.1	15.0	5.6	9.4	71.9	44.8	27.1	5.9	5.3	0.6
1994	95.3	56.1	39.2	15.4	5.6	9.8	74.7	45.8	28.9	5.2	4.7	0.5
1995	99.3	60.2	39.1	16.8	7.2	9.6	78.3	49.6	28.7	4.2	3.4	0.8
1996	92.6	58.5	34.1	15.2	6.8	8.4	73.9	48.9	25.0	3.5	2.8	0.7
1997	87.4	59.9	27.5	14.9	7.5	7.4	69.1	49.7	19.5	3.4	2.7	0.6
1998	85.3	57.5	27.8	14.7	6.9	7.8	67.4	48.1	19.3	3.3	2.6	0.7
1999	82.9	56.0	26.9	14.3	6.8	7.5	65.5	46.7	18.8	3.1	2.5	0.7

^aThe West includes Alaska, Arizona, California, Idaho, Montana, Oregon, and Washington.

The South includes Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia.

The North includes Illinois, Indiana, Iowa, Maine, Michigan, Minnesota, Missouri, New York, Ohio, Pennsylvania, and Wisconsin.

^bAmerican Pulpwood Association (12);

Data may not add to totals because of rounding. All numbers were revised.

^cData for the years 1989 to present are domestic receipts including chips at pulp mills.

Table 26—Pulpwood stumpage prices of Louisiana and northern New Hampshire, 1965–1999 (dollars per cord)

Year	Louisiana ^a				Northern New Hampshire ^b			
	Southern pine		Hardwoods		Hemlock and pine ^c		Spruce and fir	
	<i>Current dollars</i>	<i>1992 dollars^d</i>	<i>Current dollars</i>	<i>1992 dollars</i>	<i>Current dollars</i>	<i>1992 dollars</i>	<i>Current dollars</i>	<i>1992 dollars</i>
1965	4.40	15.94	1.60	5.80	1.75	6.34	4.50	16.30
1966	4.55	16.02	1.70	5.99	2.60	9.15	5.25	18.49
1967	4.60	16.14	1.75	6.14	2.10	7.37	5.25	18.42
1968	4.65	15.92	1.85	6.34	2.00	6.85	5.25	17.98
1969	4.65	15.30	1.90	6.25	1.85	6.09	4.50	14.80
1970	4.70	14.92	1.95	6.19	1.75	5.56	4.50	14.29
1971	4.75	14.62	N/A	N/A	1.75	5.38	4.50	13.85
1972	4.75	13.97	2.10	6.18	2.00	5.88	4.50	13.24
1973	5.20	13.54	2.40	6.25	2.00	5.21	4.50	11.72
1974	6.05	13.27	2.70	5.92	2.65	5.81	5.50	12.06
1975	6.40	12.85	2.80	5.62	2.65	5.32	6.00	12.05
1976	6.70	12.86	2.80	5.37	2.65	5.09	6.50	12.48
1977	7.10	12.82	2.95	5.32	2.65	4.78	6.50	11.73
1978	7.80	13.09	3.15	5.29	2.90	4.87	7.00	11.74
1979	9.30	13.84	3.65	5.43	3.75	5.58	8.00	11.90
1980	10.30	13.45	4.10	5.35	5.00	6.53	8.00	10.44
1981	12.65	15.13	4.30	5.14	5.00	5.98	8.00	9.57
1982	14.30	16.76	4.50	5.28	5.00	5.86	8.00	9.38
1983	14.85	17.19	4.80	5.56	5.00	5.79	8.50	9.84
1984	17.65	19.94	4.35	4.92	5.00	5.65	8.50	9.60
1985	15.20	17.25	4.40	4.99	4.00	4.54	9.00	10.22
1986	12.05	14.09	4.30	5.03	3.75	4.39	9.00	10.53
1987	13.85	15.79	5.35	6.10	3.75	4.28	9.00	10.26
1988	15.95	17.49	5.20	5.70	3.50	3.84	10.00	10.96
1989	18.33	19.15	5.54	5.79	4.00	4.18	11.00	11.49
1990	17.88	18.02	5.45	5.49	6.00	6.05	12.50	12.60
1991	20.80	20.93	8.19	8.24	6.00	6.04	14.00	14.08
1992	23.50	23.50	7.84	7.84	5.75	5.75	11.75	11.75
1993	25.07	24.70	9.77	9.63	6.00	5.91	16.50	16.26
1994	23.51	22.89	10.12	9.85	11.50	11.20	12.00	10.96
1995	24.35	22.89	10.40	9.77	N/A	N/A	N/A	N/A
1996	23.84	21.87	12.63	11.59	N/A	N/A	N/A	N/A
1997	23.95	22.01	15.05	13.83	N/A	N/A	N/A	N/A
1998	29.24	26.49	17.06	15.45	N/A	N/A	N/A	N/A
1999	26.28	21.85	13.75	11.43	22.27	18.52	12.50	10.40

^aLouisiana Department of Agriculture, Office of Marketing (18);

^bNew Hampshire University, Cooperative Extension Service, and New Hampshire Department of Resources and Economic Development (23).

^cIncludes tamarack.

^dDerived by dividing the price in current dollars by the Bureau of Labor Statistics producers price index for all commodities (1992 = 100).

Table 27—Pulpwood prices of Louisiana and northern New Hampshire, 1965–1999
(dollars per standard cord, including bark)^a

Year	Louisiana ^b				Northern New Hampshire ^c					
	Southern pine		Hardwoods		Hemlock and pine ^d		Spruce and fir		Hardwoods	
	<i>Current dollars</i>	<i>1992 dollars^e</i>	<i>Current dollars</i>	<i>1992 dollars</i>	<i>Current dollars</i>	<i>1992 dollars</i>	<i>Current dollars</i>	<i>1992 dollars</i>	<i>Current dollars</i>	<i>1992 dollars</i>
1965	15.70	56.88	13.65	49.46	16.85	61.05	21.00	76.09	16.50	59.78
1966	16.50	58.10	14.80	52.11	17.75	62.50	22.00	77.46	17.50	61.62
1967	16.50	57.89	14.85	52.11	20.25	71.05	22.40	78.60	17.50	61.40
1968	17.00	58.22	16.30	55.82	19.55	66.95	22.15	75.86	N/A	N/A
1969	17.75	58.39	17.40	57.24	19.45	63.98	23.20	76.32	18.90	62.17
1970	17.75	56.35	17.45	55.40	19.50	61.90	23.40	74.29	20.00	63.49
1971	N/A	N/A	N/A	N/A	19.50	60.00	23.40	72.00	20.25	62.31
1972	19.25	56.62	19.00	55.88	19.25	56.62	23.75	69.85	22.00	64.71
1973	22.50	58.59	22.00	57.29	20.40	53.13	25.50	66.41	23.50	61.20
1974	28.30	62.06	24.95	54.71	21.25	46.60	30.00	65.79	26.50	58.11
1975	29.25	58.73	26.20	52.61	25.15	50.50	30.50	61.24	28.50	57.23
1976	30.45	58.45	26.10	50.10	30.40	58.35	31.50	60.46	31.65	60.75
1977	31.65	57.13	27.20	49.10	32.50	58.66	36.50	65.88	33.00	59.57
1978	34.55	57.97	28.30	47.48	34.50	57.89	39.00	65.44	35.00	58.72
1979	38.95	57.96	32.05	47.69	36.65	54.54	44.00	65.48	37.00	55.06
1980	41.45	54.11	33.60	43.86	36.65	47.85	46.00	60.05	41.50	54.18
1981	44.20	52.87	34.20	40.91	41.50	49.64	49.00	58.61	44.00	52.63
1982	46.95	55.04	35.25	41.32	41.50	48.65	49.00	57.44	44.00	51.58
1983	47.60	55.09	35.30	40.86	41.50	48.03	49.00	56.71	46.50	53.82
1984	42.75	48.31	N/A	N/A	41.50	46.89	49.00	55.37	47.50	53.67
1985	49.20	55.85	37.50	42.57	41.50	47.11	49.00	55.62	46.50	52.78
1986	48.10	56.26	35.40	41.40	41.50	48.54	49.50	57.89	47.00	54.97
1987	50.65	57.75	45.35	51.71	41.50	47.32	49.50	56.44	47.00	53.59
1988	52.25	57.29	46.85	51.37	41.50	45.50	50.50	55.37	47.50	52.08
1989	55.19	57.67	46.49	48.58	41.50	43.36	50.50	52.77	51.00	53.29
1990	55.64	56.09	47.86	48.25	48.50	48.89	56.75	57.21	50.75	51.16
1991	61.04	61.41	52.37	52.69	50.00	50.30	66.75	67.15	50.75	51.06
1992	64.11	64.11	46.85	46.85	47.00	47.00	66.00	66.00	49.50	49.50
1993	66.15	65.17	51.54	50.78	49.00	48.28	65.00	64.04	49.50	48.77
1994	57.55	56.04	55.23	53.78	65.50	63.78	44.00	42.84	50.50	49.17
1995	67.93	63.84	73.06	68.67	N/A	N/A	N/A	N/A	N/A	N/A
1996	62.55	57.39	57.45	52.71	N/A	N/A	N/A	N/A	N/A	N/A
1997	72.30	66.45	70.19	64.51	N/A	N/A	N/A	N/A	N/A	N/A
1998	74.87	67.83	58.55	53.04	N/A	N/A	N/A	N/A	N/A	N/A
1999	64.61	53.73	53.24	44.28	49.77	41.39	27.50	22.87	26.59	22.11

^aAll numbers reflect the delivered timber price.

^bLouisiana Department of Agriculture, Office of Marketing (18); f.o.b. car.

^cNew Hampshire University, Cooperative Extension Service, and New Hampshire Department of Resources and Economic Development (23).

^dIncludes tamarack.

^eDerived by dividing price in current dollars by the Bureau of Labor Statistics producer price index for all commodities (1992 = 100).

Table 28—Lumber production, imports, exports, and consumption, by softwoods and hardwoods, 1965–1999^a

Year	Production			Imports			Exports			Consumption			Per capita consumption		
	Total	Soft-woods	Hard-woods	Total	Soft-woods	Hard-woods	Total	Soft-woods ^b	Hard-woods	Total	Soft-woods	Hard-woods	Total	Soft-woods	Hard-woods
	<i>Billion board feet</i>	<i>Billion board feet</i>	<i>Billion board feet</i>	<i>Billion board feet</i>	<i>Billion board feet</i>	<i>Billion board feet</i>	<i>Billion board feet</i>	<i>Billion board feet</i>	<i>Billion board feet</i>	<i>Billion board feet</i>	<i>Billion board feet</i>	<i>Billion board feet</i>	<i>Board feet</i>	<i>Board feet</i>	<i>Board feet</i>
1965	38.7	29.3	9.4	5.2	4.9	0.3	0.9	0.8	0.1	43.0	33.4	9.6	221	172	50
1966	38.6	28.8	9.8	5.2	4.8	0.4	1.1	0.9	0.2	42.7	32.7	10.0	217	167	51
1967	37.5	28.2	9.3	5.1	4.8	0.3	1.2	1.0	0.2	41.4	32.0	9.4	208	161	47
1968	38.0	29.3	8.7	6.1	5.8	0.3	1.1	1.0	0.1	43.0	34.1	8.9	214	170	45
1969	37.1	28.3	8.7	6.3	5.9	0.4	1.1	1.0	0.1	42.3	33.2	9.0	209	164	45
1970	35.9	27.5	8.3	6.1	5.8	0.3	1.2	1.1	0.1	40.8	32.2	8.5	199	157	42
1971	38.5	30.0	8.4	7.6	7.2	0.4	1.1	0.9	0.2	45.0	36.3	8.6	217	175	42
1972	39.5	31.0	8.5	9.4	9.0	0.4	1.4	1.2	0.2	47.5	38.8	8.7	226	185	41
1973	40.4	31.6	8.8	9.5	9.0	0.5	2.0	1.8	0.2	47.9	38.8	9.1	226	183	43
1974	36.2	27.7	8.4	7.2	6.8	0.4	1.8	1.6	0.2	41.6	32.9	8.6	194	154	40
1975	34.1	26.7	7.3	6.0	5.7	0.3	1.6	1.4	0.2	38.5	31.0	7.4	178	144	34
1976	37.7	29.7	8.0	8.3	8.0	0.3	1.8	1.6	0.2	44.2	36.1	8.1	203	166	37
1977	40.2	31.7	8.5	10.7	10.4	0.3	1.6	1.4	0.2	49.3	40.7	8.6	224	185	39
1978	41.0	32.1	9.0	12.3	11.9	0.4	1.8	1.4	0.4	51.5	42.6	9.0	231	191	40
1979	40.7	31.4	9.3	11.6	11.2	0.4	2.2	1.8	0.4	50.1	40.8	9.3	223	181	41
1980	35.4	26.2	9.2	9.9	9.6	0.3	2.5	2.0	0.5	42.8	33.8	9.0	188	149	39
1981	32.2	24.7	7.5	9.5	9.2	0.3	2.4	1.9	0.5	39.3	32.0	7.3	171	139	32
1982	31.8	23.8	8.0	9.0	8.8	0.2	2.0	1.6	0.4	38.8	31.0	7.8	167	133	34
1983	38.5	29.7	8.8	11.7	11.5	0.2	2.3	1.8	0.5	47.9	39.4	8.5	204	168	36
1984	41.3	31.2	10.1	13.0	12.7	0.3	2.1	1.6	0.5	52.1	42.3	9.8	220	179	42
1985	40.9	31.3	9.6	14.4	14.1	0.3	1.9	1.5	0.4	53.4	43.9	9.5	224	184	40
1986	45.8	35.3	10.5	14.1	13.8	0.3	2.4	1.9	0.5	57.4	47.2	10.2	239	196	43
1987	49.5	38.2	11.3	14.6	14.2	0.4	3.2	2.5	0.7	60.9	50.0	10.9	251	206	45
1988	49.9	38.1	11.7	13.8	13.5	0.3	4.5	3.3	1.2	59.2	48.3	10.9	242	197	44
1989	49.6	37.5	12.1	15.3	14.9	0.4	4.2	3.4	0.9	60.6	49.1	11.6	245	198	47
1990	48.1	35.8	12.3	13.1	12.9	0.3	3.8	2.9	0.9	57.4	45.7	11.7	230	183	47
1991	44.3	33.2	11.2	11.8	11.5	0.2	4.0	3.1	0.9	52.1	41.6	10.5	206	165	41
1992	45.9	34.5	11.4	13.5	13.2	0.3	3.6	2.6	1.0	55.8	45.1	10.7	219	177	42
1993	45.2	32.9	12.2	15.4	15.1	0.3	3.4	2.3	1.0	57.2	45.7	11.5	222	177	45
1994	46.5	34.1	12.4	16.6	16.2	0.4	3.3	2.2	1.1	59.8	48.2	11.7	230	185	45
1995	44.9	32.2	12.6	17.6	17.2	0.4	2.9	1.9	1.1	59.5	47.6	11.9	226	181	45
1996	45.8	33.3	12.5	18.4	18.0	0.4	2.9	1.8	1.1	61.3	49.5	11.8	231	186	44
1997	47.3	34.7	12.7	18.5	18.0	0.5	2.9	1.6	1.2	62.9	51.0	11.9	235	190	44
1998	48.6	34.7	13.9	19.0	18.5	0.5	2.2	1.1	1.1	65.4	52.0	13.4	242	192	50
1999	51.0	36.7	14.3	19.9	19.2	0.7	2.5	1.4	1.2	68.3	54.5	13.8	250	200	51

^aU.S. Department of Commerce, Bureau of the Census (47); American Forest and Paper Association (3); U.S. Forest Service (19);

Data may not add to totals because of rounding; Data has been revised.

^bIncludes small volumes of mixed species (not classified as softwoods or hardwoods).

Table 29—Lumber production, from softwoods and hardwoods by region,^a 1965–1999 (billion board feet)^b

Year	All regions			North			South			West ^c		
	Total	Soft-woods	Hard-woods	Total	Soft-woods	Hard-woods	Total	Soft-woods	Hard-woods	Total	Soft-woods	Hard-woods
1965	38.7	29.3	9.4	4.4	1.1	3.3	12.7	6.8	5.9	21.6	21.4	0.2
1966	38.6	28.8	9.8	4.5	1.1	3.4	12.9	6.7	6.2	21.2	21.0	0.2
1967	37.5	28.2	9.3	4.5	1.1	3.4	12.4	6.6	5.8	19.7	19.6	0.1
1968	38.0	29.3	8.7	4.5	1.1	3.4	12.2	7.0	5.2	21.3	21.2	0.1
1969	37.1	28.3	8.7	4.6	1.1	3.5	12.3	7.3	5.0	20.1	19.9	0.2
1970	35.9	27.5	8.3	4.4	1.0	3.4	12.0	7.2	4.8	19.4	19.3	0.1
1971	38.5	30.0	8.4	4.4	1.1	3.3	12.9	7.9	5.0	21.1	21.0	0.1
1972	39.5	31.0	8.5	4.4	1.1	3.3	13.0	8.0	5.0	22.1	21.9	0.2
1973	40.4	31.6	8.8	4.6	1.1	3.5	13.2	8.0	5.2	22.6	22.5	0.1
1974	36.2	27.7	8.4	4.4	1.1	3.3	11.9	7.0	4.9	19.8	19.6	0.2
1975	34.1	26.7	7.3	4.1	1.1	3.0	11.1	7.0	4.1	18.8	18.6	0.2
1976	37.7	29.7	8.0	6.2	1.8	4.5	16.5	13.4	3.1	28.8	28.6	0.2
1977	40.2	31.7	8.5	6.7	1.9	4.8	17.6	14.3	3.3	30.9	30.7	0.2
1978	41.0	32.1	9.0	6.9	1.9	5.0	17.9	14.4	3.5	31.7	31.5	0.2
1979	40.7	31.4	9.3	7.1	1.9	5.2	17.8	14.1	3.6	31.5	31.3	0.2
1980	35.4	26.2	9.2	6.7	1.6	5.1	15.4	11.8	3.6	26.5	26.2	0.3
1981	32.2	24.7	7.5	5.7	1.5	4.2	14.0	11.1	2.9	12.1	11.8	0.3
1982	31.8	23.8	8.0	3.8	1.1	2.7	13.5	8.8	4.7	14.2	13.9	0.3
1983	38.5	29.7	8.8	4.3	1.3	3.0	15.7	10.3	5.4	18.3	18.1	0.2
1984	41.3	31.2	10.1	4.5	1.2	3.3	17.1	10.7	6.4	19.5	19.3	0.2
1985	40.9	31.3	9.6	4.2	1.2	3.0	15.9	10.2	5.7	20.1	19.9	0.2
1986	45.8	35.3	10.5	5.0	1.4	3.6	18.8	11.7	7.1	22.4	22.2	0.2
1987	49.5	38.2	11.3	5.3	1.5	3.8	19.9	12.3	7.6	24.8	24.5	0.3
1988	49.9	38.1	11.7	5.3	1.4	3.9	20.7	12.7	8.0	24.3	24.0	0.3
1989	49.6	37.5	12.1	4.4	1.2	3.2	21.2	12.3	8.9	24.3	24.0	0.3
1990	48.1	35.8	12.3	3.9	1.5	2.4	22.5	12.6	9.9	22.1	21.7	0.4
1991	44.3	33.2	11.2	4.8	1.5	3.3	20.0	12.1	7.9	20.0	19.6	0.4
1992	45.9	34.5	11.4	4.7	1.6	3.1	21.1	13.0	8.1	20.3	19.9	0.4
1993	45.2	32.9	12.2	7.8	1.9	5.9	21.0	15.4	5.6	16.0	15.6	0.4
1994	46.5	34.1	12.4	8.0	1.9	6.1	21.8	16.0	5.8	16.6	16.2	0.4
1995	44.9	32.2	12.6	8.1	1.9	6.1	21.1	15.3	5.8	15.4	15.0	0.4
1996	45.8	33.3	12.5	7.9	2.0	5.9	22.0	15.7	6.3	16.7	16.3	0.4
1997	47.3	34.7	12.7	9.2	2.1	7.1	20.5	15.6	4.9	17.1	16.6	0.5
1998	48.6	34.7	13.9	9.9	2.1	7.8	21.0	15.6	5.4	17.2	16.6	0.6
1999	51.0	36.7	14.3	10.2	2.2	8.0	22.1	16.5	5.6	18.2	17.6	0.6

^aThe West includes Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, South Dakota, Utah, Washington, and Wyoming. The South includes Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia. The North includes the remaining 24 states.

^bU.S. Department of Commerce, Bureau of the Census (47); American Forest and Paper Association (3); Data may not add to totals because of rounding.

^cWestern Wood Products Association (71).

Table 30 —Lumber production in the United States, 1965–1999 (million board feet)

Year	Softwood							Hardwood								
	Howard ^a	89 RPA ^b	USDC ^c	AF&PA ^d	WWPA ^e	Adams ^f	Final ^g	Howard ^a	89 RPA ^b	USDC ^c		AF&PA ^d	WWPA ^e	Adams ^f	Luppold ^h	Final ⁱ
										Total	West					
1965	29,295	29,295	29,295	29,240	28,230	28,149	29,295	9,440	9,431	7,467	161	7,655	7,467	9,447	9,279	9,440
1966	28,847	28,847	28,847	—	27,973	27,879	28,847	9,771	9,771	7,737	204	—	7,737	9,782	9,567	9,771
1967	28,172	28,172	28,172	—	27,069	26,978	28,172	9,311	9,311	7,430	197	—	7,430	9,320	9,114	9,311
1968	29,285	30,224	29,285	—	28,936	28,832	29,285	8,735	8,432	7,188	156	—	7,188	8,795	8,579	8,735
1969	28,342	28,342	28,342	—	27,900	28,193	28,342	8,727	7,849	7,482	157	—	7,482	8,739	8,570	8,727
1970	27,530	27,297	27,530	—	27,107	27,001	27,530	8,330	7,701	7,138	127	—	7,138	8,340	8,203	8,330
1971	30,039	30,040	30,039	—	29,432	29,327	30,039	8,447	8,106	6,949	142	—	6,949	8,454	8,305	8,447
1972	30,975	30,975	30,975	—	30,873	30,763	30,975	8,494	8,230	6,770	139	—	6,770	8,502	8,355	8,494
1973	31,586	31,586	31,586	—	31,289	31,149	31,586	8,792	8,792	7,009	151	—	7,008	8,802	8,641	8,792
1974	27,704	28,357	27,704	—	27,193	27,059	27,704	8,448	8,448	6,904	189	—	6,904	8,459	8,259	8,448
1975	26,747	26,148	26,747	—	25,711	25,602	26,747	7,304	7,304	5,872	146	—	5,872	7,309	7,158	7,304
1976	30,600	30,274	30,571	29,693	29,693	29,510	29,693	7,977	7,978	6,427	177	7,801	6,417	7,983	7,800	7,977
1977	32,700	32,159	32,661	31,737	31,737	31,496	31,737	8,500	8,500	6,701	184	8,317	6,680	8,506	8,316	8,500
1978	33,500	32,585	33,467	32,057	32,057	31,698	32,057	8,960	8,959	7,031	232	8,728	8,728	8,963	8,728	8,960
1979	33,300	31,942	33,255	31,432	31,432	31,044	31,432	9,308	9,305	7,314	238	9,069	9,069	9,313	9,070	9,308
1980	28,200	26,966	28,239	26,246	26,246	25,632	26,246	9,157	9,087	7,115	297	8,860	8,860	9,160	8,860	9,157
1981	25,400	24,956	25,432	24,676	24,676	24,518	24,676	7,480	8,018	6,252	334	7,147	7,147	7,378	7,146	7,480
1982	23,787	24,098	24,949	23,787	23,787	23,631	23,787	7,996	7,854	5,061	329	7,668	7,668	7,995	7,667	7,996
1983	29,726	29,991	28,926	29,726	29,726	29,547	29,726	8,767	8,822	5,627	211	8,556	8,556	8,768	8,556	8,767
1984	31,174	31,192	30,801	31,174	31,174	30,945	31,174	10,090	9,826	6,264	211	9,865	9,865	10,082	9,879	10,090
1985	31,321	30,853	30,479	31,321	31,321	31,092	31,321	9,597	9,474	5,966	204	8,866	8,866	9,597	9,394	9,597
1986	35,273	34,700	34,815	35,273	35,273	35,003	35,273	10,477	10,311	7,184	249	10,877	10,877	10,819	10,228	10,477
1987	38,325	—	37,410	38,235	38,235	38,039	38,235	11,263	—	7,476	253	11,695	11,695	11,465	11,010	11,263
1988	38,130	—	36,845	38,130	38,130	37,826	38,130	11,741	—	7,731	275	12,170	12,170	12,151	11,466	11,741
1989	37,545	—	36,040	37,545	37,225	37,225	37,545	12,056	—	7,536	313	12,415	12,415	12,236	11,743	12,056
1990	35,791	—	36,224	35,791	35,459	35,459	35,791	12,321	—	7,242	374	12,660	12,660	12,369	11,947	12,321
1991	33,161	—	33,064	33,161	32,800	32,800	33,161	11,168	—	6,766	363	11,633	11,633	11,383	10,805	11,168
1992	34,526	—	33,704	34,526	34,151	34,151	34,526	11,423	—	7,050	416	11,639	11,639	11,630	11,007	11,423
1993	32,947	—	34,725	32,947	32,517	32,517	32,947	12,219	—	10,631	438	11,914	11,914	12,170	11,781	12,219
1994	34,107	—	35,556	34,107	33,657	33,657	34,107	12,385	—	10,910	445	12,311	12,311	12,311	11,940	12,385
1995	32,233	—	33,043	32,233	31,782	31,782	32,233	12,644	—	10,928	441	12,434	12,434	12,434	12,203	12,644
1996	33,266	—	34,065	33,266	32,859	32,859	33,266	12,488	—	10,690	449	—	—	12,705	12,039	12,488
1997	34,667	—	35,457	34,667	34,663	34,662	34,667	12,673	—	11,103	468	—	—	—	12,205	12,673
1998	34,677	—	35,358	34,677	34,678	—	34,677	13,908	—	11,202	408	—	—	—	13,500	13,908
1999 ^j	36,674	—	35,358	36,674	36,816	—	36,674	14,308	—	11,202	408	—	—	—	13,900	14,308

^aData derived from table 27.

^bU.S. Department of Agriculture, Forest Service (42).

^cU.S. Department of Commerce, Bureau of the Census (47).

^d1950-1965: National Forest Products Association. 1966. Forest Industry facts 1966. Washington, DC: National Forest Products Association. 31 p.
1986-Present: American Forest and Paper Association (3).

^eWestern Wood Products Association (72).

^fAdams, Darius (1).

^gFinal estimated Forest Service softwood lumber production series: 1950-1975: USDC Bureau of the Census. 1998. 1976-Present AF&PA 1998 (6).

^hForest Service (19). Estimated Eastern hardwood lumber production.

ⁱFinal estimated Forest Service hardwood lumber production series: 1965-1998: Luppold (19) plus USDC Bureau of the Census 1998 (West) (47).

^j1999 USDC numbers and 1999 Luppold number are preliminary.

Table 31—United States lumber imports, by softwoods, hardwoods, and country of origin, 1965–1999
(million board feet)^a

Year	All species				Softwoods				Hardwoods			
	Total	Canada	Mexico	Other ^b	Total ^c	Canada	Mexico	Other ^b	Total	Canada	Mexico	Other ^b
1965	5,232.4	5,016.6	10.1	205.7	4,898.1	4,855.7	8.1	34.3	334.3	160.9	2.0	171.4
1966	5,200.0	4,920.9	5.2	273.9	4,779.2	4,730.4	3.7	45.1	420.8	190.5	1.5	228.8
1967	5,140.8	4,902.5	5.6	232.7	4,798.1	4,747.1	3.1	47.9	342.7	155.4	2.5	184.8
1968	6,154.2	5,899.2	4.0	251.0	5,809.1	5,750.0	3.2	55.9	345.1	149.2	0.8	195.1
1969	6,300.6	5,963.4	6.6	330.6	5,854.0	5,784.4	5.8	63.8	446.6	179.0	0.8	266.8
1970	6,114.4	5,867.6	7.5	239.3	5,777.7	5,722.5	5.5	49.7	336.7	145.1	2.0	189.6
1971	7,589.4	7,314.5	6.5	268.4	7,231.7	7,172.0	4.9	54.8	357.7	142.5	1.6	213.6
1972	9,433.6	9,029.2	20.5	383.9	8,984.8	8,877.8	18.6	88.4	448.8	151.4	1.9	295.5
1973	9,568.6	8,999.3	20.4	548.9	9,019.9	8,843.9	17.5	158.5	548.7	155.4	2.9	390.4
1974	7,270.8	6,847.3	6.1	417.4	6,821.1	6,732.2	2.4	86.5	449.7	115.1	3.7	330.9
1975	5,975.8	5,738.8	28.5	208.5	5,723.8	5,677.0	0.4	46.4	252.0	61.8	28.1	162.1
1976	8,246.8	7,995.3	1.0	250.5	7,958.5	7,912.6	0.8	45.1	288.3	82.7	0.2	205.4
1977	10,713.3	10,408.0	7.0	298.3	10,369.6	10,327.0	1.2	41.4	343.7	81.0	5.8	256.9
1978	12,214.6	11,879.4	11.9	323.3	11,853.2	11,776.7	11.3	65.2	361.4	102.7	0.6	258.1
1979	11,529.5	11,187.6	4.7	337.2	11,153.3	11,100.9	3.1	49.3	376.2	86.7	1.6	287.9
1980	9,866.1	9,618.7	2.9	244.5	9,572.9	9,546.3	2.5	24.1	293.2	72.4	0.4	220.4
1981	9,523.2	9,285.4	1.8	236.0	9,232.1	9,208.1	1.5	22.5	291.1	77.3	0.3	213.5
1982	9,360.5	9,191.8	6.5	162.2	9,149.5	9,114.9	1.1	33.5	211.0	76.9	5.4	128.7
1983	12,253.5	12,039.6	13.6	200.3	11,993.0	11,962.7	12.0	18.3	260.5	76.9	1.6	182.0
1984	13,632.1	13,342.8	14.6	274.7	13,304.4	13,252.3	11.8	40.3	327.7	90.5	2.8	234.4
1985	14,995.6	14,636.1	12.2	347.3	14,632.0	14,531.7	11.8	88.5	363.6	104.4	0.4	258.8
1986	14,585.1	14,250.0	32.8	302.3	14,238.2	14,142.3	31.9	64.0	346.9	107.7	0.9	238.3
1987	15,191.5	14,763.3	55.1	373.1	14,680.4	14,600.8	54.1	25.5	511.1	162.5	1.0	347.6
1988	13,755.1	12,999.2	72.9	683.0	13,450.3	12,855.2	72.5	522.6	304.8	144.0	0.3	160.5
1989	15,232.2	13,964.2	193.4	1,074.7	14,882.8	13,761.2	193.0	928.6	349.4	202.9	0.4	146.0
1990	13,062.9	11,918.4	360.4	784.1	12,831.3	11,804.7	360.3	666.3	231.7	113.6	0.2	117.8
1991	11,708.1	11,517.6	48.0	142.6	11,498.0	11,410.8	47.8	39.4	210.2	106.8	0.2	103.2
1992	13,426.5	13,207.9	53.3	165.3	13,166.6	13,055.1	53.1	58.5	259.9	152.8	0.2	106.8
1993	15,368.5	15,059.7	51.7	257.1	15,055.0	14,856.2	51.6	147.2	313.5	203.5	0.2	109.8
1994	16,534.3	16,103.5	51.6	379.2	16,165.1	15,871.6	51.4	242.1	369.3	231.9	0.2	137.1
1995	17,523.8	16,989.5	108.8	425.4	17,169.5	16,780.5	106.2	282.8	354.3	209.0	2.7	142.7
1996	18,363.0	17,823.6	120.9	418.5	17,986.2	17,593.2	117.6	275.4	376.8	230.4	3.3	143.1
1997	18,237.1	17,535.7	124.4	577.0	17,785.9	17,235.5	120.0	430.4	451.2	300.2	4.4	146.6
1998	19,011.6	18,227.8	70.1	713.8	18,462.8	17,838.0	66.5	558.3	548.8	389.8	3.5	155.5
1999	19,900.0	18,486.5	58.3	1,355.2	19,200.0	18,021.2	56.9	1,121.9	700.0	465.4	1.4	233.3

^aU.S. Department of Agriculture, Foreign Agricultural Service (31); Data may not add to totals because of rounding.

^bFor the years 1974 to 1977, all imports with a value of less than \$500 are included in Other.

^cIncludes small volumes of hardwoods.

Table 32—United States lumber exports, by softwoods, hardwoods, and destination, 1965–1999 (million board feet)^a

Year	All species						Softwoods						Hardwoods					
	Total	Canada	Central and South		Japan	Other	Total	Canada	Central and South		Japan	Other	Total	Canada	Central and South		Japan	Other
			European Union ^b	America ^c					European Union	America					European Union	America		
1965	919.1	285.1	249.4	1.1	105.7	277.8	778.9	184.0	229.3	1.0	103.1	261.5	140.2	101.1	20.1	0.1	2.6	16.3
1966	1,022.6	309.0	250.2	1.3	174.4	287.7	867.9	186.5	230.3	1.2	171.3	278.6	154.7	122.5	19.9	0.1	3.1	9.1
1967	1,129.5	338.0	261.0	1.1	265.8	263.6	965.2	207.6	241.0	1.1	260.7	254.8	164.3	130.4	20.0	0.0	5.1	8.8
1968	1,161.7	295.4	304.3	1.2	288.6	272.2	1,048.1	210.4	288.9	1.1	284.8	262.9	113.6	85.0	15.4	0.1	3.8	9.3
1969	1,142.2	285.0	278.3	1.1	317.3	260.5	1,023.8	198.3	264.6	1.0	309.6	250.3	118.4	86.7	13.7	0.1	7.7	10.2
1970	1,243.4	269.9	299.3	1.3	383.5	289.4	1,115.5	202.6	281.8	1.1	359.6	270.4	127.9	67.3	17.5	0.2	23.9	19.0
1971	1,093.6	289.3	239.0	1.0	323.1	241.2	933.3	206.3	213.8	0.9	287.4	224.9	160.3	83.0	25.2	0.1	35.7	16.3
1972	1,428.3	419.5	286.0	1.0	478.7	243.1	1,191.1	290.1	267.9	0.9	407.2	225.0	237.2	129.4	18.1	0.1	71.5	18.1
1973	1,965.9	548.4	517.0	1.2	569.1	330.2	1,752.7	388.5	488.3	1.0	564.4	310.5	213.2	159.9	28.7	0.2	4.7	19.7
1974	1,765.4	522.3	347.4	1.1	573.9	320.7	1,566.5	382.2	311.3	1.0	570.5	301.5	198.9	140.1	36.1	0.1	3.4	19.2
1975	1,618.1	549.4	244.9	1.3	516.8	305.7	1,405.4	397.5	218.7	1.1	515.3	272.8	212.7	151.9	26.2	0.2	1.5	32.9
1976	1,846.0	619.7	354.5	1.4	478.0	392.4	1,605.5	437.9	316.3	1.3	475.1	374.9	240.5	181.8	38.2	0.1	2.9	17.5
1977	1,665.6	537.4	336.6	1.5	439.6	350.5	1,427.7	365.5	288.6	1.4	436.7	335.5	237.9	171.9	48.0	0.1	2.9	15.0
1978	1,740.9	648.4	347.4	1.3	411.3	332.5	1,353.9	374.4	257.6	1.3	407.6	313.0	387.0	274.0	89.8	0.0	3.7	19.5
1979	2,186.5	651.5	456.1	2.0	647.6	429.3	1,781.3	427.6	345.6	1.9	640.5	365.7	361.1	223.9	110.5	0.1	7.1	19.5
1980	2,506.8	631.3	594.7	3.6	648.9	628.3	2,006.5	388.3	429.2	3.2	633.9	551.9	487.5	243.0	165.5	0.4	15.0	63.6
1981	2,379.0	729.1	398.3	4.0	524.3	723.3	1,927.8	509.1	234.4	3.6	506.5	674.2	478.5	220.0	163.9	0.4	17.8	76.4
1982	2,050.3	418.9	410.6	3.1	627.9	589.8	1,634.9	261.9	248.2	2.9	610.7	511.2	385.9	157.0	162.4	0.2	17.2	49.1
1983	2,319.1	664.1	458.8	2.3	631.6	562.3	1,755.6	433.2	290.6	2.0	595.3	434.5	514.3	230.9	168.2	0.3	36.3	78.6
1984	2,121.0	555.7	345.0	2.7	602.4	615.2	1,623.6	347.7	212.0	2.1	545.0	516.8	526.8	208.0	133.0	0.6	57.4	127.8
1985	1,840.9	431.3	277.0	5.3	617.6	509.7	1,420.1	300.7	177.3	4.7	574.2	363.2	372.7	130.6	99.7	0.6	43.4	98.4
1986	2,422.0	510.1	395.3	10.6	888.3	617.7	1,888.4	361.2	253.3	10.0	827.0	436.9	499.3	148.9	142.0	0.6	61.3	146.5
1987	3,241.0	648.0	528.1	9.0	1,200.5	855.4	2,447.0	445.8	309.5	8.1	1,077.2	606.4	725.8	202.2	218.6	0.9	123.3	180.8
1988	4,347.8	753.7	891.0	5.0	1,532.4	1,165.7	3,227.5	493.9	490.5	3.5	1,280.0	959.6	1,163.2	259.8	400.5	1.5	252.4	249.0
1989	4,136.9	642.7	673.1	7.7	1,614.2	1,199.1	3,339.6	457.1	397.0	6.7	1,457.8	1,021.0	825.3	185.6	276.1	1.0	156.4	206.1
1990	4,614.4	657.6	685.8	6.7	1,270.3	1,994.0	3,752.9	422.7	412.0	6.0	1,145.1	1,767.1	812.8	234.9	273.8	0.7	125.2	178.1
1991	3,880.1	564.8	753.7	10.7	1,215.7	1,335.2	2,999.5	365.4	429.2	10.2	1,086.1	1,108.6	880.9	199.4	324.5	0.5	129.6	226.9
1992	3,512.5	571.7	735.1	9.3	1,112.9	1,083.5	2,567.3	313.8	399.2	8.3	1,003.6	842.5	930.8	258.0	335.9	1.0	109.3	226.6
1993	3,280.3	566.0	548.1	4.7	1,180.5	980.9	2,291.5	267.0	242.8	3.7	1,063.2	714.8	963.7	299.0	305.3	1.0	117.4	241.0
1994	3,115.3	610.7	543.8	7.2	1,056.6	897.0	2,078.0	285.5	230.5	6.4	958.4	597.2	1,003.5	325.1	313.3	0.8	98.2	266.1
1995	2,957.8	650.3	513.4	5.9	978.2	810.0	1,872.1	312.5	201.5	4.7	871.6	481.8	1,057.3	337.8	311.9	1.2	106.6	299.8
1996	2,897.9	664.3	485.3	7.2	961.3	779.8	1,788.7	312.3	178.2	5.3	860.7	432.2	1,089.8	352.0	307.1	1.9	100.6	328.2
1997	2,933.4	713.3	592.3	15.9	796.6	815.3	1,709.4	329.3	206.2	14.0	692.2	467.7	1,224.0	384.0	386.1	1.9	104.4	347.6
1998	2,189.4	576.3	560.8	15.3	355.4	681.5	1,129.2	230.6	207.0	10.8	297.5	383.3	1,060.2	345.7	353.8	4.5	57.9	298.2
1999	2,548.6	659.3	555.8	11.1	353.2	969.1	1,366.5	255.4	214.2	7.3	288.7	600.9	1,182.1	404.0	341.6	3.9	64.5	368.1

^aU.S. Department of Agriculture, Foreign Agricultural Service (31); Data may not add to totals because of rounding.

^bIncludes Belgium–Luxembourg, Denmark, France, Germany, Greece, Ireland, Italy, the Netherlands, Portugal, Spain, Trieste, and the United Kingdom.

^cIncludes Mexico.

Table 33—Lumber^a production in Canada, from softwoods and hardwoods, by region, 1965–1999 (billion board feet)^b

Year	All species	Softwoods					Hardwoods ^d		
		Total	British Columbia ^c			Other Canada	Total	British Columbia	Other Canada
			Total	Coast	Interior				
1965	10.8	10.3	7.4	3.6	3.8	2.9	0.5	—	0.5
1966	10.6	10.0	7.3	3.7	3.6	2.7	0.6	—	0.6
1967	10.3	9.7	7.1	3.9	3.2	2.6	0.6	—	0.6
1968	11.4	10.8	7.8	4.1	3.7	3.0	0.6	^e	0.6
1969	11.5	11.0	7.7	3.8	3.9	3.3	0.5	^e	0.5
1970	11.3	10.8	7.7	3.8	3.9	3.1	0.5	^e	0.5
1971	12.8	12.3	9.0	4.2	4.8	3.3	0.5	^e	0.5
1972	13.9	13.4	9.5	4.0	5.5	3.9	0.5	^e	0.5
1973	15.5	14.9	10.4	4.4	6.0	4.5	0.6	^e	0.6
1974	13.6	13.0	8.7	3.4	5.3	4.3	0.6	^e	0.6
1975	11.5	11.1	7.4	2.5	4.9	3.7	0.4	^e	0.4
1976	15.6	15.1	10.6	4.0	6.6	4.5	0.5	^e	0.5
1977	17.6	17.2	12.0	4.5	7.5	5.2	0.4	^e	0.4
1978	19.0	18.4	12.5	4.8	7.7	5.9	0.6	^e	0.6
1979	19.8	19.3	12.9	4.7	8.2	6.4	0.5	^e	0.5
1980	19.0	18.4	11.9	4.2	7.7	6.5	0.6	^e	0.6
1981	17.0	16.6	10.4	3.5	6.9	6.2	0.4	^e	0.4
1982	15.6	15.2	9.9	3.0	6.9	5.3	0.4	^e	0.4
1983	20.5	20.1	13.0	4.1	8.9	7.1	0.4	^e	0.4
1984	20.7	20.2	13.1	3.9	9.2	7.1	0.5	^e	0.5
1985	22.0	21.6	13.6	3.6	10.0	8.0	0.4	^e	0.4
1986	22.4	21.9	13.1	3.7	9.4	8.8	0.5	^e	0.5
1987	26.2	25.6	15.9	4.7	11.2	9.7	0.6	^e	0.6
1988	25.7	25.1	15.6	4.6	11.0	9.5	0.6	^e	0.6
1989	25.0	24.5	15.2	4.1	11.1	9.3	0.5	^e	0.5
1990	23.1	22.7	14.2	3.8	10.4	8.5	0.4	^e	0.4
1991	21.9	21.5	13.3	3.5	9.8	8.2	0.4	^e	0.4
1992	23.6	23.1	14.1	3.5	10.6	9.0	0.5	^e	0.5
1993	25.3	24.8	14.4	3.6	10.8	10.4	0.5	^e	0.5
1994	26.1	25.6	14.3	3.7	10.6	11.3	0.5	^e	0.5
1995	26.0	25.5	13.8	3.5	10.4	11.7	0.5	^e	0.5
1996	27.0	26.6	13.8	3.5	10.4	12.7	0.4	^e	0.4
1997	27.4	27.1	13.4	3.3	10.0	13.7	0.4	^e	0.4
1998	27.6	27.2	12.8	2.7	10.1	14.4	0.4	^e	0.4
1999	29.6	29.2	13.5	2.8	10.7	15.7	0.4	^e	0.4

^aDoes not include sawn ties.

^bNatural Resources Canada (21); Statistics Canada (25,26,27);

Data may not add to totals because of rounding.

^cIncludes small volumes of hardwoods.

^d1997-1999 numbers are preliminary

^eFewer than 50 million board feet.

Table 34—Lumber and competing engineered wood products, by type of product, 1970–1999

Year	Wood laminated veneer lumber ^a			Structural panels ^a		Lumber ^b	
				Wood glulam ^a	Wood I-Joists ^a	Oriented strandboard	Softwood plywood
	<i>Million square feet (3/8-in. basis)</i>	<i>Million square feet (3/8-in. basis)</i>	<i>Billion board feet</i>			<i>Billion board feet</i>	
	<i>Million cubic feet</i>	<i>Million board feet</i>	<i>Million linear feet</i>				
1970	c	c	c	c	14,340	8.3	27.5
1971	c	c	c	c	16,635	8.4	30.0
1972	c	c	c	c	18,324	8.5	31.0
1973	c	c	c	c	18,305	8.8	31.6
1974	c	c	c	c	15,878	8.4	27.7
1975	c	c	c	c	16,050	7.3	26.7
1976	c	c	c	c	18,440	8.0	29.7
1977	c	c	c	c	19,376	8.5	31.7
1978	c	c	c	c	19,964	9.0	32.1
1979	c	c	c	c	19,653	9.3	31.4
1980	3	204	45	135	16,333	9.2	26.2
1981	4	190	45	271	16,752	7.5	24.7
1982	4	164	54	557	15,846	8.0	23.8
1983	5	192	63	1,341	19,480	8.8	29.7
1984	5	229	72	2,042	19,926	10.1	31.2
1985	7	246	90	2,669	20,169	9.6	31.3
1986	8	330	99	3,513	22,118	10.5	35.3
1987	9	279	108	4,076	22,899	11.3	38.2
1988	11	298	108	4,604	22,599	11.7	38.1
1989	12	322	117	5,105	21,385	12.1	37.5
1990	16	324	122	5,418	20,919	12.3	35.8
1991	16	265	158	5,613	18,652	11.2	33.2
1992	17	258	252	6,653	19,332	11.4	34.5
1993	21	239	358	7,002	19,315	12.2	32.9
1994	23	264	380	7,486	19,638	12.4	34.1
1995	28	282	358	7,903	19,367	12.6	32.2
1996	32	309	444	9,314	19,181	12.5	33.3
1997	38	300	547	10,534	17,963	12.7	34.7
1998	41	287	619	11,227	17,776	13.9	34.7
1999	48	316	733	11,612	17,816	14.3	36.7

^aThe Engineered Wood Association (9).

^bU.S. Department of Commerce, Bureau of the Census (47); American Forest and Paper Association (3); Luppold and Dempsey (19).

^cData not available.

Table 35—Producer price indexes for lumber and selected nonwood competing materials, 1965–1999
(1992 = 100)^a

Year	All com-modities	Lumber and wood products		All lumber		Softwood lumber						All hardwood lumber	
		Actual	Relative ^b	Actual	Relative	All		Douglas-fir		Southern pine		Actual	Relative
						Actual	Relative	Actual	Relative	Actual	Relative		
1965	27.6	23.0	83.3	20.9	75.7	19.5	70.7	20.5	74.3	24.4	88.4	26.4	95.7
1966	28.4	24.0	84.5	22.3	78.5	20.5	72.2	21.5	75.7	26.8	94.4	29.5	103.9
1967	28.5	23.9	83.9	22.3	78.2	21.0	73.7	22.2	77.9	26.8	94.0	27.1	95.1
1968	29.2	27.1	92.8	26.1	89.4	25.3	86.6	26.7	91.4	30.5	104.5	28.3	96.9
1969	30.4	30.0	98.7	29.3	96.4	28.2	92.8	29.3	96.4	33.8	111.2	32.6	107.2
1970	31.5	27.2	86.3	25.3	80.3	23.7	75.2	24.1	76.5	30.7	97.5	31.1	98.7
1971	32.5	30.5	93.8	30.3	93.2	29.6	91.1	31.1	95.7	35.9	110.5	30.7	94.5
1972	34.0	34.6	101.8	35.5	104.4	35.1	103.2	35.8	105.3	40.6	119.4	34.2	100.6
1973	38.4	42.4	110.4	45.6	118.8	44.9	116.9	46.5	121.1	50.3	131.0	45.8	119.3
1974	45.6	44.0	96.5	46.1	101.1	44.3	97.1	47.5	104.2	49.4	108.3	51.4	112.7
1975	49.8	42.4	85.1	42.8	85.9	42.0	84.3	47.0	94.4	47.0	94.4	43.5	87.3
1976	52.1	49.2	94.4	51.9	99.6	52.0	99.8	55.7	106.9	58.2	111.7	47.8	91.7
1977	55.4	56.6	102.2	61.5	111.0	62.3	112.5	64.7	116.8	70.3	126.9	54.3	98.0
1978	59.6	66.1	110.9	71.7	120.3	72.5	121.6	75.4	126.5	81.6	136.9	64.0	107.4
1979	67.2	72.0	107.1	78.8	117.3	79.6	118.5	85.2	126.8	86.9	129.3	70.5	104.9
1980	76.6	69.2	90.3	72.5	94.6	72.3	94.4	78.4	102.3	79.7	104.0	68.3	89.2
1981	83.6	70.1	83.9	72.3	86.5	71.8	85.9	69.2	82.8	78.2	93.5	69.3	82.9
1982	85.3	68.2	80.0	69.2	81.1	67.4	79.0	59.1	69.3	76.6	89.8	71.2	83.5
1983	86.4	73.6	85.2	78.5	90.9	77.5	89.7	80.3	92.9	85.7	99.2	76.9	89.0
1984	88.5	73.7	83.3	77.8	87.9	74.1	83.7	72.8	82.3	85.7	96.8	86.7	98.0
1985	88.1	72.7	82.5	75.8	86.0	72.4	82.2	74.8	84.9	80.6	91.5	83.3	94.6
1986	85.5	73.1	85.5	76.4	89.4	73.0	85.4	73.6	86.1	80.4	94.0	84.1	98.4
1987	87.7	76.9	87.7	81.7	93.2	78.2	89.2	73.9	84.3	87.4	99.7	90.2	102.9
1988	91.2	81.1	88.9	84.4	92.5	80.9	88.7	80.2	87.9	86.1	94.4	93.2	102.2
1989	95.7	86.4	90.3	86.9	90.8	85.6	89.4	89.6	93.6	82.8	86.5	91.2	95.3
1990	99.2	88.5	89.2	86.2	86.9	83.4	84.1	81.8	82.5	85.2	85.9	93.2	94.0
1991	99.4	90.1	90.6	86.4	86.9	84.7	85.2	82.5	83.0	85.1	85.6	91.5	92.1
1992	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1993	101.5	118.7	116.9	126.8	124.9	130.1	128.2	140.4	138.3	129.3	127.4	116.2	114.5
1994	102.7	122.9	119.7	130.5	127.1	133.5	130.0	139.7	136.0	139.8	136.1	119.8	116.7
1995	106.4	121.5	114.2	119.9	112.7	120.3	113.1	117.5	110.4	127.9	120.2	118.9	111.7
1996	109.0	120.2	110.3	124.4	114.1	127.9	117.3	135.5	124.3	136.1	124.9	116.7	107.1
1997	108.8	125.4	115.3	134.6	123.7	139.2	127.9	130.5	119.9	142.6	131.1	123.9	113.9
1998	110.4	122.2	110.7	122.4	110.9	123.0	111.5	109.9	99.6	135.6	122.8	127.2	115.2
1999	120.2	125.2	104.2	128.2	106.6	131.9	109.7	125.2	104.2	142.8	118.7	126.0	104.8

**Table 35—Producer price indexes for lumber and selected nonwood competing materials, 1965–1999
(1992 = 100)—Con.**

Year	Metals and metal products		Metal doors, sash, and trim		Flat glass		Concrete products		Ready mixed concrete	
	Actual	Relative	Actual	Relative	Actual	Relative	Actual	Relative	Actual	Relative
1965	26.8	97.3	24.3	88.1	—	—	27.6	99.9	27.4	99.4
1966	27.5	96.9	24.9	87.7	—	—	28.0	98.5	27.8	97.8
1967	27.9	97.7	25.5	89.5	42.4	148.8	28.7	100.6	28.4	99.6
1968	28.5	97.7	26.5	90.9	44.2	151.3	29.4	100.8	29.2	99.9
1969	30.2	99.3	27.7	91.0	46.4	152.7	30.5	100.5	30.5	100.2
1970	32.5	103.1	28.8	91.5	49.0	155.5	32.2	102.1	32.2	102.2
1971	33.1	101.7	30.0	92.4	52.2	160.5	34.6	106.3	34.8	107.1
1972	34.3	100.9	30.8	90.5	51.9	152.6	36.0	105.9	36.3	106.7
1973	36.9	96.1	31.8	82.8	51.4	133.9	37.7	98.2	37.8	98.6
1974	47.8	104.9	37.6	82.4	54.6	119.7	43.4	95.2	43.5	95.4
1975	51.6	103.6	41.4	83.2	58.9	118.3	48.9	98.2	48.8	98.0
1976	54.5	104.7	43.7	83.9	63.5	121.9	51.6	99.1	52.3	100.3
1977	58.1	104.9	48.1	86.8	68.1	122.9	54.9	99.2	55.8	100.8
1978	63.2	106.0	53.0	88.9	73.2	122.8	61.3	102.9	62.2	104.3
1979	72.1	107.4	58.6	87.1	77.9	115.9	70.0	104.1	70.8	105.4
1980	79.7	104.0	65.1	85.0	83.2	108.6	78.5	102.5	79.9	104.3
1981	83.6	99.9	71.2	85.1	90.1	107.7	83.4	99.8	85.2	101.9
1982	83.9	98.4	74.1	86.9	93.8	110.0	85.3	100.0	86.8	101.8
1983	85.4	98.8	76.2	88.2	97.3	112.6	86.5	100.1	87.9	101.8
1984	87.9	99.3	79.0	89.3	95.1	107.5	88.7	100.2	90.5	102.3
1985	87.6	99.4	79.5	90.3	95.4	108.3	91.7	104.1	93.0	105.5
1986	86.6	101.3	80.7	94.4	98.0	114.7	93.2	109.0	93.5	109.3
1987	89.8	102.5	83.0	94.7	100.6	114.7	93.3	106.4	93.1	106.2
1988	99.6	109.2	90.7	99.5	102.9	112.8	93.9	102.9	93.7	102.7
1989	104.1	108.8	96.4	100.7	102.9	107.5	94.9	99.1	94.9	99.1
1990	103.1	103.9	97.4	98.2	100.8	101.7	96.8	97.6	97.1	97.9
1991	100.8	101.4	99.8	100.4	99.3	99.9	99.5	100.1	99.6	100.2
1992	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1993	100.0	98.5	101.3	99.8	100.7	99.2	102.6	101.0	103.1	101.6
1994	104.7	101.9	105.3	102.5	103.6	100.8	106.2	103.4	107.4	104.6
1995	112.8	106.0	116.0	109.0	106.2	99.8	110.4	103.8	112.0	105.2
1996	109.9	100.8	118.1	108.3	103.2	94.7	113.7	104.3	115.5	106.0
1997	110.6	101.6	119.4	109.8	101.6	93.4	116.0	106.7	117.7	108.2
1998	107.2	97.1	119.7	108.5	100.6	91.1	119.5	108.3	121.4	109.9
1999	104.6	87.0	120.1	99.9	99.6	82.9	127.4	105.9	124.3	103.4

**Table 35—Producer price indexes for lumber and selected nonwood competing materials, 1965–1999
(1992 = 100)—Con.**

Year	Ceramic tile ^c		Prepared asphalt roofing ^d		Gypsum products		Soft surface floor covering		Hard surface floor covering	
	Actual	Relative	Actual	Relative	Actual	Relative	Actual	Relative	Actual	Relative
1965	35.2	127.6	29.4	106.4	39.4	142.7	56.6	205.1	29.2	105.9
1966	35.7	125.6	30.8	108.3	38.8	136.6	56.4	198.5	29.0	102.2
1967	36.4	127.8	30.0	105.3	39.0	136.8	53.7	188.5	28.8	101.1
1968	37.5	128.4	31.2	106.8	40.4	138.3	54.1	185.1	29.6	101.3
1969	38.7	127.3	31.1	102.2	40.4	132.8	54.1	177.8	28.8	94.7
1970	39.7	126.2	30.5	97.0	38.8	123.1	53.1	168.6	28.9	91.7
1971	41.6	127.9	38.0	116.8	42.6	131.0	51.9	159.8	29.9	92.1
1972	41.7	122.7	40.1	117.9	44.7	131.4	51.6	151.7	30.1	88.4
1973	43.4	112.9	41.6	108.3	47.1	122.5	54.2	141.2	30.3	78.9
1974	47.4	103.9	57.1	125.1	53.5	117.4	59.5	130.5	36.2	79.4
1975	52.9	106.3	65.4	131.4	56.0	112.5	61.5	123.5	42.7	85.8
1976	56.9	109.1	69.5	133.3	60.1	115.4	63.3	121.5	47.0	90.2
1977	57.8	104.4	74.0	133.6	71.5	129.0	65.5	118.2	49.5	89.4
1978	57.5	96.5	86.6	145.4	89.2	149.7	67.8	113.8	52.0	87.2
1979	62.4	92.8	94.6	140.8	98.2	146.1	69.8	103.8	57.3	85.3
1980	66.0	86.1	111.9	146.1	99.8	130.3	76.0	99.2	65.7	85.8
1981	71.6	85.7	107.7	128.9	99.8	119.4	84.4	100.9	69.2	82.7
1982	75.4	88.4	106.0	124.3	99.7	116.9	85.4	100.1	70.4	82.6
1983	78.3	90.6	99.8	115.5	111.4	128.9	87.3	101.0	72.4	83.8
1984	81.2	91.8	103.6	117.1	135.0	152.5	89.9	101.6	74.6	84.3
1985	85.4	97.0	106.6	121.0	131.9	149.7	89.1	101.1	77.8	88.3
1986	89.7	105.0	102.7	120.1	136.6	159.8	91.4	106.9	79.9	93.4
1987	92.8	105.9	97.5	111.1	124.8	142.3	93.3	106.4	81.8	93.2
1988	95.9	105.2	100.1	109.8	112.6	123.4	96.4	105.7	86.3	94.6
1989	98.2	102.6	101.4	105.9	109.7	114.6	98.6	103.1	91.5	95.6
1990	99.9	100.7	101.6	102.4	104.9	105.7	99.9	100.7	93.7	94.4
1991	98.9	99.5	102.0	102.6	99.0	99.6	100.5	101.1	98.0	98.6
1992	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1993	100.7	99.2	100.6	99.1	108.0	106.4	99.7	98.2	102.3	100.7
1994	102.3	99.6	98.5	95.9	135.6	132.0	100.7	98.0	103.7	101.0
1995	104.1	97.8	103.7	97.5	154.0	144.8	102.3	96.2	107.9	101.4
1996	104.3	95.7	103.3	94.8	153.5	140.9	104.4	95.7	108.3	99.4
1997	104.4	95.9	102.3	94.1	170.3	156.5	105.4	96.9	108.7	99.9
1998	101.6	92.0	101.5	91.9	176.8	160.1	105.6	95.7	108.5	98.3
1999	101.7	84.6	101.1	84.0	205.7	171.1	104.9	87.2	107.7	89.6

^aU.S. Department of Labor, Bureau of Labor Statistics (63).

^bDerived by dividing the actual price index by the all commodities price index.

^cCeramic floor and wall tile.

^dPrepared asphalt and tar roofing and siding products.

Table 36—Relative^a producer price indexes for lumber, 1800–1999 (1992 = 100)^b

Year	All lumber	Year	All lumber	Year	All lumber	Year	All lumber	Year	All lumber
1800	5.0	1840	12.6	1880	19.4	1920	42.0	1960	75.7
1801	5.2	1841	13.0	1881	20.7	1921	35.9	1961	72.0
1802	6.2	1842	12.9	1882	21.1	1922	40.3	1962	73.1
1803	5.3	1843	12.6	1883	20.9	1923	43.7	1963	75.1
1804	5.3	1844	13.3	1884	22.4	1924	39.8	1964	76.7
1805	5.4	1845	14.7	1885	22.9	1925	38.3	1965	75.7
1806	5.5	1846	13.9	1886	23.7	1926	38.2	1966	78.5
1807	5.9	1847	13.4	1887	23.7	1927	37.4	1967	78.2
1808	5.8	1848	13.9	1888	23.1	1928	35.4	1968	89.4
1809	5.4	1849	14.1	1889	23.1	1929	37.5	1969	96.4
1810	5.1	1850	14.8	1890	23.6	1930	37.5	1970	80.3
1811	5.1	1851	14.3	1891	23.2	1931	36.0	1971	93.2
1812	4.8	1852	15.7	1892	24.1	1932	34.8	1972	104.4
1813	4.3	1853	15.2	1893	23.8	1933	40.5	1973	118.8
1814	3.6	1854	14.8	1894	26.3	1934	42.7	1974	101.1
1815	6.4	1855	15.6	1895	24.6	1935	38.7	1975	85.9
1816	7.1	1856	16.0	1896	25.9	1936	40.8	1976	99.6
1817	6.2	1857	16.5	1897	25.1	1937	44.1	1977	111.0
1818	5.8	1858	16.4	1898	25.4	1938	42.6	1978	120.3
1819	6.7	1859	16.0	1899	26.0	1939	45.7	1979	117.3
1820	7.5	1860	16.0	1900	26.8	1940	49.8	1980	94.6
1821	7.5	1861	15.6	1901	27.3	1941	53.2	1981	86.5
1822	7.1	1862	14.2	1902	26.7	1942	51.0	1982	81.1
1823	7.5	1863	13.6	1903	28.4	1943	51.9	1983	90.9
1824	7.6	1864	13.6	1904	26.5	1944	56.2	1984	87.9
1825	7.9	1865	12.6	1905	28.1	1945	55.7	1985	86.0
1826	8.5	1866	15.9	1906	33.2	1946	56.1	1986	89.4
1827	8.6	1867	16.9	1907	31.7	1947	72.8	1987	93.2
1828	9.0	1868	17.4	1908	30.4	1948	76.3	1988	92.5
1829	8.9	1869	17.0	1909	28.3	1949	73.7	1989	90.8
1830	8.8	1870	17.4	1910	26.8	1950	82.8	1990	86.9
1831	8.8	1871	18.4	1911	28.8	1951	80.5	1991	86.9
1832	8.7	1872	18.7	1912	29.1	1952	80.5	1992	100.0
1833	9.1	1873	19.0	1913	30.4	1953	80.8	1993	124.9
1834	10.0	1874	18.8	1914	28.8	1954	79.1	1994	127.1
1835	8.8	1875	18.0	1915	27.6	1955	84.1	1995	112.7
1836	8.0	1876	18.4	1916	25.3	1956	83.1	1996	114.1
1837	11.5	1877	18.6	1917	24.1	1957	75.9	1997	123.7
1838	12.0	1878	18.6	1918	25.0	1958	73.8	1998	110.9
1839	11.4	1879	19.9	1919	32.0	1959	79.3	1999	106.6

^aDerived by dividing the actual price index by the all commodities price index.

^b1800 to 1914, Cornell University Agricultural Experiment Station (14);
1915 to 1997, U.S. Department of Labor, Bureau of Labor Statistics (63).

Table 37—Plywood production, imports, exports, and consumption, by softwoods and hardwoods, 1965–1999 (3/8-in. basis)^a

Year	Production			Imports			Exports			Consumption			Per capita consumption		
	Total	Soft-woods	Hard-woods	Total	Soft-woods	Hard-woods	Total	Soft-woods	Hard-woods ^b	Total	Soft-woods	Hard-woods	Total	Soft-woods	Hard-woods
	<i>Million square feet</i>	<i>Million square feet</i>	<i>Million square feet</i>	<i>Million square feet</i>	<i>Million square feet</i>	<i>Million square feet</i>	<i>Million square feet</i>	<i>Million square feet</i>	<i>Million square feet</i>	<i>Million square feet</i>	<i>Million square feet</i>	<i>Million square feet</i>	<i>Square feet</i>	<i>Square feet</i>	<i>Square feet</i>
1965	14,496	12,447	2,049	1,052	5	1,047	36	30	6	15,512	12,422	3,090	80	64	16
1966	15,132	13,056	2,076	1,257	3	1,254	56	48	8	16,333	13,011	3,322	83	66	17
1967	14,874	12,958	1,916	1,247	3	1,244	93	85	8	16,028	12,876	3,152	81	65	16
1968	16,704	14,695	2,009	1,896	10	1,886	78	64	14	18,522	14,641	3,881	92	73	19
1969	15,563	13,694	1,869	2,122	15	2,107	215	199	16	17,470	13,510	3,960	86	67	20
1970	16,136	14,340	1,796	2,049	2	2,047	172	114	58	18,013	14,228	3,785	88	69	18
1971	18,559	16,635	1,924	2,545	3	2,542	114	99	15	20,990	16,539	4,451	101	80	21
1972	20,354	18,324	2,030	3,162	6	3,156	247	221	26	23,269	18,109	5,160	111	86	25
1973	20,112	18,305	1,807	2,536	9	2,527	451	411	40	22,197	17,903	4,294	105	84	20
1974	17,279	15,878	1,401	1,648	4	1,644	610	542	68	18,317	15,340	2,977	86	72	14
1975	17,102	16,050	1,052	1,925	7	1,918	859	791	68	18,168	15,266	2,902	84	71	13
1976	19,523	18,440	1,083	2,368	12	2,356	795	716	79	21,096	17,736	3,360	97	81	15
1977	20,563	19,376	1,187	2,272	18	2,254	357	287	70	22,478	19,107	3,371	102	87	15
1978	21,149	19,964	1,185	2,555	63	2,492	329	298	31	23,375	19,729	3,646	105	89	16
1979	20,803	19,653	1,150	2,097	27	2,070	431	402	29	22,469	19,278	3,191	100	86	14
1980	17,371	16,333	1,038	1,235	37	1,198	413	373	40	18,193	15,997	2,196	80	70	10
1981	17,728	16,752	976	1,512	30	1,482	733	686	47	18,507	16,096	2,411	80	70	10
1982	17,231	15,846	1,385	1,878	9	1,869	493	452	41	18,616	15,403	3,213	80	66	14
1983	20,960	19,480	1,480	2,747	18	2,729	615	574	41	23,092	18,924	4,168	99	81	18
1984	21,431	19,926	1,505	2,527	48	2,480	408	371	37	23,550	19,603	3,948	100	83	17
1985	21,511	20,169	1,342	3,112	54	3,058	365	321	44	24,259	19,903	4,356	102	83	18
1986	23,508	22,118	1,390	3,234	63	3,171	676	614	61	26,067	21,567	4,500	108	90	19
1987	24,423	22,899	1,524	3,932	129	3,803	855	796	60	27,500	22,232	5,268	113	92	22
1988	24,151	22,599	1,552	3,358	96	3,262	1108	1004	104	26,401	21,691	4,711	108	89	19
1989	22,926	21,385	1,541	1,983	49	1,935	1562	1442	119	23,348	19,991	3,356	94	81	14
1990	22,456	20,919	1,537	1,687	38	1,649	1766	1613	153	22,377	19,344	3,033	90	77	12
1991	20,148	18,652	1,496	1,457	28	1,429	1553	1322	231	20,052	17,358	2,695	79	69	11
1992	20,755	19,332	1,423	1,776	47	1,729	1760	1442	318	20,771	17,937	2,834	81	70	11
1993	20,826	19,315	1,511	1,786	41	1,745	1677	1409	268	20,935	17,946	2,989	81	70	12
1994	21,439	19,638	1,801	1,693	47	1,646	1455	1211	244	21,677	18,474	3,203	83	71	12
1995	21,209	19,367	1,842	1,951	60	1,892	1517	1267	250	21,643	18,160	3,483	82	69	13
1996	20,965	19,181	1,784	1,780	85	1,695	1499	1248	251	21,246	18,018	3,228	80	68	12
1997	19,835	17,963	1,872	2,111	104	2,007	1802	1548	254	20,143	16,519	3,625	75	62	14
1998	19,738	17,776	1,962	2,429	179	2,250	970	764	206	21,198	17,191	4,007	78	64	15
1999	19,832	17,816	2,016	2,989	469	2,519	833	595	238	21,988	17,690	4,297	80	65	16

^aU.S. Department of Commerce, Bureau of the Census (44,54); American Plywood Association, The Engineered Wood Association (10); U.S. Department of Agriculture, Foreign Agricultural Service (32); Data may not add to totals because of rounding.

^bIncludes mixed species (not classified as hardwoods or softwoods).

Table 38—Production, imports, exports, and consumption of structural panel products, by type, 1980–1999
(million square feet, 3/8-in. basis)^a

Year	Production			Imports			Exports			Consumption		
	Total	Softwood plywood	Other structural panels ^b	Total	Softwood plywood	Other structural panels ^{b,c}	Total	Softwood plywood	Other structural panels ^b	Total	Softwood plywood	Other structural panels ^b
1980	16,468	16,333	135	360	37	323	373	373	^d	16,455	15,997	458
1981	17,023	16,752	271	349	30	319	686	686	^d	16,686	16,096	590
1982	16,403	15,846	557	268	9	259	452	452	^d	16,219	15,403	816
1983	20,821	19,480	1,341	423	18	405	574	574	^d	20,670	18,924	1,746
1984	21,968	19,926	2,042	727	48	679	371	371	^d	22,324	19,603	2,721
1985	22,838	20,169	2,669	848	54	794	321	321	^d	23,366	19,903	3,463
1986	25,631	22,118	3,513	723	63	660	614	614	^d	25,740	21,567	4,173
1987	26,975	22,899	4,076	889	129	760	796	796	^d	27,068	22,232	4,836
1988	27,203	22,599	4,604	911	96	815	1,004	1,004	^d	27,110	21,691	5,419
1989	26,490	21,385	5,105	1,160	49	1,111	1,442	1,442	^d	26,207	19,991	6,216
1990	26,337	20,919	5,418	1,351	38	1,313	1,613	1,613	^d	26,075	19,344	6,731
1991	24,265	18,652	5,613	1,016	28	988	1,379	1,322	57	23,901	17,358	6,544
1992	25,985	19,332	6,653	1,619	47	1,572	1,491	1,442	49	26,113	17,937	8,176
1993	26,317	19,315	7,002	2,203	41	2,163	1,470	1,409	60	27,051	17,946	9,105
1994	27,124	19,638	7,486	2,635	47	2,588	1,289	1,211	78	28,469	18,474	9,995
1995	27,270	19,367	7,903	3,274	60	3,214	1,348	1,267	82	29,196	18,160	11,036
1996	28,495	19,181	9,314	4,500	85	4,414	1,405	1,248	157	31,590	18,018	13,572
1997	28,497	17,963	10,534	5,376	104	5,272	1,715	1,548	167	32,158	16,519	15,639
1998	29,003	17,776	11,227	6,671	179	6,492	864	764	100	34,810	17,191	17,619
1999	29,428	17,816	11,612	7,820	469	7,351	774	595	179	36,474	17,690	18,783

^aAmerican Plywood Association (8,10); U.S. Department of Agriculture, Foreign Agricultural Service (32); Data may not add to totals because of rounding.

^bOriented strandboard and waferboard.

^cBased on Canadian export data. Industry sources estimate that about 95 percent of Canadian exports are to U.S. markets.

^dNot available.

Table 39—Hardwood plywood imports, by country or region of origin, 1965–1999 (million square feet, surface measured)^a

Year ^b	Latin America								Asia							Europe							
	Total	Central America and South			Other ^c				Total	Japan	Philip-pines	China ^d	Taiwan	Korea	Indo-nesia	Malaysia	Other Asia	Total	Russian Federation			Africa	Other ^e
		Canada	Total	Mexico	West Indies	Brazil	Other	Other											Federation	Other			
1965	2,032.8	64.5	10.8	f	f	—	10.8	1,832.4	768.0	307.8	368.2	—	336.7	—	—	51.7	118.3	—	—	6.8	—		
1966	2,553.7	64.1	8.7	—	—	—	8.7	2,328.9	783.4	397.9	528.8	—	573.6	—	—	45.2	145.1	—	—	6.6	0.3		
1967	2,532.7	48.0	8.1	f	—	—	8.1	2,356.0	632.3	471.5	485.4	—	702.0	—	—	64.8	118.2	—	—	2.4	f		
1968	3,841.3	53.0	12.2	—	1.0	—	11.2	3,619.1	921.3	602.2	829.6	—	1,167.2	—	—	98.8	156.0	—	—	1.0	f		
1969	4,290.2	40.6	11.7	0.1	4.0	—	7.6	4,043.8	802.3	572.1	936.0	—	1,589.8	—	—	143.6	192.3	—	—	1.8	f		
1970	4,168.1	24.9	10.2	f	1.9	—	8.3	3,996.3	623.5	570.9	939.6	—	1,787.3	—	—	75.0	136.1	—	—	0.5	0.1		
1971	5,176.7	45.8	13.8	—	1.3	—	12.5	4,989.7	598.3	592.2	1,395.5	—	2,251.3	0.1	—	152.3	127.3	—	—	f	0.1		
1972	6,427.5	69.5	20.5	—	8.7	—	11.8	6,216.0	519.1	644.2	2,021.9	—	2,865.6	—	—	165.2	121.3	—	—	0.1	0.1		
1973	5,146.7	74.4	18.0	—	4.5	—	13.5	4,959.6	341.0	695.3	1,367.2	—	2,443.0	—	—	113.1	94.0	—	—	0.5	0.2		
1974	3,349.1	46.8	18.8	—	1.0	—	17.8	3,229.0	244.3	279.3	937.2	—	1,694.7	—	—	73.5	48.2	—	—	—	6.3		
1975	3,906.4	50.4	15.8	—	7.5	—	8.3	3,805.1	240.5	224.1	1,011.8	—	2,290.0	—	—	38.7	30.8	—	—	—	4.3		
1976	4,797.8	53.6	18.3	—	6.8	—	11.5	4,668.7	312.5	352.9	1,189.4	—	2,785.7	—	—	28.2	47.6	—	—	0.5	9.1		
1977	4,590.7	69.3	24.8	—	5.1	—	19.7	4,445.3	356.1	231.0	1,149.1	—	2,676.9	—	—	32.2	44.2	—	—	—	7.1		
1978	5,076.0	75.3	29.6	0.1	5.9	—	23.6	4,922.2	255.6	312.4	1,752.8	—	2,493.0	64.3	—	44.1	48.1	—	—	0.7	0.1		
1979	4,216.3	82.2	53.7	f	2.4	—	51.3	4,039.6	192.7	367.3	1,523.1	—	1,836.7	95.5	—	24.3	40.8	—	—	f	f		
1980	2,440.5	72.8	46.1	—	3.7	—	42.4	2,290.5	150.4	246.7	859.8	—	902.1	120.8	—	10.7	30.6	—	—	f	0.5		
1981	3,017.5	64.7	30.4	—	4.4	—	26.0	2,884.4	139.8	436.7	1,080.9	—	943.7	271.7	—	11.6	37.9	—	—	0.1	—		
1982	2,249.4	54.5	24.3	—	2.5	—	21.8	2,146.4	95.8	161.3	850.6	—	559.6	473.9	—	5.2	24.1	—	—	—	0.1		
1983	3,346.6	57.5	44.1	0.3	1.3	—	42.5	3,205.6	119.9	182.4	1,124.6	—	414.8	1,352.2	—	11.7	39.4	—	—	—	f		
1984	2,982.3	73.4	90.0	0.1	1.4	—	88.5	2,767.9	109.7	94.9	904.8	—	78.1	1,568.8	—	11.6	50.9	—	—	f	0.1		
1985	3,522.1	69.4	75.1	f	2.9	—	72.2	3,294.6	106.7	212.6	780.3	—	28.2	2,147.2	—	19.6	82.3	—	—	0.4	0.3		
1986	3,809.2	55.8	120.8	0.2	1.8	—	118.8	3,556.4	74.0	110.9	723.5	—	61.8	2,551.1	—	35.1	71.5	—	—	4.7	f		
1987	3,950.2	87.4	105.9	0.2	0.9	—	104.8	3,670.7	41.6	126.1	665.6	—	48.7	2,721.4	—	67.3	85.1	—	—	0.5	0.6		
1988	3,262.3	81.7	118.5	f	0.5	—	118.0	3,022.0	19.8	51.8	523.8	—	6.7	2,345.4	—	74.5	39.6	—	—	—	0.5		
1989	3,938.9	249.1	232.1	0.6	2.2	186.9	42.3	3,271.2	11.5	59.5	0.4	770.2	9.5	2,341.2	40.3	38.5	158.7	0.0	158.7	0.2	27.5		
1990	3,356.4	211.1	306.3	0.0	4.2	248.9	53.3	2,700.6	3.9	35.7	0.4	255.9	7.9	2,209.4	159.1	28.3	90.6	0.0	90.6	0.0	47.9		
1991	2,910.3	215.8	297.2	0.1	1.3	237.6	58.2	2,268.6	3.2	16.5	1.4	141.9	0.6	1,798.0	289.0	18.0	82.0	0.0	82.0	0.0	46.7		
1992	3,520.5	268.4	455.6	1.8	1.4	397.6	54.7	2,706.1	1.8	23.2	2.1	109.5	0.0	2,084.1	471.3	13.9	87.7	25.6	62.1	0.1	2.8		
1993	3,553.3	310.0	686.5	0.2	3.8	594.8	87.8	2,430.9	0.6	8.6	14.5	90.5	0.4	1,858.5	443.7	14.2	122.8	60.0	62.8	0.6	2.5		
1994	3,351.3	372.9	847.1	5.7	8.2	687.2	146.0	1,922.3	1.5	0.8	20.4	45.9	0.1	1,456.4	379.1	18.1	205.6	141.9	63.6	0.9	2.4		
1995	3,851.4	422.6	832.6	10.1	8.7	554.0	259.8	2,282.7	0.2	0.2	12.4	29.3	0.0	1,858.4	373.9	8.3	311.9	252.1	59.8	0.0	1.6		
1996	3,451.0	339.4	826.7	21.0	9.8	496.5	299.4	1,931.6	1.2	0.4	14.3	38.4	0.0	1,575.1	300.4	1.7	351.6	330.3	21.3	0.2	1.6		
1997	4,086.1	606.1	856.4	16.4	6.2	569.1	264.7	2,200.7	2.0	0.0	47.3	33.4	0.0	1,786.2	326.8	5.0	422.3	306.8	115.6	0.3	0.2		
1998	4,581.7	654.6	490.1	7.2	6.2	271.3	205.4	2,948.5	1.2	0.0	104.1	36.7	1.2	2,074.2	723.3	7.8	480.8	388.1	92.8	2.0	5.6		
1999	5,129.3	713.9	720.4	16.3	1.8	463.3	239.0	3,010.1	0.8	0.0	153.8	45.2	1.3	1,837.5	963.4	8.1	667.8	535.2	132.6	3.1	14.1		

^aU.S. International Trade Commission (69). Data may not add to totals because of rounding, 1989 - 1997 numbers were revised. Conversion of 2.036 used from square feet 3/8 inch basis.

^bFor the years 1974 to 1977, all imports with a value of less than \$500 are included in Other.

^cIncludes Brazil from 1965-1988.

^dIncludes Taiwan from 1965-1988.

^eIncludes mixed species (not classified as hardwoods or softwoods).

^fFewer than 100 ft².

Table 40—Veneer imports and exports, by species, 1965–1999 (million square feet, surface measured)^a

Year	Imports					Exports					
	Total	Hardwoods			Soft-woods	Total	Hardwoods				Soft-woods
		Total	Birch and maple	Other			Total	Walnut	Red and white oak	Other	
1965	1,958.2	1,871.2	817.4	1,053.8	87.0	169.8	143.7	80.6	^b	63.1	26.1
1966	2,043.0	1,843.7	766.4	1,077.3	199.3	153.9	110.5	54.2	^b	56.3	43.4
1967	1,990.9	1,796.7	754.9	1,041.8	194.2	192.8	105.8	44.8	^b	61.0	87.0
1968	2,340.1	2,178.7	820.8	1,357.9	161.4	306.3	173.6	71.9	^b	101.7	132.7
1969	2,054.6	1,855.7	698.2	1,157.5	198.9	360.6	194.2	92.4	^b	101.8	166.4
1970	1,876.6	1,605.8	650.0	955.8	270.8	327.1	183.8	111.3	^b	72.5	143.3
1971	2,302.1	2,035.2	812.0	1,223.2	266.9	571.5	172.7	97.7	^b	75.0	398.8
1972	3,151.4	2,786.0	997.9	1,788.1	365.4	491.7	204.3	84.9	^b	119.4	287.4
1973	2,967.7	2,582.9	890.5	1,692.4	384.8	660.5	346.0	90.9	^b	255.1	314.5
1974	2,281.6	1,965.9	679.6	1,286.3	315.7	599.4	380.8	77.4	^b	303.4	218.6
1975	1,497.7	1,145.6	552.2	593.4	352.1	736.8	390.3	63.6	^b	326.7	346.5
1976	1,993.5	1,595.6	760.3	835.3	397.9	768.2	505.8	91.8	^b	414.0	262.4
1977	2,261.0	1,718.5	721.3	997.2	542.5	687.0	516.5	93.1	^b	423.4	170.5
1978	2,143.3	1,632.5	722.8	909.7	510.8	1,541.6	1,353.3	128.9	476.1	748.3	188.3
1979	2,076.6	1,560.1	713.4	846.7	516.5	1,072.5	886.0	80.6	522.0	283.4	186.5
1980	1,666.8	1,213.2	584.2	629.0	453.6	1,333.1	1,077.3	117.8	631.2	328.3	255.8
1981	1,729.3	1,406.3	605.1	801.2	323.0	1,378.1	919.6	107.9	509.2	302.5	458.5
1982	1,665.9	1,231.9	506.8	725.1	434.0	1,140.3	803.6	78.6	512.9	212.1	336.7
1983	2,072.5	1,607.2	637.8	969.4	465.3	1,438.8	1,023.8	106.0	624.4	293.4	415.0
1984	1,886.8	1,502.9	537.2	965.7	383.9	1,370.5	1,002.7	84.4	636.0	282.3	367.8
1985	1,753.4	1,398.0	501.5	896.5	355.4	1,100.2	792.6	85.6	481.5	225.5	307.6
1986	1,997.4	1,603.9	557.3	1,046.6	393.5	1,466.1	995.8	72.6	639.3	283.9	470.3
1987	2,106.6	1,682.2	563.4	1,118.8	424.4	1,775.9	1,384.7	90.7	857.4	436.6	391.2
1988	2,226.7	1,713.8	588.0	1,125.8	512.9	1,830.1	1,574.2	69.9	1,058.7	445.6	255.9
1989	1,163.9	719.7	239.9	479.8	444.1	1,712.2	1,599.6	35.8	431.0	1,132.7	112.6
1990	2,109.3	1,600.7	559.2	1,041.5	508.6	1,820.2	1,681.4	103.4	1,135.5	442.5	138.9
1991	1,917.4	1,383.7	523.5	860.2	533.7	1,896.1	1,725.5	85.9	1,084.3	555.4	170.6
1992	2,422.3	1,674.4	599.1	1,075.3	747.9	2,072.2	1,884.8	69.7	1,094.0	721.2	187.4
1993	2,870.0	1,904.1	619.2	1,284.9	965.9	2,209.9	1,977.4	60.7	958.1	958.6	232.5
1994	3,036.6	1,946.6	713.0	1,233.7	1,090.0	2,459.3	2,310.0	68.4	1,086.1	1,155.5	149.3
1995	3,223.2	2,283.2	739.4	1,543.8	940.0	2,800.0	2,613.3	73.6	1,109.9	1,429.8	186.7
1996	3,011.4	2,093.4	718.2	1,375.1	918.0	2,792.7	2,613.3	49.1	1,080.1	1,484.1	179.4
1997	2,926.9	1,994.9	767.9	1,227.0	932.0	3,068.6	2,875.4	60.2	1,070.3	1,744.8	193.2
1998	3,435.1	2,210.7	789.2	1,421.6	1,224.3	2,946.1	2,722.2	58.6	1,041.5	1,622.0	223.9
1999	3,933.3	2,350.6	947.9	1,402.7	1,582.7	3,293.3	2,986.8	78.6	1,008.7	1,899.4	306.5

^aAmerican Forest and Paper Association (3); U.S. International Trade Commission (69). Data may not add to totals because of rounding, 1989-1997 numbers were revised.

^bRed and white oak are included in Other for 1965 to 1977.

Table 41—Hardwood veneer imports, by country or region of origin, 1965–1999 (million square feet, surface measured)^a

Year	Total	Latin America					Asia						
		Canada	Total	Mexico	Central America and West Indies	South America	Total	Japan	Philippines	Other Asia	Africa	Europe	Other ^b
1965	1,871.2	852.0	67.1	0.1	19.2	47.8	687.0	4.8	527.0	155.2	219.8	44.3	0.9
1966	1,843.7	792.8	96.4	0.3	21.2	74.9	714.1	3.8	522.7	187.6	209.7	29.6	1.0
1967	1,796.7	775.8	140.9	0.1	8.0	132.8	580.9	3.8	451.8	125.3	271.2	27.7	0.2
1968	2,178.7	837.7	200.5	1.5	16.8	182.2	837.7	4.3	609.8	223.6	276.5	26.3	0.1
1969	1,855.7	713.9	152.7	0.6	13.1	139.0	838.6	5.3	671.4	161.9	128.1	22.2	0.3
1970	1,605.8	672.4	191.0	0.6	5.0	185.4	569.1	3.3	460.0	105.8	147.0	26.1	0.2
1971	2,035.2	842.4	216.1	0.5	15.1	200.5	809.4	4.5	590.9	214.0	143.1	24.0	0.2
1972	2,786.0	1,051.8	303.8	^c	28.8	275.0	1,226.5	0.9	822.5	403.1	153.9	30.2	19.7
1973	2,582.9	944.4	288.4	^c	43.2	245.2	1,126.1	2.3	850.8	273.0	167.2	27.8	29.0
1974	1,965.9	709.2	243.8	—	43.9	199.9	874.0	0.9	660.8	212.3	78.6	39.4	20.8
1975	1,145.6	570.7	132.5	—	22.2	110.3	331.5	3.8	294.3	33.4	74.3	23.1	13.5
1976	1,595.6	804.6	210.8	—	8.3	202.5	520.6	4.5	452.4	63.7	15.0	30.1	14.5
1977	1,718.5	801.4	159.1	0.9	13.0	145.2	689.3	5.5	580.5	103.3	19.6	30.5	18.7
1978	1,632.5	817.4	213.1	3.6	21.8	187.7	536.8	7.1	442.6	87.1	19.1	44.7	1.5
1979	1,560.1	834.0	149.4	2.0	28.2	119.2	482.5	1.3	448.2	33.0	35.4	56.4	2.4
1980	1,213.2	700.4	156.0	—	27.3	130.7	301.6	2.0	261.5	38.1	21.9	31.4	1.5
1981	1,406.3	753.6	165.0	0.2	27.3	137.5	398.2	0.9	330.7	66.6	36.3	41.6	11.4
1982	1,231.9	705.9	161.2	0.8	24.4	136.0	149.9	0.7	120.0	29.2	19.2	193.2	2.6
1983	1,607.2	908.3	192.2	3.0	23.1	166.1	366.0	2.8	318.3	44.9	27.1	100.9	12.8
1984	1,502.9	828.1	227.5	0.8	31.6	195.1	287.2	8.5	180.7	98.0	13.7	127.6	19.0
1985	1,398.0	728.7	233.1	0.2	26.5	206.4	240.5	6.5	110.7	123.3	26.1	150.8	18.8
1986	1,603.9	831.8	233.9	0.2	20.8	212.9	310.4	5.1	112.7	192.6	57.4	139.0	31.3
1987	1,682.2	910.8	245.0	—	18.0	227.0	331.3	6.3	122.8	202.2	40.9	127.0	27.2
1988	1,713.8	944.3	312.8	0.8	33.2	278.8	279.5	2.0	182.4	95.1	41.6	92.8	42.8
1989	719.7	366.9	143.1	0.0	6.4	136.7	116.4	2.5	72.5	41.4	23.9	53.9	15.6
1990	1,600.7	904.2	320.6	0.0	28.4	292.2	221.2	5.8	111.6	103.8	31.8	93.6	29.4
1991	1,383.7	832.1	254.4	0.0	25.5	228.9	167.3	4.8	73.3	89.1	26.7	75.0	28.2
1992	1,674.4	997.9	364.5	1.0	109.0	254.5	182.9	2.9	64.2	115.8	21.8	80.9	26.4
1993	1,904.1	1,158.4	452.8	2.9	7.8	442.0	120.5	2.5	11.6	106.3	39.2	95.7	37.5
1994	1,946.6	1,220.8	414.5	1.4	6.5	406.5	71.7	3.0	5.7	63.1	41.5	151.5	46.6
1995	2,283.2	1,186.4	575.4	9.1	14.8	551.5	213.0	3.5	47.9	161.6	114.4	137.8	56.1
1996	2,093.4	1,190.2	508.8	13.6	6.1	489.1	58.1	4.3	0.1	53.7	171.4	112.0	52.9
1997	1,994.9	1,247.4	374.4	17.0	1.6	355.7	61.9	6.1	0.0	55.8	137.2	139.8	34.2
1998	2,210.7	1,316.2	351.8	22.3	1.9	327.6	99.2	3.2	0.0	96.0	218.4	176.1	49.0
1999	2,350.6	1,440.5	340.8	22.6	0.7	317.5	94.0	5.6	0.0	88.4	282.7	167.9	24.7

^aU.S. International Trade Commission (69). Data may not add to totals because of rounding, 1989-1997 numbers were revised.

^bFor the years 1974 to 1977, all imports with a value of less than \$500 are included in Other.

^cFewer than 50,000 ft².

Table 42—Producer price indexes for plywood, 1965–1999 (1992 = 100)^a

Year	Softwood plywood									
	All plywood		All softwood plywood				All hardwood plywood ^b			
	Actual	Relative ^c	Actual	Relative	Western		Southern		Actual	Relative
1965	33.5	121.4	25.5	92.4	—	—	—	—	51.9	188.0
1966	33.7	118.7	25.6	90.1	—	—	—	—	52.4	184.5
1967	32.4	113.7	24.1	84.6	—	—	—	—	51.6	181.1
1968	37.4	128.1	31.2	106.8	—	—	—	—	51.9	177.7
1969	39.7	130.6	33.5	110.2	32.2	105.9	38.0	125.0	53.8	177.0
1970	35.1	111.4	27.4	87.0	26.2	83.2	32.1	101.9	52.9	167.9
1971	37.1	114.2	30.6	94.2	29.2	89.8	36.7	112.9	52.0	160.0
1972	42.3	124.4	37.3	109.7	35.7	105.0	43.8	128.8	53.9	158.5
1973	50.3	131.0	46.8	121.9	45.2	117.7	50.7	132.0	58.3	151.8
1974	52.1	114.3	45.0	98.7	43.7	95.8	48.0	105.3	67.3	147.6
1975	52.1	104.6	48.4	97.2	47.0	94.4	50.3	101.0	61.7	123.9
1976	60.6	116.3	59.7	114.6	56.7	108.8	66.1	126.9	63.3	121.5
1977	68.7	124.0	71.4	128.9	67.3	121.5	80.5	145.3	65.9	119.0
1978	76.3	128.0	78.7	132.0	75.1	126.0	86.2	144.6	72.4	121.5
1979	81.1	120.7	77.7	115.6	76.1	113.2	78.8	117.3	87.4	130.1
1980	79.8	104.2	74.5	97.3	72.0	94.0	78.5	102.5	91.2	119.1
1981	79.6	95.2	73.9	88.4	72.7	87.0	74.6	89.2	92.9	111.1
1982	75.1	88.0	68.0	79.7	65.4	76.7	72.5	85.0	93.5	109.6
1983	79.0	91.4	74.8	86.6	71.2	82.4	81.7	94.6	92.9	107.5
1984	78.2	88.4	73.2	82.7	70.5	79.7	77.2	87.2	93.2	105.3
1985	74.8	84.9	73.1	83.0	70.5	80.0	76.7	87.1	84.1	95.5
1986	76.2	89.1	74.4	87.0	71.9	84.1	78.0	91.2	85.1	99.5
1987	77.1	87.9	74.7	85.2	72.8	83.0	76.9	87.7	86.9	99.1
1988	77.7	85.2	74.2	81.4	73.9	81.0	73.8	80.9	88.1	96.6
1989	87.1	91.0	84.5	88.3	84.6	88.4	82.8	86.5	93.4	97.6
1990	85.8	86.5	81.4	82.1	82.0	82.7	78.8	79.4	96.1	96.9
1991	85.9	86.4	82.2	82.7	82.9	83.4	79.3	79.8	96.2	96.8
1992	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1993	114.8	113.1	115.4	113.7	116.6	114.9	113.0	111.3	108.0	106.4
1994	119.2	116.1	120.3	117.1	121.0	117.8	121.3	118.1	114.4	111.4
1995	124.2	116.7	128.0	120.3	125.8	118.2	132.9	124.9	114.3	107.4
1996	117.7	108.0	118.3	108.5	117.8	108.1	114.2	104.8	116.9	107.2
1997	119.6	109.9	119.3	109.7	119.8	110.1	118.2	108.6	118.9	109.3
1998	118.3	107.2	119.1	107.9	117.5	106.4	125.6	113.8	118.7	107.5
1999	132.5	110.2	140.6	116.9	139.9	116.3	148.2	123.2	120.3	100.0

^aU.S. Department of Labor, Bureau of Labor Statistics (63).

^bHardwood plywood and related products.

^cDerived by dividing the actual price index by the all commodities index.

Table 43—Paper and board^a production, imports, exports, and consumption, 1965–1999^b

Year	Production	Imports ^c		Exports ^c		Consumption		
		Thousand tons	Thousand tons	Percent of consumption	Thousand tons	Percent of production	Total	Per capita
							Thousand tons	Pounds
1965	40,489	6,536	14.4	1,530	3.8	45,495	468	
1966	43,904	7,178	14.5	1,696	3.9	49,386	502	
1967	43,745	6,818	14.0	1,835	4.2	48,728	490	
1968	47,085	6,643	12.9	2,125	4.5	51,602	514	
1969	49,824	7,051	12.9	2,377	4.8	54,498	538	
1970	48,719	6,845	12.9	2,433	5.0	53,131	518	
1971	49,741	6,932	12.8	2,665	5.4	54,008	520	
1972	53,842	7,245	12.4	2,790	5.2	58,297	555	
1973	56,346	7,865	12.8	2,616	4.6	61,595	581	
1974	55,756	8,128	13.4	3,058	5.5	60,827	569	
1975	47,997	5,961	11.6	2,400	5.0	51,557	477	
1976	54,993	6,879	11.6	2,637	4.8	59,235	543	
1977	56,656	7,190	11.7	2,546	4.5	61,301	557	
1978	58,571	8,311	12.9	2,583	4.4	64,299	578	
1979	61,070	8,462	12.7	2,864	4.7	66,668	592	
1980	61,042	8,013	12.4	4,241	6.9	64,814	569	
1981	62,109	7,779	11.7	3,630	5.8	66,258	576	
1982	59,290	7,321	11.6	3,494	5.9	63,117	544	
1983	64,947	8,357	12.0	3,786	5.8	69,519	593	
1984	68,449	10,148	13.5	3,542	5.2	75,055	635	
1985	66,983	10,444	14.1	3,290	4.9	74,137	622	
1986	70,905	10,922	14.0	3,972	5.6	77,855	647	
1987	74,361	11,855	14.4	4,111	5.5	82,105	676	
1988	76,587	12,184	14.4	4,239	5.5	84,532	690	
1989	76,786	12,027	14.3	4,713	6.1	84,100	680	
1990	78,679	12,195	14.2	5,163	6.6	85,711	686	
1991	79,427	11,086	13.2	6,435	8.1	84,078	665	
1992	82,868	11,730	13.4	7,021	8.5	87,577	686	
1993	84,857	12,990	14.3	6,835	8.1	91,013	705	
1994	89,080	13,651	14.3	7,536	8.5	95,195	730	
1995	89,509	14,292	14.9	7,621	8.5	96,180	731	
1996	90,381	13,023	13.8	9,118	10.1	94,287	710	
1997	95,029	14,525	14.6	10,368	10.9	99,186	740	
1998	94,526	14,538	14.5	9,103	9.6	99,961	740	
1999	96,611	16,917	16.3	9,477	9.8	104,051	762	

^aExcludes hardboard. Excludes wet machine board and construction grades.

^bNumbers are the sum of Table 43 & Table 44.

^cExcludes converted products.

Table 44—Paper shipments, imports, exports, and consumption, 1965–1999^a

Year	Shipments ^{b,c} <i>Thousand tons</i>	Imports ^{b,c,d}		Exports ^{b,c,e}		Consumption	
		<i>Thousand tons</i>	<i>Percent of consumption</i>	<i>Thousand tons</i>	<i>Percent of production</i>	<i>Thousand tons</i>	<i>Per capita^g Pounds</i>
1965	19,157	6,528	25.9	491	2.6	25,194	259
1966	20,725	7,128	26.1	530	2.6	27,323	278
1967	20,926	6,805	25.0	501	2.4	27,230	274
1968	22,181	6,625	23.4	529	2.4	28,277	282
1969	23,449	7,040	23.5	517	2.2	29,972	296
1970	23,351	6,835	23.1	534	2.3	29,652	289
1971	23,722	6,915	23.0	550	2.3	30,087	290
1972	25,359	7,237	22.6	559	2.2	32,037	305
1973	26,797	7,832	23.0	601	2.2	34,028	321
1974	26,863	8,094	23.8	909	3.4	34,049	318
1975	23,260	5,953	21.1	947	4.1	28,266	262
1976	26,577	6,866	21.1	928	3.5	32,515	298
1977	27,722	7,162	21.0	716	2.6	34,168	310
1978	28,320	8,211	22.8	543	1.9	35,988	323
1979	29,666	8,380	22.4	601	2.0	37,445	333
1980	30,116	7,915	21.3	907	3.0	37,124	326
1981	30,901	7,649	20.4	1,008	3.3	37,542	326
1982	30,245	7,206	19.7	840	2.8	36,611	315
1983	32,802	8,189	20.4	774	2.4	40,217	343
1984	34,446	9,905	22.7	811	2.4	43,540	369
1985	34,061	10,260	23.6	779	2.3	43,542	365
1986	35,550	10,641	23.5	884	2.5	45,307	376
1987	36,919	11,494	24.2	921	2.5	47,492	391
1988	38,353	11,843	24.1	1,102	2.9	49,094	401
1989	38,266	11,494	23.8	1,466	3.8	48,295	391
1990	39,361	11,569	23.4	1,519	3.9	49,411	395
1991	39,084	10,313	21.8	2,072	5.3	47,325	375
1992	40,973	10,786	22.0	2,635	6.4	49,124	385
1993	41,745	11,905	23.3	2,587	6.2	51,063	396
1994	43,356	12,384	23.5	2,980	6.9	52,760	405
1995	42,868	12,874	24.4	3,011	7.0	52,731	401
1996	42,481	11,694	23.1	3,500	8.2	50,676	382
1997	44,697	13,028	24.1	3,599	8.1	54,127	404
1998	44,777	12,872	23.7	3,288	7.3	54,361	402
1999	45,552	14,946	26.2	3,405	7.5	57,093	418

^aExcludes building paper and converted products.

^bAmerican Paper Institute; American Forest & Paper Association: Statistics of paper, paperboard & wood pulp; 1977, 1982, 1985, 1990, 1995 & 1998 annual editions (4)

^cAmerican Forest & Paper Association: Paper, paperboard & wood pulp - monthly statistical summary, May 1999 (2).

^d1965-1997 numbers revised. This import series incorporates data on Canadian exports of newsprint & uncoated groundwood to the U.S. rather than US Dept. of Commerce import data for these commodities. Such data for 1998 obtained from the Canadian Pulp & Paper Association (CPPA), in Ottawa, Canada, by fax communication.

^e1965-1988 numbers revised to make series consistent with later numbers.

^fConsumption = Production + Imports - Exports.

^gBased upon population data given in Table 1.

Table 45—Paperboard^a production,^b imports, exports, and consumption, 1965–1999

Year	Production ^{c,d,e} <i>Thousand tons</i>	Imports ^{c,d,f}		Exports ^{c,d,g}		Consumption	
		<i>Thousand tons</i>	<i>Percent of consumption</i>	<i>Thousand tons</i>	<i>Percent of production</i>	<i>Thousand tons</i>	<i>Per capitaⁱ Pounds</i>
1965	21,332	8	0.0	1,039	4.9	20,301	209
1966	23,179	50	0.2	1,166	5.0	22,063	224
1967	22,819	13	0.1	1,334	5.8	21,498	216
1968	24,904	18	0.1	1,596	6.4	23,326	232
1969	26,376	11	0.0	1,860	7.1	24,527	242
1970	25,368	10	0.0	1,899	7.5	23,479	229
1971	26,019	17	0.1	2,115	8.1	23,921	230
1972	28,483	8	0.0	2,231	7.8	26,260	250
1973	29,549	33	0.1	2,015	6.8	27,567	260
1974	28,894	34	0.1	2,149	7.4	26,779	250
1975	24,736	8	0.0	1,453	5.9	23,291	216
1976	28,416	13	0.0	1,709	6.0	26,720	245
1977	28,935	28	0.1	1,830	6.3	27,133	246
1978	30,251	100	0.4	2,040	6.7	28,311	254
1979	31,404	82	0.3	2,263	7.2	29,223	260
1980	30,926	98	0.4	3,334	10.8	27,690	243
1981	31,208	130	0.5	2,622	8.4	28,716	250
1982	29,045	115	0.4	2,654	9.1	26,506	228
1983	32,146	168	0.6	3,012	9.4	29,302	250
1984	34,002	243	0.8	2,731	8.0	31,514	267
1985	32,922	184	0.6	2,511	7.6	30,595	257
1986	35,355	281	0.9	3,088	8.7	32,548	270
1987	37,442	361	1.0	3,190	8.5	34,613	285
1988	38,234	341	1.0	3,137	8.2	35,438	289
1989	38,519	533	1.5	3,247	8.4	35,805	290
1990	39,318	626	1.7	3,644	9.3	36,300	291
1991	40,343	773	2.1	4,363	10.8	36,753	291
1992	41,895	944	2.5	4,386	10.5	38,453	301
1993	43,113	1,085	2.7	4,248	9.9	39,950	310
1994	45,724	1,267	3.0	4,556	10.0	42,435	326
1995	46,641	1,418	3.3	4,610	9.9	43,449	330
1996	47,900	1,329	3.0	5,618	11.7	43,611	329
1997	50,332	1,497	3.3	6,769	13.4	45,060	336
1998	49,749	1,666	3.7	5,815	11.7	45,600	337
1999	51,059	1,971	4.2	6,072	11.9	46,958	344

^aDoes not include wet machine board, hard pressed board nor insulation board. Does not include converted products.

^bBy end use.

^cAmerican Paper Institute; American Forest & Paper Association: Statistics of Paper, Paperboard & Wood Pulp; 1977, 1982, 1985, 1990, 1995 & 1998 annual Statistics reports (4).

^dAmerican Forest & Paper Assn: Paper, Paperboard & Wood Pulp; A Monthly Statistical Summary; May 1999 (2).

^e1983 & 1996-1997 numbers revised.

^f1965-1988 numbers revised.

^gThis export series represents production for export; numbers may differ from exports reported by U.S. Dept. of Commerce. 1991 & 1997 numbers revised.

^hConsumption = Production + Imports - Exports.

ⁱBased upon population data given in Table 1.

Table 46—Paper and board production and fibrous materials consumed in the manufacture of paper and board, 1965–1999

Year	Paper and board ^a production ^{b,e} <i>Thousand tons</i>	Consumption of fibrous materials				Consumption of fibrous materials per ton of paper and board produced			
		Total	Wood pulp ^c	Recovered Paper ^d	Other ^{e,f}	Total	Wood pulp	Recovered paper ^g	Other
		<i>Thousand tons</i>	<i>Thousand tons</i>	<i>Thousand Tons</i>	<i>Thousand tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>
1965	40,489	46,838	35,728	10,231	879	1.157	0.882	0.253	0.022
1966	43,904	49,958	38,414	10,564	980	1.138	0.875	0.241	0.022
1967	43,745	48,846	38,122	9,888	836	1.117	0.871	0.226	0.019
1968	47,085	53,635	42,508	10,222	905	1.139	0.903	0.217	0.019
1969	49,824	57,597	44,750	11,969	878	1.156	0.898	0.240	0.018
1970	48,719	56,595	43,964	11,803	828	1.162	0.902	0.242	0.017
1971	49,741	58,224	45,243	12,106	875	1.171	0.910	0.243	0.018
1972	53,842	62,059	48,242	12,925	892	1.153	0.896	0.240	0.017
1973	56,346	64,953	49,976	14,094	883	1.153	0.887	0.250	0.016
1974	55,756	64,490	49,670	13,982	838	1.157	0.891	0.251	0.015
1975	47,997	55,970	43,597	11,748	625	1.166	0.908	0.245	0.013
1976	54,993	63,294	48,930	13,622	742	1.151	0.890	0.248	0.013
1977	56,656	65,240	50,356	14,058	826	1.152	0.889	0.248	0.015
1978	58,571	67,059	51,445	14,760	854	1.145	0.878	0.252	0.015
1979	61,070	68,648	52,560	15,361	727	1.124	0.861	0.252	0.012
1980	61,042	68,727	53,203	14,922	602	1.126	0.872	0.244	0.010
1981	62,109	68,828	53,199	15,037	592	1.108	0.857	0.242	0.010
1982	59,290	66,611	51,729	14,433	449	1.123	0.872	0.243	0.008
1983	64,947	70,573	54,504	15,638	431	1.087	0.839	0.241	0.007
1984	68,449	75,732	58,643	16,724	365	1.106	0.857	0.244	0.005
1985	66,983	71,482	54,816	16,371	295	1.067	0.818	0.244	0.004
1986	70,905	75,368	57,121	17,934	313	1.063	0.806	0.253	0.004
1987	74,361	78,522	59,508	18,694	320	1.056	0.800	0.251	0.004
1988	76,587	80,730	60,668	19,685	377	1.054	0.792	0.257	0.005
1989	76,786	81,772	61,234	20,220	318	1.065	0.797	0.263	0.004
1990	78,679	84,040	62,036	21,736	268	1.068	0.788	0.276	0.003
1991	79,427	86,143	62,294	23,662	187	1.085	0.784	0.298	0.002
1992	82,868	89,507	63,145	26,185	177	1.080	0.762	0.316	0.002
1993	84,857	91,471	63,227	28,011	233	1.078	0.745	0.330	0.003
1994	89,080	95,771	64,842	30,670	259	1.075	0.728	0.344	0.003
1995	89,509	96,531	64,811	31,391	329	1.078	0.724	0.351	0.004
1996	90,381	98,412	64,025	33,981	406	1.089	0.708	0.376	0.004
1997	95,029	101,590	66,057	35,208	298	1.069	0.695	0.370	0.003
1998	94,526	101,217	65,122	35,770	625	1.071	0.689	0.378	0.007
1999	96,611	101,672	64,126	37,221	605	1.052	0.664	0.385	0.006

^aExcludes paper, paperboard, wet machine board and construction grades.

^bProduction numbers = totals in Table 42. Source: see e) below.

^cWood pulp consumption numbers from Table 48 (some numbers revised).

^dWastepaper consumption numbers from Table 46 (some numbers revised).

^eAmerican Paper Institute; American Forest & Paper Association: Statistics of Paper, Paperboard & Wood Pulp; 1977, 1982, 1990, 1995, 1999 annual Statistics reports (4).

^f1981-1987 & 1996-1997 numbers revised. 1999 number is preliminary.

^gWhen given as percentage, referred to as "Recovered Paper Utilization Rate".

Table 47—Paper and board new supply and recyclable paper consumption, exports, imports, and total recovered, 1965–1999^{a,b,c}

Year	Recyclable paper						
	Paper and board— new supply ^{d,e}	Consumed at paper and board mills ^f	For molded pulp, insulation, and other uses ^g	Exports ^h	Imports ⁱ	Total recovered ^j	Recovery rate ^{k,l}
	<i>Thousand tons</i>	<i>Thousand tons</i>	<i>Thousand tons</i>	<i>Thousand tons</i>	<i>Thousand tons</i>	<i>Thousand tons</i>	<i>Percent</i>
1965	48,270	10,231	—	292	108	—	—
1966	52,118	10,564	—	246	113	—	—
1967	51,435	9,888	—	262	86	—	—
1968	54,351	10,222	—	253	93	—	—
1969	57,423	11,969	—	289	75	—	—
1970	55,969	11,803	418	408	67	12,562	22.4
1971	57,450	12,106	442	419	68	12,899	22.4
1972	62,040	12,925	447	415	88	13,699	22.1
1973	65,004	14,094	499	683	87	15,189	23.4
1974	63,308	13,982	489	1,307	89	15,689	24.8
1975	54,113	11,748	535	861	72	13,072	24.2
1976	62,014	13,622	630	1,273	106	15,419	24.9
1977	64,243	14,058	870	1,512	92	16,348	25.4
1978	67,787	14,760	502	1,613	70	16,805	24.8
1979	69,796	15,361	509	2,127	78	17,919	25.7
1980	67,166	14,922	472	2,636	87	17,943	26.7
1981	67,957	15,037	480	2,282	79	17,720	26.1
1982	64,730	14,433	487	2,233	74	17,078	26.4
1983	71,166	15,638	474	2,705	100	18,727	26.3
1984	76,937	16,724	459	3,456	110	20,530	26.7
1985	76,138	16,371	529	3,560	88	20,369	26.8
1986	79,755	17,934	594	4,093	99	22,521	28.2
1987	83,491	18,694	657	4,809	127	24,033	28.8
1988	85,718	19,685	703	5,953	161	26,179	30.5
1989	85,373	20,220	722	6,307	173	27,077	31.7
1990	86,796	21,736	994	6,505	123	29,112	33.5
1991	85,071	23,662	1,063	6,598	122	31,201	36.7
1992	88,273	26,185	1,137	6,782	150	33,954	38.5
1993	91,538	28,011	1,216	6,371	138	35,460	38.7
1994	95,718	30,670	1,300	7,974	253	39,691	41.5
1995	96,062	31,391	1,390	9,908	498	42,191	43.9
1996	94,490	33,981	1,487	8,084	474	43,077	45.6
1997	99,637	35,208	1,590	7,882	693	43,956	44.2
1998	101,137	35,770	1,700	8,117	511	45,076	44.6
1999	105,095	37,221	2,000	8,543	426	47,338	45.0

^aIncludes paper, paperboard, wet machine board and construction paper and board.

^b1972-Present, American Forest and Paper Association, 1999 Annual Statistical Summary Recovered Paper Utilization, p. 81 (6). 1965-1971, American Forest and Paper Association (2,4,5).

^cData may not add to totals because of rounding.

^dProduction plus imports less exports. Includes imports and exports of products.

^e1976-1977, 1980 & 1982-1988 revised.

^f1986, 1988, 1990 & 1997 revised.

^g1980, 1983-1984 & 1986 revised.

^h1978-1988 revised.

ⁱ1985 revised.

^jTotal recovered paper = total recyclable paper consumption plus exports less imports. 1978-1990 & 1997 revised.

^k1979-1988 & 1997 revised.

^lRecovery rate is the ratio of total recovered paper collected to new supply of paper and paperboard.

**Table 48—Recovered paper consumption, in paper and paperboard manufacture,^a
by major grade, 1970–1999 (thousand short tons)^b**

Year	Recovered paper consumption					Total recovery rate (%) ^d	
	Mixed grades	Old newspapers	Old corrugated	Pulp substitutes ^c	High grade deinking		Total all grades
1970	2,639.0	2,235.0	4,080.0	3,067.0	^e	12,021.0	22.4
1971	2,776.0	2,174.0	4,277.0	3,096.0	^e	12,323.0	22.4
1972	3,054.0	2,317.0	4,722.0	3,039.0	^e	13,132.0	22.1
1973	3,371.0	2,456.0	5,292.0	3,199.0	^e	14,318.0	23.4
1974	3,118.0	2,408.0	5,716.0	2,954.0	^e	14,196.0	24.8
1975	2,606.0	2,040.0	4,743.0	2,594.0	^e	11,983.0	24.2
1976	2,798.0	2,278.0	5,696.0	2,117.0	933.0	13,822.0	24.9
1977	2,773.0	2,287.0	6,205.0	2,079.0	944.0	14,288.0	25.4
1978	2,729.0	2,212.0	6,721.0	2,242.0	1,068.0	14,972.0	24.8
1979	2,648.0	2,480.0	6,967.0	2,308.0	1,117.0	15,520.0	25.7
1980	2,268.0	2,564.0	6,866.0	2,254.0	1,142.0	15,094.0	26.7
1981	2,233.0	2,552.0	6,910.0	2,307.0	1,215.0	15,217.0	26.1
1982	1,707.0	2,673.0	6,770.0	2,247.0	1,223.0	14,620.0	26.4
1983	1,908.0	2,692.0	7,443.0	2,456.0	1,323.0	15,822.0	26.3
1984	1,974.5	2,894.8	7,971.7	2,673.4	1,368.6	16,883.0	26.7
1985	1,901.5	2,875.0	7,899.5	2,493.7	1,380.4	16,550.1	26.8
1986	2,044.5	3,117.8	8,633.6	2,761.5	1,570.3	18,127.7	28.2
1987	2,116.0	3,142.6	9,176.7	2,902.2	1,563.5	18,901.0	28.8
1988	2,182.2	3,215.6	9,909.1	2,889.5	1,691.1	19,887.5	30.5
1989	2,355.8	3,638.1	9,993.5	2,642.4	1,812.4	20,442.2	31.7
1990	2,504.9	4,084.5	10,686.5	2,731.8	1,999.8	22,007.5	33.5
1991	2,890.6	4,572.4	11,247.0	2,988.5	2,239.5	23,938.0	36.7
1992	3,463.8	4,816.9	12,532.3	2,997.7	2,669.1	26,479.8	38.5
1993	4,110.1	5,000.3	13,566.8	2,802.1	2,856.8	28,336.1	38.7
1994	4,786.0	5,368.0	15,009.6	2,696.0	3,090.0	30,949.6	41.5
1995	4,529.4	5,157.3	16,513.5	2,459.1	3,004.0	31,663.3	43.9
1996	4,801.7	5,238.4	18,733.3	2,428.8	3,039.9	34,242.1	45.6
1997 ^f	4,699.0	5,561.5	19,641.0	2,641.0	2,955.0	35,497.5	44.2
1998	5,440.8	5,611.3	19,530.1	2,341.8	3,147.8	36,071.8	44.6
1999 ^g	5,578.2	5,833.6	20,611.2	2,310.3	3,186.6	37,519.9	45.0

^aIncludes paper, paperboard, construction grades and molded pulp grades.

^bAmerican Forest and Paper Association, 1999 Annual Statistical Summary, Recovered Paper Utilization, p. 12 & 81 (6).

^cFor years 1972-1975, high grade deinking is included with pulp substitutes.

^dRecovery rate is the ratio of total recovered paper collected to new supply of paper and paperboard.

^eNot available separately; included with pulp substitutes.

^f1997 numbers revised.

^gPreliminary.

Table 49—Wood pulp production, imports, exports, and consumption, 1965–1999^a

Year	Production ^{b,c,d} <i>Thousand tons</i>	Imports ^{d,e}		Exports ^{d,f}		Consumption	
		<i>Thousand tons</i>	<i>Percent of consumption</i>	<i>Thousand tons</i>	<i>Percent of production</i>	Total ^g	Per capita ^h
						<i>Thousand tons</i>	<i>Pounds</i>
1965	33,993	3,137	8.8	1,402	4.1	35,728	368
1966	36,603	3,358	8.7	1,547	4.2	38,414	391
1967	36,677	3,166	8.3	1,721	4.7	38,122	384
1968	40,892	3,532	8.3	1,916	4.7	42,508	424
1969	42,813	4,040	9.0	2,103	4.9	44,750	442
1970	43,546	3,513	8.0	3,095	7.1	43,964	429
1971	43,903	3,515	7.8	2,175	5.0	45,243	436
1972	46,767	3,728	7.7	2,253	4.8	48,242	460
1973	48,327	3,993	8.0	2,344	4.9	49,976	472
1974	48,349	4,123	8.3	2,802	5.8	49,670	464
1975	43,084	3,078	7.1	2,565	6.0	43,597	404
1976	47,721	3,727	7.6	2,518	5.3	48,930	449
1977	49,132	3,864	7.7	2,640	5.4	50,356	457
1978	50,020	4,024	7.8	2,599	5.2	51,445	462
1979	51,177	4,318	8.2	2,935	5.7	52,560	467
1980	52,958	4,051	7.6	3,806	7.2	53,203	467
1981	52,790	4,087	7.7	3,678	7.0	53,199	463
1982	51,468	3,656	7.1	3,395	6.6	51,729	446
1983	54,055	4,093	7.5	3,644	6.7	54,504	465
1984	57,747	4,490	7.7	3,594	6.2	58,643	496
1985	54,145	4,466	8.1	3,795	7.0	54,816	460
1986	56,997	4,582	8.0	4,458	7.8	57,121	475
1987	59,547	4,850	8.2	4,889	8.2	59,508	490
1988	61,158	5,038	8.3	5,528	9.0	60,668	495
1989	61,996	5,004	8.2	5,766	9.3	61,234	495
1990	63,048	4,893	7.9	5,905	9.4	62,036	496
1991	63,635	4,997	8.0	6,338	10.0	62,294	493
1992	65,338	5,029	8.0	7,222	11.1	63,145	494
1993	64,313	5,413	8.6	6,499	10.1	63,227	490
1994	65,920	5,650	8.7	6,728	10.2	64,842	497
1995	67,103	5,969	9.2	8,261	12.3	64,811	493
1996	65,503	5,692	8.9	7,170	10.9	64,025	482
1997	66,650	6,398	9.7	6,990	10.5	66,057	493
1998	65,163	5,984	9.2	6,025	9.2	65,122	482
1999	62,914	6,650	10.4	5,438	8.6	64,126	469

^aIncludes dissolving and special alpha pulps, excludes defibrated/exploded pulps and screenings.

^bU.S. Department of Commerce, Bureau of the Census (52,56,57); American Forest and Paper Association (2,4); United Nations, Food and Agriculture Organization (29).

^c1993-1997 revised to include dissolving and special alpha pulps, which is consistent with earlier years.

^dAmerican Paper Institute; American Forest & Paper Association: Statistics of Paper, Paperboard & Wood Pulp; 1977, 1982, 1990, 1995, 1998, 1999 annual Statistics reports (4).

^e1965-1967, 1970, 1973, 1977-1978, 1986-1988 & 1997 revised.

^f1966, 1968, 1972, 1975, 1985-1987 & 1996-1997 revised.

^gConsumption = Production + Imports - Exports.

^hBased on U.S. population data given in Table 1.

Table 50—Pulpwood consumed in manufacture of wood pulp, 1965–1999^a

Year	Pulpwood consumption ^b		Wood pulp production <i>Thousand tons</i>
	Total <i>Thousand cords</i>	Per ton of pulp produced <i>Cords</i>	
1965	54,034	1.59	33,993
1966	57,399	1.57	36,603
1967	58,419	1.59	36,677
1968	60,969	1.49	40,892
1969	64,577	1.51	42,813
1970	66,732	1.53	43,546
1971	66,601	1.52	43,903
1972	68,068	1.46	46,767
1973	71,421	1.48	48,327
1974	75,787	1.57	48,349
1975	63,941	1.48	43,084
1976	71,094	1.49	47,721
1977	72,952	1.48	49,132
1978	75,073	1.50	50,020
1979	78,680	1.54	51,177
1980	81,921	1.55	52,958
1981	81,003	1.53	52,790
1982	76,912	1.49	51,468
1983	84,504	1.56	54,055
1984	86,282	1.49	57,747
1985	85,380	1.58	54,145
1986	91,187	1.60	56,997
1987	93,005	1.56	59,547
1988	93,000	1.52	61,158
1989	92,615	1.49	61,996
1990	92,561	1.47	63,048
1991	91,925	1.44	63,635
1992	93,643	1.43	65,338
1993	90,996	1.41	64,313
1994	93,259	1.41	65,920
1995	97,272	1.45	67,103
1996	90,367	1.38	65,503
1997	84,674	1.27	66,650
1998	82,555	1.27	65,163
1999	79,972	1.27	62,914

^aU.S. Department of Commerce, Bureau of the Census (53); American Forest and Paper Association (2,4,5); Data may not add to totals because of rounding.

^bIncludes changes in inventories.

Table 51—Producer price indexes for paper, board, and wood pulp, 1965–1999 (1992 = 100)^a

Year	Pulp, paper, and allied products		Paper		Paperboard		Building paper and board		Wood pulp	
	Actual	Relative ^b	Actual	Relative ^b	Actual	Relative ^b	Actual	Relative ^b	Actual	Relative ^b
1965	22.9	83.0	26.8	97.1	29.6	107.2	35.2	127.5	22.0	79.7
1966	23.6	83.1	27.7	97.5	29.8	104.9	35.2	123.9	22.0	77.5
1967	23.8	83.5	28.4	99.6	29.2	102.5	34.9	122.5	22.0	77.2
1968	24.1	82.5	28.9	99.0	28.0	95.9	35.2	120.5	22.0	75.3
1969	24.8	81.6	29.9	98.4	29.0	95.4	36.9	121.4	22.0	72.4
1970	25.8	81.9	31.5	100.0	29.5	93.7	35.3	112.1	24.1	76.5
1971	26.2	80.6	32.4	99.7	29.9	92.0	35.9	110.5	24.7	76.0
1972	27.1	79.7	33.0	97.1	30.8	90.6	37.1	109.1	24.5	72.1
1973	29.1	75.8	34.4	89.6	33.6	87.5	39.4	102.6	28.2	73.4
1974	36.2	79.4	42.2	92.5	44.4	97.4	43.1	94.5	48.0	105.3
1975	40.6	81.5	49.1	98.6	49.7	99.8	44.4	89.2	62.4	125.3
1976	42.8	82.1	51.7	99.2	51.4	98.7	48.4	92.9	63.0	120.9
1977	44.5	80.3	55.1	99.5	51.4	92.8	54.8	98.9	61.9	111.7
1978	46.6	78.2	58.5	98.2	52.5	88.1	65.4	109.7	58.7	98.5
1979	52.3	77.8	65.2	97.0	59.0	87.8	63.7	94.8	69.2	103.0
1980	59.4	77.5	72.9	95.2	68.5	89.4	72.0	94.0	83.7	109.3
1981	65.3	78.1	79.4	95.0	75.3	90.1	80.9	96.8	87.5	104.7
1982	68.9	80.8	81.2	95.2	74.4	87.2	83.6	98.0	83.5	97.9
1983	71.1	82.3	80.0	92.6	73.2	84.7	87.3	101.0	76.4	88.4
1984	76.0	85.9	85.9	97.1	82.1	92.8	90.5	102.3	87.5	98.9
1985	78.0	88.5	86.1	97.7	80.1	90.9	89.8	101.9	76.3	86.6
1986	80.0	93.6	86.9	101.6	79.3	92.7	91.0	106.4	79.0	92.4
1987	83.9	95.7	90.6	103.3	87.9	100.2	93.0	106.0	93.1	106.2
1988	89.8	98.5	100.1	109.8	99.1	108.7	94.7	103.8	114.1	125.1
1989	94.9	99.2	105.3	110.0	104.2	108.9	96.7	101.0	131.4	137.3
1990	97.2	98.0	104.6	105.4	101.0	101.8	93.8	94.6	126.3	127.3
1991	98.4	99.0	103.1	103.7	96.9	97.5	93.5	94.1	99.5	100.1
1992	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1993	101.4	99.9	100.6	99.1	96.7	95.3	111.0	109.4	87.0	85.7
1994	105.0	102.2	102.2	99.5	104.3	101.6	120.6	117.4	97.2	94.6
1995	118.6	111.5	129.2	121.4	136.2	128.0	121.2	113.9	152.9	143.7
1996	116.2	106.6	121.4	111.4	116.1	106.5	114.6	105.1	111.7	102.5
1997	115.6	106.3	116.8	107.4	107.7	99.0	108.9	100.1	107.2	98.5
1998	117.6	106.6	118.6	107.4	112.9	102.3	111.0	100.5	102.3	92.7
1999	119.9	99.7	115.1	95.7	114.1	94.9	118.1	98.3	104.2	86.6

^aU.S. Department of Labor, Bureau of Labor Statistics (63).

^bDerived by dividing the actual price index by the all commodities price index.

Table 52—Producer price indexes for wastepaper, by grade, 1965–1999 (1992 = 100)^a

Year	Wastepaper		Newspaper		Mixed papers		Corrugated		High grades ^b		Exports (all grades)	
	Actual	Relative ^c	Actual	Relative ^c	Actual	Relative ^c	Actual	Relative ^c	Actual	Relative ^c	Actual	Relative ^c
1965	90.5	327.9	—	—	—	—	—	—	—	—	—	—
1966	95.5	336.3	—	—	—	—	—	—	—	—	—	—
1967	71.1	249.5	151.6	531.9	131.9	462.8	72.4	254.0	—	—	—	—
1968	92.4	316.4	207.9	712.0	201.3	689.4	93.1	318.8	—	—	—	—
1969	98.6	324.3	186.4	613.2	222.0	730.3	101.7	334.5	—	—	—	—
1970	88.9	282.2	163.8	520.0	171.8	545.4	98.2	311.7	—	—	—	—
1971	79.7	245.2	156.4	481.2	161.9	498.2	80.8	248.6	—	—	—	—
1972	95.0	279.4	180.7	531.5	204.7	602.1	95.3	280.3	—	—	—	—
1973	140.3	365.4	208.0	541.7	304.5	793.0	161.8	421.4	—	—	—	—
1974	188.8	414.0	305.6	670.2	436.4	957.0	182.2	399.6	—	—	—	—
1975	78.3	157.2	169.5	340.4	136.6	274.3	65.1	130.7	—	—	—	—
1976	131.4	252.2	302.5	580.6	206.2	395.8	141.8	272.2	—	—	—	—
1977	133.2	240.4	317.7	573.5	230.0	415.2	135.1	243.9	—	—	—	—
1978	135.9	228.0	303.9	509.9	295.5	495.8	146.4	245.6	—	—	—	—
1979	146.9	218.6	230.1	342.4	269.6	401.2	201.8	300.3	—	—	—	—
1980	148.3	193.6	253.9	331.5	292.4	381.7	139.2	181.7	—	—	—	—
1981	124.9	149.4	—	—	—	—	—	—	—	—	—	—
1982	86.1	100.9	109.3	128.1	100.0	117.2	68.5	80.3	—	—	—	—
1983	—	—	—	—	—	—	—	—	—	—	—	—
1984	170.7	192.9	292.7	330.7	322.8	364.7	217.7	246.0	—	—	—	—
1985	105.9	120.2	227.4	258.1	274.6	311.7	106.2	120.5	—	—	—	—
1986	122.8	143.6	209.1	244.6	240.7	281.5	163.1	190.8	—	—	—	—
1987	156.2	178.1	266.6	304.0	285.6	325.7	214.6	244.7	110.3	125.8	140.8	160.5
1988	158.1	173.4	262.2	287.5	314.7	345.1	171.6	188.2	132.7	145.5	144.1	158.0
1989	135.3	141.4	136.0	142.1	215.1	224.8	123.6	129.2	137.0	143.2	127.4	133.1
1990	119.6	120.6	113.9	114.8	162.1	163.4	113.4	114.3	120.7	121.7	113.2	114.1
1991	104.6	105.2	111.4	112.1	119.6	120.3	113.0	113.7	97.4	98.0	100.9	101.5
1992	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1993	101.1	99.6	110.3	108.7	168.3	165.8	97.5	96.1	96.0	94.6	93.2	91.8
1994	180.7	175.9	222.5	216.7	395.0	384.6	220.9	215.1	112.3	109.3	139.1	135.4
1995	319.6	300.4	465.6	437.6	968.1	909.9	352.8	331.6	161.6	151.9	249.6	234.6
1996	120.5	110.6	120.1	110.2	207.5	190.4	145.7	133.7	82.2	75.4	101.0	92.7
1997	142.5	131.0	119.7	110.0	194.8	179.0	170.5	156.7	98.4	90.4	125.2	115.1
1998	125.6	113.8	131.9	119.5	320.7	290.5	123.6	111.9	92.6	83.9	95.4	86.4
1999	157.6	131.1	181.4	150.9	739.9	615.3	271.6	225.9	100.7	83.7	129.0	107.3

^aU.S. Department of Labor, Bureau of Labor Statistics (63).

^bPulp substitutes and deinking; December 1986 = 100.

^cDerived by dividing the actual price index by the all commodities price index.

Table 53—Particleboard and medium-density fiberboard production, imports, exports, and consumption, 1965–1999 (3/4-in. basis)^a

Year	Production				Exports	Consumption	
	Total	Particleboard	Medium-density fiberboard	Imports ^b		Total	Per capita
						Million square feet	Million square feet
1965	828	753	75	4	^c	832	4
1966	1,031	948	83	1	^c	1,032	5
1967	1,167	1,074	93	1	2	1,166	6
1968	1,494	1,391	103	1	6	1,489	7
1969	1,796	1,682	114	12	14	1,794	9
1970	1,858	1,731	127	3	10	1,851	9
1971	2,500	2,359	141	8	20	2,488	12
1972	3,236	3,079	157	14	45	3,205	15
1973	3,634	3,460	174	17	77	3,574	17
1974	3,269	3,075	194	7	113	3,163	15
1975	2,718	2,503	215	16	84	2,650	12
1976	3,469	3,189	280	60	80	3,449	16
1977	4,010	3,569	441	158	63	4,105	19
1978	4,228	3,720	508	193	61	4,360	20
1979	3,883	3,376	507	221	84	4,020	18
1980	3,443	2,950	493	264	106	3,601	16
1981	3,385	2,869	516	254	117	3,522	15
1982	2,839	2,393	446	766	41	3,564	15
1983	3,613	3,009	604	994	47	4,560	19
1984	3,830	3,196	634	1,331	54	5,107	22
1985	4,016	3,331	685	1,335	59	5,292	22
1986	4,384	3,603	781	1,395	86	5,693	24
1987	4,605	3,706	899	1,550	113	6,042	25
1988	4,768	3,829	939	1,634	163	6,239	25
1989	4,828	3,858	970	425	333	4,920	20
1990	4,756	3,806	950	363	373	4,746	19
1991	4,730	3,772	958	293	369	4,654	18
1992	5,046	3,980	1,066	405	394	5,057	20
1993	5,402	4,241	1,161	572	318	5,656	22
1994	5,793	4,542	1,251	775	297	6,271	24
1995	5,307	4,200	1,107	840	319	5,828	22
1996	5,705	4,459	1,246	814	154	6,365	24
1997	5,916	4,531	1,385	963	188	6,691	25
1998	5,994	4,593	1,401	1,253	135	7,112	26
1999	6,043	4,630	1,413	1,282	135	7,190	26

^aNational Particleboard Association (20); U.S. International Trade Commission (69); U.S. Department of Agriculture (32). Data may not add to totals because of rounding.

^bMay contain significant volumes of waferboard and oriented strandboard products prior to 1989.

^cFewer than 500,000 ft².

Table 54—Insulating board^a production, imports, exports, and consumption, 1965–1999 (1/2-in. basis)^b

Year	Production	Imports ^c	Exports	Consumption	
				Total	Per capita
				<i>Million square feet</i>	<i>Square feet</i>
1965	3,362	75	42	3,395	17
1966	3,079	67	48	3,098	16
1967	3,209	69	45	3,233	16
1968	3,476	94	45	3,525	18
1969	3,623	98	65	3,656	18
1970	3,194	103	51	3,246	16
1971	3,839	115	65	3,889	19
1972	3,918	121	66	3,973	19
1973	3,914	140	79	3,975	19
1974	3,282	72	102	3,252	15
1975	2,960	36	77	2,919	14
1976	3,407	45	77	3,375	15
1977	3,462	107	84	3,485	16
1978	3,437	139	106	3,470	16
1979	3,310	138	49	3,399	15
1980	2,780	100	62	2,818	12
1981	2,124	104	110	2,118	9
1982	1,790	118	67	1,841	8
1983	2,277	204	83	2,398	10
1984	2,545	286	89	2,742	12
1985	2,461	343	80	2,724	11
1986	2,194	338	117	2,415	10
1987	2,242	273	127	2,388	10
1988	2,340	320	203	2,457	10
1989	2,455	346	180	2,621	11
1990	2,365	290	175	2,480	10
1991	2,323	200	191	2,332	9
1992	2,363	310	215	2,458	10
1993	2,358	285	208	2,435	9
1994 ^d	2,335	305	170	2,470	9
1995 ^d	2,335	305	170	2,470	9
1996 ^d	2,335	305	170	2,470	9
1997 ^d	2,335	305	170	2,470	9
1998 ^d	2,335	305	170	2,470	9
1999 ^d	2,335	305	170	2,470	9

^aDensity equal to or less than 31 lb/ft³.

^bAmerican Forest and Paper Association (2,4); U.S. Department of Commerce, Bureau of the Census (52,56,57); Data may not add to totals because of rounding.

^cIncludes other building board.

^dPreliminary.

Table 55—Insulating board^a production, imports, exports, and consumption, 1965–1999^b (thousand tons)

Year	Production <i>Thousand tons</i>	Imports ^c <i>Thousand tons</i>	Exports <i>Thousand tons</i>	Consumption	
				Total <i>Thousand tons</i>	Per capita <i>pounds</i>
1965	1,234	28	15	1,246	6
1966	1,130	25	18	1,137	6
1967	1,178	25	17	1,187	6
1968	1,276	34	17	1,294	6
1969	1,330	36	24	1,342	7
1970	1,172	38	19	1,191	6
1971	1,409	42	24	1,427	7
1972	1,438	44	24	1,458	7
1973	1,436	51	29	1,459	7
1974	1,204	26	37	1,193	6
1975	1,086	13	28	1,071	5
1976	1,250	17	28	1,239	6
1977	1,271	39	31	1,279	6
1978	1,261	51	39	1,273	6
1979	1,215	51	18	1,247	6
1980	1,020	37	23	1,034	5
1981	780	38	40	777	3
1982	657	43	25	676	3
1983	836	75	30	880	4
1984	934	105	33	1,006	4
1985	903	126	29	1,000	4
1986	805	124	43	886	4
1987	823	100	47	876	4
1988	859	117	75	902	4
1989	901	127	66	962	4
1990	868	106	64	910	4
1991	853	73	70	856	3
1992	867	114	79	902	4
1993	865	105	76	894	3
1994 ^d	857	112	62	906	3
1995 ^d	857	112	62	906	3
1996 ^d	857	112	62	906	3
1997 ^d	857	112	62	906	3
1998 ^d	857	112	62	906	3
1999 ^d	857	112	62	906	3

^aDensity equal to or less than 31 lb/ft³.

^bProduct of table 53 using a conversion of .367.

^cIncludes other building board.

^dPreliminary.

Table 56—Hardboard^a production, imports, exports, and consumption, 1965–1999 (1/8-in. basis)^b

Year	Production ^c <i>Million square feet</i>	Imports <i>Million square feet</i>	Exports <i>Million square feet</i>	Consumption	
				Total	Per capita
				<i>Million square feet</i>	<i>Square feet</i>
1965	2,921	574	22	3,473	18
1966	3,083	459	32	3,510	18
1967	3,038	455	30	3,463	17
1968	3,710	623	40	4,293	21
1969	4,247	694	48	4,893	24
1970	4,384	452	77	4,759	23
1971	5,225	631	83	5,773	28
1972	5,798	1,060	103	6,755	32
1973	6,050	1,047	131	6,966	33
1974	5,654	739	175	6,218	29
1975	5,681	264	158	5,787	27
1976	6,785	486	187	7,084	32
1977	7,714	625	174	8,165	37
1978	7,825	903	78	8,650	39
1979	7,688	831	101	8,418	37
1980	6,140	515	87	6,568	29
1981	6,105	568	171	6,502	28
1982	5,587	458	47	5,998	26
1983	7,303	717	60	7,960	34
1984	6,837	807	64	7,580	32
1985	6,300	782	192	6,890	29
1986	5,822	855	182	6,495	27
1987	5,458	832	269	6,021	25
1988	5,118	633	322	5,429	22
1989	5,196	718	427	5,487	22
1990	5,025	689	552	5,162	21
1991	4,895	571	606	4,860	19
1992	5,273	571	836	5,008	20
1993	5,248	639	917	4,970	19
1994	5,206	1,119	1,190	5,135	20
1995	4,930	1,152	1,377	4,705	18
1996	5,280	1,183	1,426	5,037	19
1997	4,501	1,306	1,259	4,548	17
1998	4,300	1,273	871	4,703	17
1999	4,386	1,782	916	5,253	19

^aDensity greater than 31 lb/ft³.

^bU.S. Department of Commerce, Bureau of the Census (52,56,57); American Forest and Paper Association (2,3,4); U.S. International Trade Commission (69); data may not add to totals because of rounding.

^cData for the years 1982 to present are for shipments.

Table 57—Producer price indexes for hardboard and particleboard, 1965–1999 (1992 = 100)^a

Year	Hardboard and particleboard ^b		Hardboard		Particleboard ^c	
	Actual	Relative ^d	Actual	Relative ^d	Actual	Relative ^d
1965	41.2	149.3	43.5	157.6	—	—
1966	41.0	144.4	43.4	152.8	—	—
1967	39.6	138.9	42.6	149.5	—	—
1968	39.2	134.2	41.7	142.8	—	—
1969	40.7	133.9	42.6	140.1	—	—
1970	36.9	117.1	43.5	138.1	—	—
1971	37.0	113.8	43.0	132.3	—	—
1972	38.2	112.4	43.5	127.9	—	—
1973	41.8	108.9	44.7	116.4	—	—
1974	45.6	100.0	50.1	109.9	—	—
1975	45.0	90.4	50.0	100.4	—	—
1976	49.0	94.0	56.0	107.5	—	—
1977	55.8	100.7	60.9	109.9	—	—
1978	67.5	113.3	66.8	112.1	—	—
1979	65.6	97.6	70.1	104.3	—	—
1980	75.6	98.7	79.8	104.2	—	—
1981	84.2	100.7	92.8	111.0	—	—
1982	87.0	102.0	97.3	114.1	—	—
1983	90.7	105.0	97.7	113.1	87.6	101.4
1984	94.2	106.4	99.4	112.3	96.1	108.6
1985	92.3	104.8	100.3	113.8	90.9	103.2
1986	93.2	109.0	101.0	118.1	92.7	108.4
1987	95.2	108.6	99.0	112.9	99.8	113.8
1988	96.7	106.0	100.8	110.5	103.4	113.4
1989	97.6	102.0	100.9	105.4	106.0	110.8
1990	93.5	94.3	98.6	99.4	96.7	97.5
1991	92.6	93.2	96.7	97.3	96.5	97.1
1992	100.0	100.0	100.0	100.0	100.0	100.0
1993	111.4	109.8	106.5	104.9	114.8	113.1
1994	120.9	117.7	109.1	106.2	128.5	125.1
1995	121.4	114.1	113.2	106.4	128.4	120.7
1996	114.3	104.9	115.8	106.2	123.3	113.1
1997	108.1	99.3	119.0	109.4	117.6	108.1
1998	110.6	100.2	116.5	105.5	114.7	103.9
1999	118.0	98.1	118.7	98.7	118.1	98.2

^aU.S. Department of Labor, Bureau of Labor Statistics (63).

^bHardboard, particleboard, and fiberboard products.

^cPlaten-type (mat formed)

^dDerived by dividing the actual price index by the all commodities index.

Table 58—Production of treated wood products by type of treatment, treatment plant, and product, 1984–1999
(thousands of board feet)^a

Year	Total	Volume of treated wood				Plants treating with ^c			
		Creosote solutions	Oilborne ^b pressure	Waterborne pressure	Fire retardants	Creosote	Oilborne	Waterborne	Fire retardants
1984	5,990,223	1,651,128	643,320	3,620,364	74,676	120	95	445	75
1985	6,232,526	1,542,852	630,420	3,944,124	114,384	123	97	449	77
1986	6,649,988	1,424,988	593,808	4,505,496	124,944	117	81	475	79
1987	6,912,536	1,173,888	582,684	5,027,808	127,416	109	71	479	81
1988	7,190,466	1,085,772	574,428	5,406,780	122,760	97	65	484	80
1989	6,684,010	1,078,440	592,632	4,883,292	128,952	90	60	473	71
1990	7,028,294	1,118,304	559,104	5,252,100	98,112	85	65	458	66
1991	6,781,779	1,051,320	521,880	5,092,440	115,488	83	63	445	60
1992	7,026,410	1,078,452	477,876	5,369,244	100,224	81	44	432	57
1993	7,271,029	1,105,584	433,860	5,646,048	84,960	76	49	404	48
1994	7,609,643	1,134,780	495,348	5,962,596	16,296	85	33	461	44
1995	6,947,010	1,101,012	393,168	5,407,152	45,156	71	28	384	39
1996	7,099,799	1,038,136	401,934	5,614,264	44,974	68	27	368	29
1997	8,773,495	1,168,768	468,270	6,977,434	158,491	70	46	381	35
1998 ^f	8,773,495	1,168,768	468,270	6,977,434	158,491	70	46	381	35
1999 ^f	8,773,495	1,168,768	468,270	6,977,434	158,491	70	46	381	35

Year	Total ^d	Volume by product								
		Lumber	Timbers	Poles	Pilings	Fence posts	Crossties	Switch and bridge ties	Plywood (thousand sq.ft.)	Other ^e
1984	3,980,729	948,965	324,492	931,896	142,068	235,800	1,064,640	98,376	179,936	234,492
1985	4,032,820	1,025,956	350,496	921,972	126,348	149,232	1,030,728	97,608	267,072	330,480
1986	4,136,740	1,173,628	387,348	880,092	125,784	208,092	965,316	70,884	297,664	325,596
1987	4,118,679	1,290,567	542,376	903,288	97,440	135,024	715,128	111,672	408,064	323,184
1988	4,136,768	1,417,868	540,204	854,292	116,388	148,848	693,240	75,780	406,560	290,148
1989	4,054,037	1,207,913	527,412	887,700	116,136	172,524	696,264	75,612	422,048	370,476
1990	4,240,101	1,290,657	576,012	882,012	86,232	178,488	755,856	85,980	392,736	384,864
1991	4,129,285	1,220,053	630,372	860,808	81,240	166,020	731,664	74,760	415,936	364,368
1992	4,236,767	1,284,479	622,284	812,592	93,012	165,504	747,348	77,052	430,368	434,496
1993	4,344,226	1,348,906	614,196	764,376	104,772	164,988	763,032	79,332	444,800	504,624
1994	5,146,279	1,084,470	970,867	903,974	121,390	246,946	756,648	120,036	651,267	941,949
1995	4,698,187	990,043	886,332	825,264	110,820	225,444	690,768	109,584	594,560	859,932
1996	4,470,363	1,160,247	667,572	762,792	101,028	281,208	669,948	68,880	681,088	758,688
1997	5,287,364	1,543,748	1,032,313	774,235	108,062	181,375	911,537	72,042	772,963	664,053
1998 ^f	5,287,364	1,543,748	1,032,313	774,235	108,062	181,375	911,537	72,042	772,963	664,053
1999 ^f	5,287,364	1,543,748	1,032,313	774,235	108,062	181,375	911,537	72,042	772,963	664,053

^aWood Preservation Statistics, 1996 (72); American Plywood Association, The Engineered Wood Association (8,10).

^bPentachlorophenol, Copper Napthenate, Zinc Napthenate, Copper-8-Quinolinate, and TBTO (mostly pentachlorophenol).

^c1984 was estimated.

^dExcludes plywood.

^eCrossarms, landscape timbers, highway posts and guardrails, mine ties and timbers, crossing planks, and other misc. products not listed above. Lumber taken from General Technical Report GTR-199 update, table 11 Hardwood Recovery Factor.

Plywood taken from GTR-199 update, Hardwood Plywood Lumber Conversion table B-7. All Other taken from GTR-199 update, table B-10.

^fPreliminary.

Table 59—Production of forest chemical products, 1965–1999^a

Year	Tall oil fatty acids			Turpentine ^b				Rosin ^c			
	Total	Over 2%	Under 2%	Total	Sulphate	Gum	Steam	Total	Tall oil	Gum	Steam
		rosin	rosin		turpentine ^d	turpentine	distilled		rosin	rosin	distilled rosin
1000 Short Tons	1000 Short Tons	1000 Short Tons	1000 U.S. Gallons	1000 U.S. Gallons	1000 U.S. Gallons	1000 U.S. Gallons	1000 Short Tons	1000 Short Tons	1000 Short Tons	1000 Short Tons	
1965	164.0	N/A	N/A	35,033	21,033	5,569	8,432	591.2	179.2	103.3	308.8
1966	185.5	N/A	N/A	33,275	21,338	4,211	7,727	559.9	200.0	78.1	281.9
1967	183.2	N/A	N/A	31,397	20,987	3,387	7,024	534.5	194.6	63.9	275.9
1968	186.3	N/A	N/A	32,609	23,658	2,521	6,430	527.8	204.3	48.9	274.6
1969	203.9	N/A	N/A	30,869	23,975	1,750	5,144	498.1	226.8	34.0	237.4
1970	220.2	N/A	N/A	28,790	22,768	1,292	4,731	473.6	228.7	25.1	219.8
1971	223.9	N/A	N/A	28,433	22,745	1,418	4,270	466.3	230.3	26.3	209.8
1972	235.9	N/A	N/A	28,295	23,206	1,328	3,761	465.7	240.1	25.5	200.1
1973	226.8	N/A	N/A	27,308	22,629	1,143	3,536	418.4	222.2	20.2	176.0
1974	199.8	N/A	N/A	25,583	21,379	797	3,407	369.3	198.0	14.5	156.8
1975	161.3	N/A	N/A	21,471	18,575	1,006	1,890	264.0	160.7	17.8	85.5
1976	205.7	N/A	N/A	24,183	20,265	920	2,998	350.2	201.7	16.8	131.7
1977	197.6	98.0	99.6	23,646	20,297	731	2,618	341.1	202.4	13.4	125.3
1978	193.8	102.1	91.7	24,949	22,066	517	2,366	340.8	211.5	9.4	119.9
1979	210.8	107.1	103.6	26,257	23,449	369	2,439	354.4	231.7	7.0	115.7
1980	209.0	114.8	94.2	27,685	24,979	314	2,392	343.6	223.3	5.9	114.4
1981	210.7	102.1	108.6	25,765	23,310	270	2,185	331.3	221.8	5.1	104.5
1982	187.7	91.1	96.6	23,353	21,283	230	1,840	286.4	194.0	4.4	88.0
1983	214.0	103.4	110.6	23,808	22,193	235	1,380	303.9	211.6	4.3	88.0
1984	235.8	118.4	117.5	23,233	21,628	225	1,380	295.8	225.6	4.2	66.0
1985	204.6	106.8	97.8	22,191	21,096	175	920	261.9	214.5	3.4	44.0
1986	215.1	112.5	102.5	21,956	21,956	N/A	N/A	216.8	216.8	N/A	N/A
1987	231.0	114.1	116.9	23,196	23,196	N/A	N/A	252.1	252.1	N/A	N/A
1988	239.4	118.9	120.5	28,000	28,000	N/A	N/A	256.5	256.5	N/A	N/A
1989	241.2	114.7	126.5	29,749	29,749	N/A	N/A	262.1	262.1	N/A	N/A
1990	236.8	112.8	124.1	31,077	31,077	N/A	N/A	274.6	274.6	N/A	N/A
1991	264.8	125.7	139.0	25,767	25,767	N/A	N/A	262.9	262.9	N/A	N/A
1992	251.9	115.0	137.0	24,498	24,498	N/A	N/A	266.1	266.1	N/A	N/A
1993	255.2	107.4	147.8	27,114	27,114	N/A	N/A	285.6	285.6	N/A	N/A
1994	279.1	124.6	154.4	26,424	26,424	N/A	N/A	281.8	281.8	N/A	N/A
1995	249.8	109.0	140.8	25,328	25,328	N/A	N/A	272.6	272.6	N/A	N/A
1996	254.7	109.0	145.6	22,412	22,412	N/A	N/A	290.6	290.6	N/A	N/A
1997	273.7	112.8	160.9	25,564	25,564	N/A	N/A	308.4	308.4	N/A	N/A
1998	281.9	130.8	151.1	24,146	24,146	N/A	N/A	271.7	271.7	N/A	N/A
1999 ^e	290.2	133.7	156.5	20,733	20,733	N/A	N/A	231.1	231.1	N/A	N/A

^aNaval Stores Review (22).

^b1965-1972 numbers are converted from 50 gallon barrels to 1000 gallons.

^c1965-1972 numbers are converted from 520 lb. drums to 1000 short tons.

^d1988-present represents crude turpentine production.

^ePreliminary

Annotated Bibliography

1. **Adams, Darius.** Timber assessment market model database. [unpublished]. Oregon State University, Portland, OR.
Hardwood and softwood lumber production.
2. **American Forest and Paper Association.** Paper, paperboard, and wood pulp statistical summary. [monthly]. Washington, DC.
Production, imports, and exports of paper, paperboard, and wood pulp; pulpwood consumption; and related subjects.
3. **American Forest and Paper Association.** Wood statistical roundup. Statistical supplement. [monthly and quarterly]. Washington, DC.
Lumber production, shipments, orders, stocks, trade, and related subjects.
4. **American Forest and Paper Association.** Statistics of paper, paperboard, and wood pulp. [annual]. Washington, DC.
Production, shipments, imports, and exports of paper, paperboard, and wood pulp; financial data on the paper industry; data on related subjects.
5. **American Forest and Paper Association.** U.S. wood pulp data. [monthly]. Washington, DC.
U.S. and Canadian pulp production by grade, use, shipment, and inventory.
6. **American Forest and Paper Association, Paper Recycling Group.** Annual statistical summary of recovered paper utilization. [annual]. Washington, DC.
U.S. recovered paper usage by grade, region, and end use; quantitative data on consumption.
7. **American Iron and Steel Institute.** Annual statistical report. [annual]. Washington, DC.
Internet address: <http://www.steel.org>
8. **American Plywood Association–The Engineered Wood Association.** APA economics report. Tacoma, WA.
Quantitative data on demand for structural panel products in North America.
9. **American Plywood Association–The Engineered Wood Association.** APA structural panel statistics. [weekly]. Tacoma, WA.
Structural panel production, capacity, orders, and shipments.
10. **American Plywood Association–The Engineered Wood Association.** Regional production and distribution patterns of the structural panel industry. [monthly]. Tacoma, WA.
Structural panel production by major producing regions and shipments to major trading areas; description of market conditions and economic factors that affect production.
11. **American Pulpwood Association.** Monthly pulpwood summary. [monthly]. New York.
Pulpwood consumption, domestic receipts, imports, and inventories by region and type of wood.
12. **American Pulpwood Association.** Pulpwood statistics. [annual]. Washington, DC.
Pulpwood consumption, receipts, and inventories by region, State, and type of pulpwood.
13. **Canadian Pulp and Paper Association.** Personal fax communication, June 1999. Montreal, Quebec, Canada.
Canadian export of newsprint by destination; Canadian shipment of uncoated mechanical papers to United States.
14. **Cornell University Agricultural Experiment Station.** 1932. Wholesale prices for 213 years, 1720 to 1932. Memoir 142. Ithaca, NY.
Estimates of wholesale prices for various commodities, 1720 to 1932.
15. **Ince, Peter.** 2000. Industrial wood productivity in the United States, 1900–1998. Res. Note FPL–RN–0272. Madison, WI: U.S. Department of Agriculture, Forest Service, Forest Products Laboratory.
Internet address:
<http://www.fpl.fs.fed.us/econ/Publications.htm>
16. **Ince, Peter, and others.** Roundwood, residue, and recycled fiber equivalents of U.S. forest product production, consumption, and trade, 1982–1996. [In preparation]. U.S. Department of Agriculture, Forest Service, Forest Products Laboratory, Madison, WI.
17. **Ingram, C. Denise; Ince, Peter J.; Mehlberg, Ryan L.** 1999. United States pulpwood receipts, softwood and hardwood, roundwood and residues, 1953–1996. Gen. Tech. Rep. FPL–GTR–115. Madison, WI. U.S. Department of Agriculture, Forest Service, Forest Products Laboratory.
18. **Louisiana Department of Agriculture, Office of Marketing.** Louisiana forest products—quarterly market report. Baton Rouge, LA. Internet address:
<http://www.ldaf.state.la.us>
Stumpage and delivered prices of saw logs and pulpwood for selected species; delivered prices of poles and pine stumps.

19. **Luppold, G. William; Dempsey, P. Gilbert.** 1989. New estimates of central and eastern U.S. hardwood lumber production. *Northern Journal of applied Forestry*. 6(3).
20. **National Particleboard Association.** Particleboard & medium density fiberboard annual production & shipments. [annual]. Silver Spring, MD.
Particleboard and medium density fiberboard production, shipments, number of plants, value of shipments, and related subjects.
21. **Natural Resources Canada, Canadian Forest Service, Industry, Economics, and Programs Branch.** Selected forestry statistics Canada. [annual]. Ottawa, ON.
22. **Naval Stores Review.** International yearbook. [annual]. New Orleans, LA.
23. **New Hampshire University, Cooperative Extension Service and New Hampshire Department of Resources and Economic Development.** New Hampshire forest market report. [annual]. Durham, NH.
Stumpage prices and roadside and delivered prices of saw logs, pulpwood, excelsior wood, poles, pilings, boltwood, and other products, by selected species; lumber prices.
24. **Powell, Douglas S.; Faulkner, Joanne L.; Darr, David R.; Zhu, Zhiliang; MacCleery, Douglas W.** 1993. Forest resources of the U.S., 1992. Gen. Tech. Rep. RM-234. (Revised, June 1994). Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station.
Data from periodic surveys of forest resources by State and Forest Service region—land area by class of land, timberland area by ownership, net volume of timber on timberland by class and species group, and related data.
25. **Statistics Canada, Industry Division.** Production, shipments, and stocks on hand of sawmills in British Columbia. [monthly]. Ottawa, ON.
Estimates of production, shipments (by destination), and stock by species for interior and coastal mills.
26. **Statistics Canada, Industry Division.** Production, shipments, and stocks on hand of sawmills east of the Rockies. [monthly]. Ottawa, ON.
Estimates of production, shipments (by destination), and stock by species and Providence (excluding Newfoundland and Prince Edward Island; price information for some species.
27. **Statistics Canada, Industry Division.** Wood industries. Census of manufacturers of wood industries. [annual]. Ottawa, ON.
Number of industries, employment, wages, shipments, materials and supplies, and related subjects; figures on lumber production by Province.
28. **United Nations, Food and Agriculture Organization, Economic Commission for Europe.** European timber trends and prospects: into the 21st century. Geneva timber and forest study papers, no. 11. [annual]. Geneva, Switzerland.
Projections of European supply, demand, and trade for timber products.
29. **United Nations, Food and Agriculture Organization.** Forestry database: FAOSTAT. Internet address: <http://www.fao.org>
Historical data to 1998 on production and trade of pulp and paper products and other wood products.
30. **U.S. Council of Economic Advisors.** Economic indicators. [monthly]. Washington, DC: Superintendent of Documents, U.S. Government Printing Office.
Output, income, and spending; employment, unemployment, and wages; production and business activity; prices; money, credit, and security markets; Federal finance; and related subjects.
31. **U.S. Council of Economic Advisors.** Economic report of the President. [annual]. Washington, DC: Superintendent of Documents, U.S. Government Printing Office.
Detailed description of the economic situation at the beginning of each year; comprehensive series of historical statistics on national income, population, employment, wages, productivity, business activity, prices, money supply, finance, corporate profits, agriculture, international trade, and related subjects.
32. **U.S. Department of Agriculture, Foreign Agricultural Service.** Circular Series WP 1-00, April 2000. Wood products: International trade and foreign markets. [annual].
Volume and value of imports and exports of timber products.
33. **U.S. Department of Agriculture, Forest Service.** Bulletin of hardwood market statistics: first, second and third quarters. [quarterly]. Princeton, WV.
34. **U.S. Department of Agriculture, Forest Service.** Production, prices, employment, and trade in Northwest forest industries. [quarterly]. Portland, OR: Pacific Northwest Forest and Range Experiment Station.
Current information on the timber situation in the West—data on log, lumber, and plywood production, and prices; employment in forest industries; international trade in logs and lumber; volume and average prices of stumpage sold by public agencies; and related subjects.

35. **U.S. Department of Agriculture, Forest Service.** Pulpwood prices in the mid-South. Res. Note SO. [annual]. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station.
Pulpwood prices in U.S. mid-South, by wood type (hardwood and softwood) and purchase point.
36. **U.S. Department of Agriculture, Forest Service.** Pulpwood production in the North Central region by county. [annual]. St. Paul, MN: North Central Forest Experiment Station,
Pulpwood production in the Lake and Central states by State, county, and species.
37. **U.S. Department of Agriculture, Forest Service.** Pulpwood production in the Northeast. [annual]. Radnor, PA: Northeastern Forest Experiment Station,
Pulpwood production by State and species group, wood pulp production, and locations and names of pulp producers in the Northeast.
38. **U.S. Department of Agriculture, Forest Service.** Southern pulpwood production. [annual]. Asheville, NC: Southeastern Forest Experiment Station, and New Orleans, LA: Southern Forest Experiment Station.
Pulpwood production in 12 southern states by species group, State, and county.
39. **U.S. Department of Agriculture, Forest Service.** 1997. U.S. timber production, trade, consumption, and price statistics. James Howard. FPL–GTR–98. Madison, WI: U.S. Department of Agriculture, Forest Service, Forest Products Laboratory.
40. **U.S. Department of Agriculture, Forest Service.** Volume and value of sawtimber stumpage sold from national forests, by selected species and region. [quarterly and annual]. Washington, DC: U.S. Department of Agriculture, Forest Service.
Stumpage prices of timber sold from National Forests by selected species and region.
41. **U.S. Department of Agriculture, Forest Service.** 1964. The demand and price situation for forest products, 1964. Misc. Pub. 983. Washington, DC: Superintendent of Documents, U.S. Government Printing Office.
Historical data on U.S. timber production, trade, consumption, and prices.
42. **U.S. Department of Agriculture, Forest Service.** 1989. An analysis of the timber situation in the United States 1952–2040. GTR RM–199. Washington, DC.
Comprehensive survey and analysis of present and prospective timber demand, supply, and prices in the United States.
43. **U.S. Department of Agriculture, Forest Service.** 1997. Report of the United States on the criteria and indicators for the sustainable management of temperate and boreal forests. [annual]. Washington, DC
44. **U.S. Department of Commerce, Bureau of the Census.** Hardwood plywood. Curr. Ind. Rep. Ser. MA–24F. [annual]. Washington, DC.
Production and shipments of hardwood plywood by type of plywood, geographic division, and face species.
45. **U.S. Department of Commerce, Bureau of the Census.** Housing completions. Constr. Rep. C 22. [monthly]. Washington, DC: Superintendent of Documents, U.S. Government Printing Office.
Number of houses completed in the United States by structure type, ownership, region, and metropolitan statistical area.
46. **U.S. Department of Commerce, Bureau of the Census.** Housing starts. Constr. Rep. C 20. [monthly]. Washington, DC: Superintendent of Documents, U.S. Government Printing Office.
Number of houses started in the United States by structure type, ownership, region, and metropolitan statistical area; information on shipments of mobile homes.
47. **U.S. Department of Commerce, Bureau of the Census.** Lumber production and mill stocks. Curr. Ind. Rep. Ser. MA-24T. [annual]. Washington, DC.
Lumber production by major species, producing region, and State.
48. **U.S. Department of Commerce, Bureau of the Census.** New one-family houses sold and for sale. Constr. Rep. C 25. [monthly and annual]. Washington, DC: Superintendent of Documents, U.S. Government Printing Office.
Number of privately owned, one-family homes sold and for sale in the United States by stage of construction and sale price.
49. **U.S. Department of Commerce, Bureau of the Census.** Particleboard. Curr. Ind. Rep. Ser. MA-24L . [annual]. Washington, DC.
Production of particleboard by State, type of particleboard, shipment, and resin consumption.
50. **U.S. Department of Commerce, Bureau of the Census.** Population characteristics. Curr. Pop. Rep. Ser. P–20. [monthly]. Washington, DC: Superintendent of Documents, U.S. Government Printing Office.
Estimates of households, families, marital status, fertility, and related population characteristics.

51. **U.S. Department of Commerce, Bureau of the Census.** Population estimates and projections. Curr. Pop. Rep. Ser. P-25. [monthly]. Washington, DC: Superintendent of Documents, U.S. Government Printing Office.
Estimates of United States population by type and month.
52. **U.S. Department of Commerce, Bureau of the Census.** Pulp, paper, and board. Curr. Ind. Rep. Ser. MA-26A. [annual]. Washington, DC.
Pulpwood receipts, consumption, and inventories; wood pulp production, transfers, and inventories; paper and board shipments by grade; and related subjects.
53. **U.S. Department of Commerce, Bureau of the Census.** Residential alterations and repairs. Constr. Rep. C 50. [quarterly and annual supplement]. Washington, DC: Superintendent of Documents, U.S. Government Printing Office
Regional data on expenditures for additions, alterations, maintenance, and repairs and replacements for all residential units and for owner occupants of one-housing unit properties.
54. **U.S. Department of Commerce, Bureau of the Census.** Softwood plywood. Curr. Ind. Rep. Ser. MA-24H. [annual]. Washington, DC.
Production of softwood plywood and veneer and consumption of softwood veneer logs.
55. **U.S. Department of Commerce, Bureau of the Census.** Statistics for industry groups and industries. M(AS-1). Washington, DC. Internet address: <http://www.census.gov/prod/www/abs/industry.html>
56. **U.S. Department of Commerce, Bureau of the Census.** U.S. exports/schedule E commodity by country. FT 410. [monthly]. Washington, DC: Superintendent of Documents, U.S. Government Printing Office.
Volume and value of exports by product and country of destination; lumber exports presented by major species and grade.
57. **U.S. Department of Commerce, Bureau of the Census.** U.S. imports for consumption and general imports/ TSUSA commodity by country of origin. FT 246. [annual]. Washington, DC: Superintendent of Documents, U.S. Government Printing Office.
Volume and value of imports by product and country of origin; lumber imports presented by major species and grade.
58. **U.S. Department of Commerce, Bureau of the Census.** Value of new construction put in place. Constr. Rep. C 30. [monthly]. Washington, DC: Superintendent of Documents, U.S. Government Printing Office.
Value of new construction put in place by type of construction.
59. **U.S. Department of Commerce, Bureau of the Census and U.S. Department of Housing and Urban Development.** Characteristics of new housing. [annual]. Constr. Rep. C 25. Washington, DC: Superintendent of Documents, U.S. Government Printing Office.
Housing completions by type of structure and location.
60. **U.S. Department of Commerce, Bureau of Economic Analysis.** Survey of current business. [monthly]. Washington, DC: Superintendent of Documents, U.S. Government Printing Office.
Gross national product, national income, personal income, and outlays, foreign transactions, and other national subjects.
61. **U.S. Department of Commerce, Bureau of Industrial Economics.** Construction review. [monthly]. Washington, DC: Superintendent of Documents, U.S. Government Printing Office.
Volume of construction, costs, employment, and related subjects.
62. **U.S. Department of Labor, Bureau of Labor Statistics.** Employment and earnings, United States. Internet address: <http://stats.bls.gov:80/ceshome.htm>
Employment and earnings of individual nonagricultural industries in the United States.
63. **U.S. Department of Labor, Bureau of Labor Statistics.** Producer prices and price indexes. [monthly and annual]. Washington, DC.
Prices and price indexes of several hundred commodities, including selected lumber items of important commercial species and plywood, pulp, and paper items.
64. **U.S. Department of Labor, Bureau of Labor Statistics.** The CPI detailed report. [monthly]. Washington, DC: Superintendent of Documents, U.S. Government Printing Office.
Consumer price indexes for goods and services usually bought by all urban consumers and by urban wage earners and clerical workers.
65. **U.S. Department of Labor, Bureau of Labor Statistics.** 1979. Employment and earnings, United States, 1909-78 and supplements. Washington, DC: Superintendent of Documents, U.S. Government Printing Office.
Employment and earnings of individual nonagricultural industries in the United States.

66. **U.S. Federal Reserve System, Board of Governors.** Federal reserve bulletin. [monthly]. Washington, DC.
Interest rates; security prices; Federal and business finances; selected indexes on business activity and wholesale and consumer prices; sales, profits, and dividends of large manufacturing corporations; and related subjects.
67. **U.S. Federal Reserve System, Board of Governors.** Industrial production. [monthly]. Washington, DC.
Indexes of industrial production by market and industry.
68. **U.S. Geological Survey.** Mineral Commodity Summaries. [annual]. Reston, VA.
Internet address: <http://minerals.usgs.gov>
69. **U.S. International Trade Commission.** Interactive tariff and trade data web.
Internet address: <http://dataweb.usitc.gov/>
Interactive database containing Department of Commerce data on imports and exports of commodities identified by trade code.
70. **U.S. International Trade Commission.** U.S. trade shifts in selected industries. [annual].
Volume and value of imports and exports of timber products.
71. **Western Wood Products Association.** Western lumber facts. [weekly]. Portland, OR.
Softwood lumber production, orders, shipments, stocks, and realization value in the western woods region by major species.
72. **Wood Preservers Institute.** The 1996 wood preserving industry production statistical report. [annual]. Fairfax, VA.
Volume and value of wood preservative and wood products treated with preservatives.
73. **Wood Technology.** North American factbook, panel review. [annual].
Data published by APA, Statistics Canada, National Particleboard Association, and American Hardboard Association.