

Indicator 6.40.

Distribution of Revenues Derived From Forest Management

What is the indicator and why is it important?

Revenues derived from forest management activities, including the sale of forest products and environmental services, are one of the principal sources of funds for paying annual operating costs and making capital investments in the forest estate. This indicator tracks who shares in the revenues—workers through wages and income, communities through taxes, and others at different geographic scales. Therefore, information on the collection and distribution of these revenues will be useful in understanding economic support for sustainable forest management.

What does the indicator show?

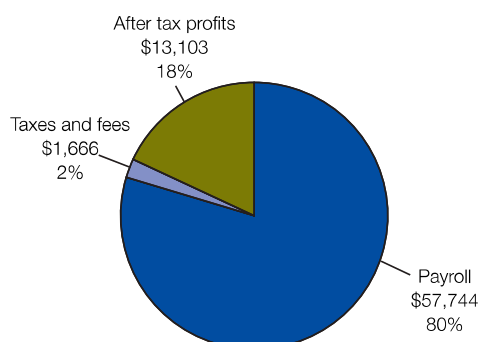
We first look at who shares in the revenues from the operation of forest products industries. These industries include forestry and logging, wood products, paper products, and wood furniture. Figure 40-1 shows the shares of revenues in these industries that go to workers in the form of wages, to business owners in the form of profits, and governments in the form of taxes. In 2002, of a total \$72.5 billion (2005 dollars) in wages, profits and taxes, 80 percent went to wages, 18 percent to profits, and 2 percent to taxes. It is notable that these amounts are only part of the uses of the total revenue from product shipments of about \$300 billion (2005 dollars) in 2002. Revenue is also used to pay for other costs of production, including materials,

energy, insurance, and interest on debt. The profits received in 2002 by owners (\$11 billion (2005 dollars) were about 3.7 percent of the value of shipments.

Of the \$72.5 billion in wages, profits, and taxes, 43 percent was provided by paper products industries, 35 percent by wood products industries, 17 percent by wood furniture industries, and 5 percent by forestry and logging. The share of revenue going to workers was somewhat higher for the paper and wood furniture industries, 82 and 83 percent, respectively (with correspondingly lower profit shares), than for the wood products and forestry and logging industries, at 76 and 79 percent respectively.

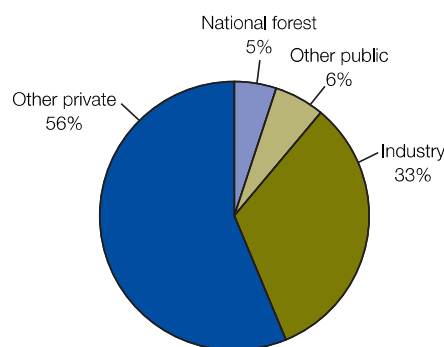
We next look at who shares in the revenues from sale of timber from forest land. We have data for 1997 that indicate how this revenue is shared among various forest land owners, including owners of national forests, other public forest land, industry forest owners, and other private forest owners. Based on rough estimates for the total stumpage sales value in 1997 of \$22 billion (2005 dollars), 5 percent went to national forests, 6 percent went to other public lands, 33 percent went to industry land owners, and 56 percent went to other private landowners (fig. 40-2). Since 1997, a significant amount of industry forest land has been sold to Timber Management Organizations and Real Estate Investment trust, so the share of stumpage revenues going to industry land owners has probably declined.

Figure 40-1. Payments going to forest products business owners (profits), to forest products firm employees (payroll), and to governments (taxes and fees), 2002 (in millions of 2005 dollars and percent).



Sources: USDA Forest Service analysis, multiple data sources

Figure 40-2. Share of stumpage revenue from U.S. timber harvest by owner, 1997.



Sources: USDA Forest Service analysis, multiple data sources

A considerable amount of Native-American land is forested. These forests provide wood and nonwood forest products and other values that are vital to Native-American communities. Therefore it also important to note the share of U.S. timber stumpage revenues that goes to Native Americans.

Approximately 18 million acres of forest land exist on Indian reservations in the United States, of which 5.7 million acres are classified as commercial timber land. In 2001 these lands provided \$95 million of revenue (2005 dollars) mostly from industrial timber harvest. This 2001 stumpage revenue is 0.4 percent of the estimated total U.S. 1997 stumpage revenue of \$22 billion (2005 dollars). The 18 million acres of Native-American *forest land* is about 2 percent of total U.S. forest land (749 million acres). The 5.7 million acres of Native-American *timber land* is about 1 percent of total U.S. timber land (504 million acres).

For Native-American forest land in 2001, the Pacific Northwest Region accounted for more than 70 percent of the harvested timber volume and more than 85 percent of revenue, followed by the Lake States at 13.5 percent of the harvested timber volume and more than 7 percent of revenue.

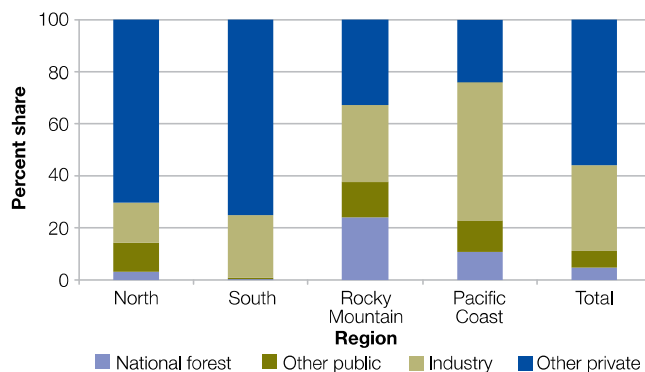
What has changed since 2003?

Data are not available to determine a time trend in share of revenue received by various groups from forest industry activities or from timber sales.

Are there important regional differences?

The estimated share of timber stumpage revenues going to various landowners varies widely among regions (fig. 40-3). In 1997, the share going to public owners (national forest and other public) was highest in the Rocky Mountain Region (37 percent) followed by the Pacific Coast (23 percent), North (14 percent), and South (1 percent). The share going to other private owners (nonindustry) was highest in the South (75 percent) followed by the North (70 percent), Rocky Mountains (33 percent), and Pacific Coast (24 percent).

Figure 40-3. Share of stumpage revenue from U.S. timber harvest for each type of forest owner by region, 1997.



Sources: USDA Forest Service analysis, multiple data sources

Another way to look at the geographical distribution of revenue shares is by looking at where various types of owners receive most of their stumpage revenue.

For national forest or other public land owners in 1997, the largest share of stumpage revenue came from the Pacific Coast (68 percent), followed by the North (18 percent), Rocky Mountains (10 percent), and South (4 percent). For industry owners the largest share of revenue came from the Pacific Coast (54 percent) followed by the South (36 percent), North (7 percent), and the Rocky Mountains (3 percent). For other private landowners, the largest share for revenue came from the South (66 percent), followed by the North (18 percent), Pacific Coast (14 percent), and Rocky Mountains (2 percent) (fig. 40-4).

Why can't the entire indicator be reported at this time?

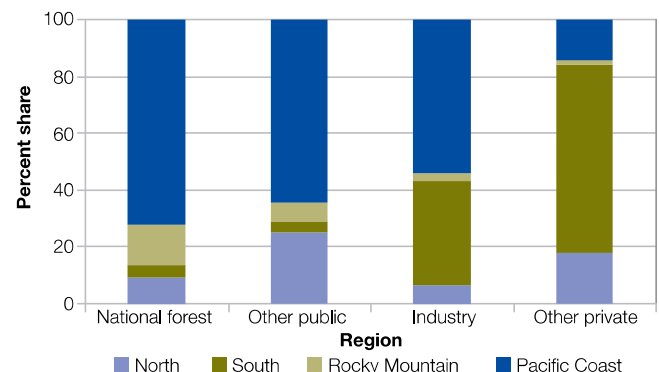
Data are not available to determine a time trend in share of revenues received by various groups.

Information of overall revenues from environmental services is shown under Indicator 27. Data, however, are not available on the shares of such revenues going to workers, businesses, and governments. Nor are data available on the shares of revenues from such services going to various types of forest land owners.

Relation to other indicators

The trends in who obtains benefits from forests would aid our understanding of the importance of forests (Indicator 6.44), and would aid our understanding of the influence of changing benefits on resilience of forest-dependent communities (Indicator 6.38)—to whom and where are benefits flowing. The trends in who obtains benefits from forest would also suggest how the stakeholders in forests are changing. As benefits increase to certain stakeholder groups, their voices may become more influential in determining forest investment (Indicator 6.37), research and education (Indicator 6.35), and institutions (Criterion 7).

Figure 40-4. Share of stumpage revenue from U.S. timber harvest for each region by type of forest owner, 1997.



Sources: USDA Forest Service analysis, multiple data sources