Indicator 6.30.

Value and Volume in Roundwood Equivalents of Exports and Imports of Wood Products

What is the indicator and why is it important?
For many countries, international trade is a significant factor in the commercial use of forests. Exports are, in some cases, a significant source of value for regional and national economies. Imports may either supplement or be a substitute for production from domestic sources. The values and volumes of wood product exports and imports are important because of the increasing importance of global markets in determining economic developments in our domestic forest sector and in influencing the sustainability of forest ecosystems both domestically and throughout the world.

What does the indicator show?
Between 1990 and 2006 the overall value of forest products imports increased 73 percent—from $24 to $41 billion (all dollar values adjusted for inflation and reported in 2005 dollars), but increases have been small since 1999. At the same time, the value of exports increased 15 percent—from $20 to $24 billion with most of the increase occurring in the early 1990s and subsequent declines in more recent years (figs. 30-1 and 30-2). In 2006, import value was about 71 percent higher than export value. A factor influencing the competitive position of U.S. products versus those in other countries (and trends in imports and exports) is the trend in the value of the U.S. dollar relative to other currencies.

Import value for all groups of forest products increased between 1990 and 1999. Since 1999, the value of imports of wood and paper products has not increased, and the import value in the other wood and log and chip categories have continued to rise (though the log and chip import value is extremely small relative to the other categories).

Wood products include lumber, veneer, and panels. Other wood includes poles and piling, fuelwood, wood charcoal, cork, wood containers, wood doors, and other miscellaneous products. Paper products include paper, paperboard, pulp, and recovered paper.

In 2006, the largest share of import value was for paper products (49 percent), followed by wood products (32 percent), other wood products (18 percent), and logs and chips (1 percent).

Export value increased a small amount overall between 1990 and 2006. The export value for paper and other wood increased modestly during the first half of the 1990s but has remained steady since then. In contrast, the export value for both wood products and logs and chips declined steadily between 1990 and 2006. (fig. 30-2)

Figure 30-1. Value of forest products imports by product group, 1990–2006 (2005 dollars) (each line’s value is added to the line below).


Figure 30-2. Value of forest products exports by product group, 1990–2006 (2005 dollars) (each line’s value is added to the line below).

We now shift to data on imports and exports in terms of roundwood equivalent—the amount of wood needed to make various products. These estimates do not include roundwood equivalent of imports and exports of recovered paper. Between 1990 and 2006, overall imports increased 67 percent—from 2.6 to 4.3 billion cubic feet, and exports decreased 53 percent—from 1.8 to 0.8 billion cubic feet. Note that export volume has decreased and export value has increased. In 2006, import volume is more than 400 percent larger than export volume (figs. 30-3 and 30-4). This margin is much greater than the margin of import value over export value.

Import volume increased for all forest product groups between 1990 and 2005, and declined for all groups in 2005 and 2006 (fig. 30-3). The strong increase in volume through 2004 is in contrast to the limited increase in import value during the same period.

**Figure 30-3.** Imports of forest products in roundwood equivalent (excluding pulp and recovered paper), 1965–2006 (each line’s value is added to the one below).

<table>
<thead>
<tr>
<th>Year</th>
<th>Cubic feet (billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965</td>
<td>0.5</td>
</tr>
<tr>
<td>1970</td>
<td>1.0</td>
</tr>
<tr>
<td>1975</td>
<td>1.5</td>
</tr>
<tr>
<td>1980</td>
<td>2.0</td>
</tr>
<tr>
<td>1985</td>
<td>2.5</td>
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<td>1990</td>
<td>3.0</td>
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<td>1995</td>
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<tr>
<td>2000</td>
<td>4.0</td>
</tr>
<tr>
<td>2005</td>
<td>4.5</td>
</tr>
<tr>
<td>2006</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Source: USDA Forest Service

**Figure 30-4.** Exports of forest products in roundwood equivalent (excluding pulp and recovered paper), 1965–2006 (each line is added to the one below).

**Figure 30-5.** Value of forest products exports by region of customs districts, 1980–2005 (2005 dollars).

Are there important regional differences?

In 2005, the largest share of export value of forest products (fig. 30-5) was from the South (44 percent), followed by the North (31 percent), Pacific Northwest (13 percent), and other West (12 percent).

Between 1990 and 2005:
- Value for the North increased then stabilized above $6 billion (2005 dollars) after 1999,
- Value for the South peaked in 1995 and has since declined,
- Value for the Pacific Northwest declined steadily, and
- Value for the other West increased until about 1997 then stabilized at above $2 billion (2005 dollars).

What has changed since 2003?

Trends in imports and exports evident before 2003 have continued. Import value is stable to higher, export value is level to declining, import volume is higher, and export volume is trending lower.

The product groups used when estimating roundwood equivalent of imports and exports are lumber, plywood, and veneer, pulpwod based products (including OSB) and logs and chips. In 2006, the largest share of import volume—in roundwood equivalent—was for lumber (76 percent), followed by pulpwood based products (18 percent), plywood and veneer (4 percent) and logs and chips (2 percent). The actual shares of product volume imported are lower for lumber and plywood because about one-half of the roundwood used to make these products would be left in the exporting country.
Relation to other indicators
The levels and trends in this indicator are factors in sustaining benefits from forests—employment and wages (Indicators 6.36 and 6.37), distribution of revenues (Indicator 6.40), and community resiliency (Indicator 6.38). Exports and imports also influence level of harvest (Indicator 2.13). The level of exports and imports are determined by the competitiveness of U.S. industries compared to foreign industries which, in turn, is influenced by capital investment in new technology (Indicator 6.34), research and education (Indicator 6.35), and productivity of forests (Indicator 2.11).