



# Economic Environment

## A Comparison of Global Lumber Manufacturing Costs

by Al Schuler

Take a few minutes to compare U.S. lumber manufacturing costs with those of competitors around the world.

**A**s discussed in the March issue, U.S. wood product manufacturers are being impacted by global events much more than a decade ago. In this article, we'll compare U.S. lumber manufacturing costs with competitors around the world. Today almost 40 percent of our softwood lumber consumption is imported, up from 25 percent since 1990. Although Canada supplies most of the imports, there are increasing volumes of framing lumber from Europe and industrial grades from the southern hemisphere. U.S. exports have fallen by almost 50 percent in the past five years. Both the U.S. and Canadian lumber industry are consolidating to address competitive issues, and this is altering lumber markets—changes in distribution, selling and other aspects of doing business.

### Global Comparison

Figure 1 provides a comparison of global manufacturing costs. The U.S. was the high cost producer of lumber while Brazil, Chile, New Zealand and Central Europe were vying for low cost status. Although we are comparing apples to oranges with different grades, dimensions and species in each region, similarities exist: SYP in the U.S. South and South America, Spruce/Pine in Central Europe, Russia and Canada. The data in Figure 1 represent industry averages for various geographic regions—averages across all grades, species and dimensions.<sup>1</sup> For the most part, lumber producers all over the world are not making inordinate amounts of money (EBITDA—earnings before interest, taxes, and depreciation). That is, lumber is often a low margin business. Higher wood costs are the main reason for the high cost position of U.S. mills. If you are a high cost producer, a sound business strategy may be to reduce your exposure to commodity products while putting more emphasis on value added products. Competition wasn't as much a problem before globalization; mills in the U.S. South competed with mills in the Pacific Northwest and Canada, but today they compete with low cost mills all over the world.

### North American Comparison

Again, we are comparing apples and oranges. Product mix can differ from one producing region to another. Here are some examples:

- Due to size of the timber, there are larger production volumes of higher margin products like wide dimension (2x8 - 2x12) and long lengths (22' and 24') in the U.S. West and B.C. Interior compared to eastern Canada and the South.
- SYP has inherent physical properties that provide favorable treating economics, consequently, about 40 percent is treated compared with much lower volumes for other softwood species.
- Due to the inherent strength of SYP, a higher proportion of the production meets "stress grades" standards.
- Transportation costs to consuming destinations provide advantages and disadvantages to various producing regions.

### at a glance

- ❑ The U.S. lumber producers are in general the high cost producers when compared to their foreign counterparts.
- ❑ The softwood lumber tariff creates a two-tiered lumber market that allows Canadian component manufacturers to buy lumber cheaper than their U.S. counterparts, creating a competitive advantage when shipping to the U.S.

<sup>1</sup> These cost comparisons are for 2002 data. Since then, the USD has fallen against each of the currencies of the competing regions thereby improving U.S. competitiveness. Unfortunately, I don't have 2004 fiber and mill costs to complete an analysis based on 2004 data. That data will become available by mid 2005 when WMM, Price Waterhouse Coopers and Beck Consulting complete their global lumber benchmarking study.

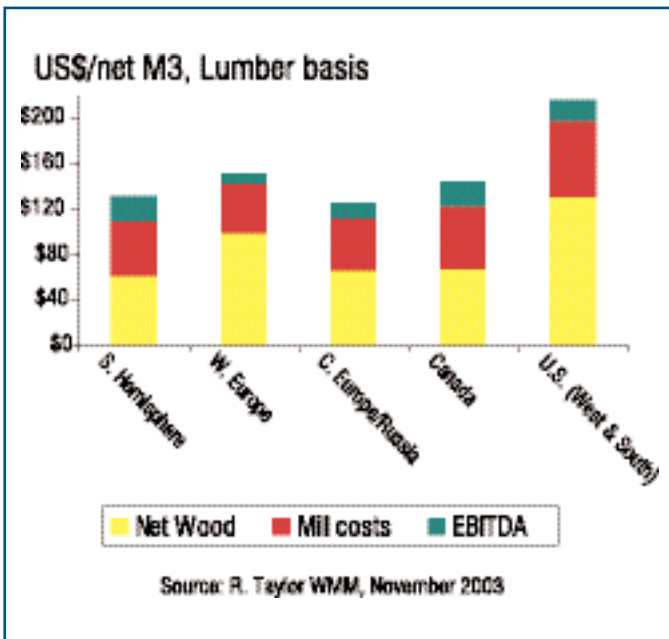


Figure 1. Global Sawmilling Costs (2002 basis). The U.S. was the high cost producer. **Note:** Net wood costs are wood costs after accounting for residue income (i.e., net of residue income). Mill costs include labor, energy, etc. (all variable costs except wood). Mill cost rankings (low to high): 1) S. Hemisphere, 2) C. Europe/Russia, 3) Canada, 4) W. Europe, 5) U.S.

For a more relevant comparison that deals with some of these issues, RISI (Resource Information Systems, Inc., part of the Paperloop Group) developed Product Variable Costs, which compares the variable costs of manufacturing 2x4s on FOB Mill basis in different geographic regions (see Table 1). This comparison demonstrates that on a pre-duty basis, Canadian producing regions have some cost advantages.

DF Green (del. Portland)	\$291	U.S. West
Inland HF	\$301	U.S. West
SYP	\$295	U.S. South
WSPF	\$245	Canadian West
ESPF (del. Grt. LK)	\$310	Canadian East

Table 1. Product Variable Costs (US\$/M, FOB, Mill, 2X4) - 2004 basis. [Source: RISI (North American Lumber Forecast, December 2004)]

In Figure 2 (on page 23), we compare industry-wide costs delivered to Chicago, and can see clearly the impact of the duty on the Canadian cost position. Of course, not everyone ships to Chicago. For example, Eastern Canadian mills often ship to closer U.S. east coast and southeast destinations. The Canadian dollar (CAD) appreciated about 20 percent between 2002 and 2004, and we show the added impact of a further strengthening in 2005, (about eight percent)—in essence, the stronger CAD translates to less revenue (or higher costs if you prefer) on shipments to the U.S. The CAD

Continued on page 24

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## Economic Environment

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is expected to remain strong through 2005 as the U.S. current account deficit puts downward pressure on the USD (U.S. Dollar) while robust world commodity prices support the CAD (see Jan/Feb **SBC**). The comparisons shown in Figure 2 help explain why Canadian mills are having serious margin problems, and any slip in U.S. prices (from a slower housing market for example), could result in reduced production from higher cost mills.

## Conclusions

U.S. sawmills are facing increasing competition from offshore sources, but the duty and the stronger CAD are keeping many U.S. mills competitive with their Canadian counterparts. This should be only a temporary advantage; the duty issue will be resolved eventually, and the consensus is that the new duty, if any, will be lower than 27 percent. In addition, the CAD is expected to peak this year, and the consensus opinion is that it will weaken in the future for a variety of reasons. U.S. mills need to consider adding more value to their product mix (move up the value chain), consolidate to capture scale economies, invest more to reduce costs, and

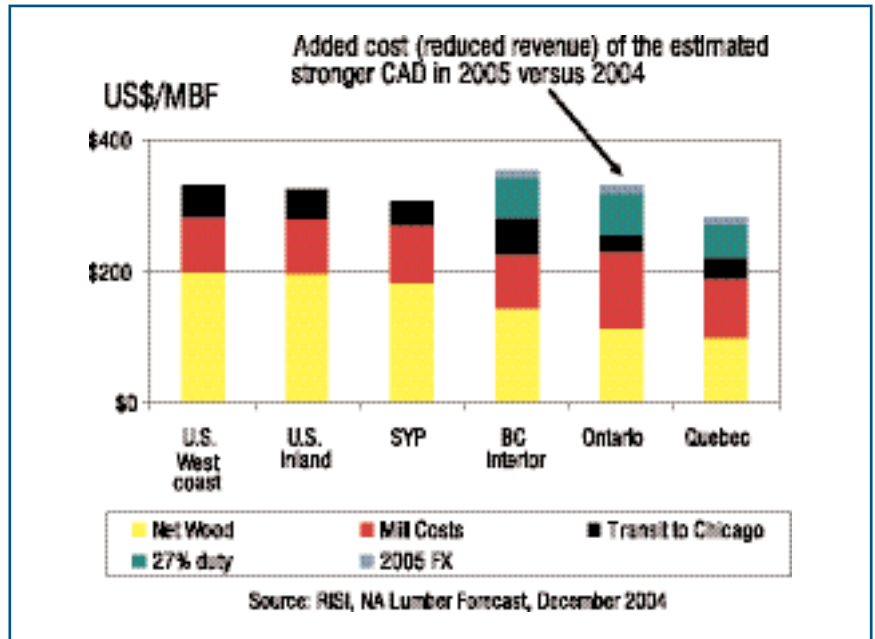


Figure 2. North American Industry cost comparisons for various geographic regions - 2004 basis, delivered Chicago.

be aware of new competitive threats from offshore.

CMs should stay current on the duty issue and CAD fluctuations because they impact Canadian sawmill costs, U.S. lumber prices indirectly, and even the competitive position of Canadian manufacturers. For example, the strong CAD and

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## Two Tiered Lumber Market

Price Differential (U.S. Price – Canadian price, US\$/M)

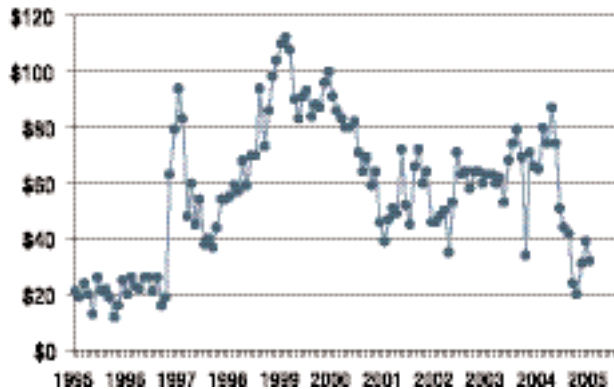


Figure 3. Two-tiered market showing price spread (USD) between the U.S. price, delivered U.S. destination, and Canadian price (USD), delivered Toronto, for ESPF, 2x4.

duty is forcing Canadian mills to divert some shipments from U.S. destinations to Canadian destinations simply because margins are being squeezed (a pullback in U.S. housing would exacerbate this situation). The Canadian market then becomes oversupplied or saturated, resulting in lower lumber

prices in Canada. This is called a “two-tiered market” as Canadian SPF prices in Canada (USD basis) can be significantly lower than SPF prices in the U.S. (Figure 3). During 2004, after converting to USD, the spread for Canadian Eastern SPF, KD, 2x4, delivered Toronto versus delivered, Great Lakes (a U.S. destination), ranged from \$87/M to \$20/M. During 2004, Canadian component manufacturers paid about ten percent less for SPF (USD basis) than their U.S. counterparts, lowering their manufacturer’s costs and making them more competitive when shipping to U.S. customers. This puts the unintended consequence of no duty on Canadian manufactured components/trusses shipped to the U.S. in front and center view and explains why it is difficult for component manufacturers to create long-term business plans. The uncertainty from day-to-day, month-to-month and year-to-year is illustrated in Figure 3. **SBC**

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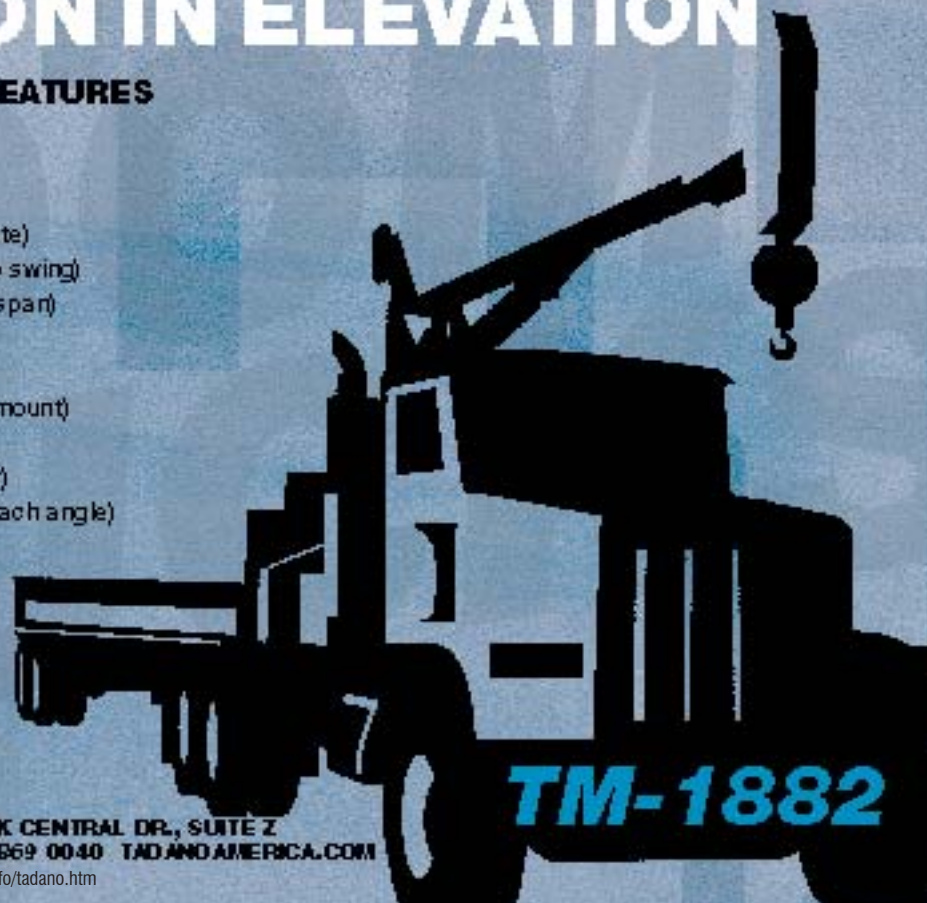
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