STRUCTURAL BUILDING COMPONENTS MAGAZINE
December 2003

Economic Environment

Lumber Market Dynamics by Al Schuler

How do the U.S and international lumber markets impact the component manufacturer today and in the future?

North American lumber markets truly respond to shifts in demand and supply as seen in Figure 1. In response to the housing boom in the 1970s, prices escalated and the lumber industry (primarily the U.S.) added capacity, which forced prices down to about $200/M (real, inflation adjusted dollars) where they stayed throughout the 1980s. The spotted owl and related environmental issues resulted in a significant reduction in western softwood timber harvests from public lands, and this pushed prices up through the first half of the 1990s. Again, capacity increase was the response, this time more from the Canadian side, and this allowed Canadian market share to move above the "magic 30 percent threshold." This triggered the Softwood Lumber Agreement (SLA) quota in 1996, which forced prices up again by restricting supply in the face of a booming housing market. In response to the higher prices, U.S. production increased in both the Pacific Northwest (PNW) and the South during the latter half of the 1990s. The continuation of the booming housing market that began in 1996, supported healthy lumber prices through 2001. In response to the high prices, 2002 saw a record amount of supply to the North American (NA) market, and particularly the U.S. market (record NA production: 30 BBF in Canada plus 36 BBF in U.S.) in addition to record offshore imports. Of course, this resulted in too much lumber and prices collapsed for a time. Then, 2003 saw a large temporary increase (40 percent) in the Framing Lumber Composite (FLC) price index beginning in the third quarter as a combination of factors combined to push extraordinary demand (e.g., phenomenal housing

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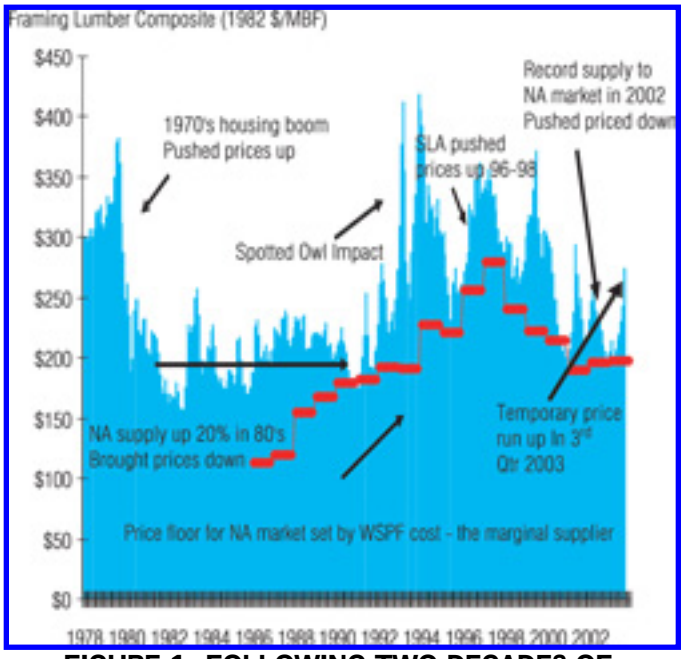


FIGURE 1. FOLLOWING TWO DECADES OF ADJUSTMENTS TO DEMAND AND SUPPLY, TODAY'S REAL, INFLATION-ADJUSTED LUMBER PRICES ARE ALMOST THE SAME AS 20 YEARS AGO.

market) above short term supply (wet weather hindered logging in the West; shortages in the distribution pipeline (a hangover from poor pricing in 2002); fire problems in the West; then the Army entered the picture, buying wood for Iraq, plus we had hurricane damage on the East Coast, putting more pressure on existing supply capability.

Throughout this time period, particularly from 1990 on, the price floor was effectively set by the Western Spruce-Pine-Fir (WSPF) cost structure. WSPF producers (SPF from BC and Alberta) are the marginal suppliers to the U.S. market, accounting for 60 percent of Canada's exports (11 - 12 BBF in 2002), thus making up about 20 percent of U.S. consumption. The combination of low cost (see Table 1) and large volume means that they exert considerable influence over market prices, particularly the floor, below which prices won't go. For example, many producers on both sides of the border began curtailing production in 2002 due to weak prices. However, prices didn't stabilize until they approached WSPF costs in the second half of 2002. At that time, the curtailments by the larger WSPF producers brought the price slide to a halt. We can use WSPF costs as a guide to the price bottom, but not upside potential as that is influenced more by demand forces.

		AVC (average variable cost)/M		
Product KD(2X4)	**2001**	**2002**	**2003(F)**	**2004(F)**
SYP West	$279	$266	$271	270
WSPF	212	215	223	231
ESPF (Grt lakes)	267	253	266	281
Inland HF	292	285	272	268
		Price (FOB Mill)/M		
SYP	$325	$302	$289	$286
WSPF	275	262	245	247
ESPF (Grt lakes)	345	330	316	315
Inland HF	312	305	290	288
		Gross Margin/M & %*		
SYP	$46 (17%)	$36(14%)	$18(7%)	$16(6%)
WSPF	63(30%)	47(22%)	22(10%)	16(7%)
ESPF	88(34%)	77(30%)	50(19%)	34(12%)
Inland HF	20(7%)	20(7%)	18(7%)	20(7%)
		GM after 27% duty*		
WSPF	negative	negative	negative	negative
ESPF	0	0	negative	negative

TABLE 1: AVERAGE VARIABLE COSTS, PRICES AND GROSS MARGINS FOR KEY SPECIES. [SOURCE: RESOURCE INFORMATION SYSTEMS INC., NORTH AMERICAN LUMBER FORECAST, JULY 2003 (VOLUME 3, NO. 3).] *ONLY APPLIES TO 2X4 PRODUCT, NOT WHOLE CANADIAN INDUSTRY.

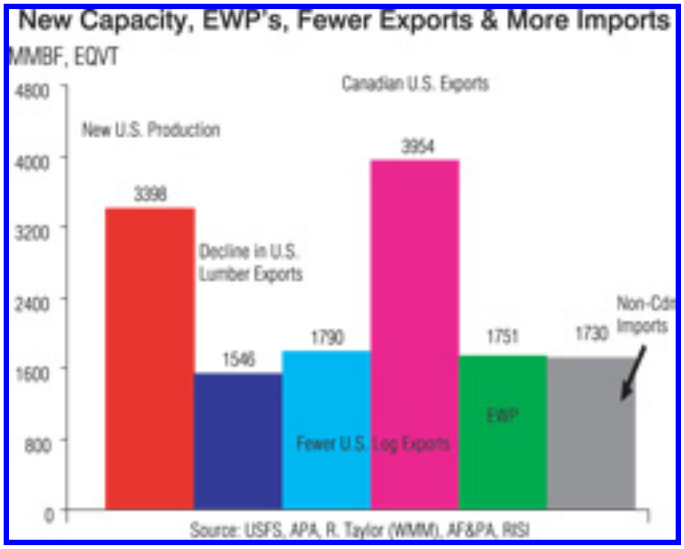
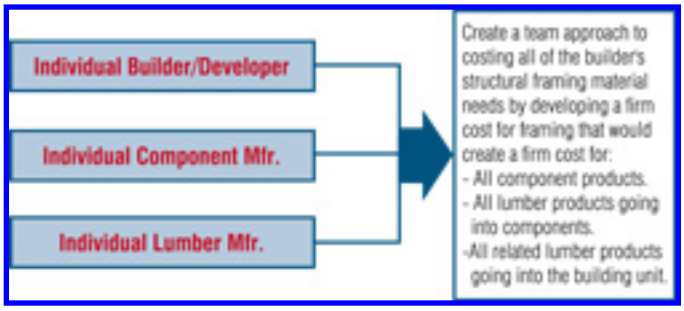


FIGURE 2. U.S. "SOFTWOOD LUMBER SUPPLY" INCREASED 14 BBF FROM 1993 - 2002.

MARKET OUTLOOK: PRICE, COST & MARGINS

The conclusion from the market outlook presented in the table above is that the North American lumber industry did not make much money in 2003. Gross margins were miniscule for U.S. producers while the duty and the stronger Canadian dollar turned the Canadian margins much lower for the industry. Most analysts don't expect 2004 to bring much, if any improvement in market conditions. Ongoing consolidation within the NA industry should bring supply into better balance with demand, which is expected to fall modestly in response to an anticipated pullback in residential construction (see SBC Magazine, September/October 2003). Most analysts don't expect prices to improve significantly until



consolidation removes excess capacity, which could take several more years (Russ Taylor's Wood Markets, June/July 2003; RISI's Lumber Commentary).

FIGURE 3

TOO MUCH "SUPPLY"

The problem is not on the demand side, as U.S. residential markets are expected to remain strong for the rest of the decade. The problem is too much supply: a combination of record NA production; lower offshore exports of lumber and logs as both Canada and the U.S. lose market share to traditional and non-traditional competitors; record non-Canadian imports; and substitution pressures from engineered wood products (see Figure 2). Between 1993 and 2002, U. S. domestic consumption increased about 11 BBF (from 45 to 56 BBF) or 25 percent, while additional supply increased 14 BBF, exceeding demand and keeping prices in check. In addition, the U.S. and Canada are losing their competitive position in offshore export markets not only to traditional competitors like Scandinavia and western Europe, but also to new ones in eastern Europe (e.g., Russia and the Baltic states), and new capacity in Chile, Brazil and Oceania. As reported by Russ Taylor (Wood Markets, November 2002), since 1995, European lumber capacity additions have exceeded NA increases. Furthermore, between 2003 and 2004, almost two BBF of new capacity is being considered mostly in Russia and the Baltic states. Alarmingly, European exports have increased significantly, often at the expense of NA exporters in key markets such as Japan and the Middle East. (Collectively, NA offshore exports have fallen from 6.75 BBF in 2000 to 2.7 BBF in 2002).

We are losing export markets because other regions have lower costs, including exchange rate advantages. According to Taylor's Wood Markets monthly (February 2002), the five regions with the lowest softwood variable costs are: Chile ($136/M), South Africa ($155/M), Brazil ($164/M), Canadian Prairies including interior BC ($183/M), and Sweden ($201/M). The best in the U.S. is the South ($280/M). Another source of "additional supply" comes from U.S. logs that traditionally were shipped to Japan that are now being converted into lumber for domestic markets. Finally, substitution pressures from EWPs like LVL and I-Joists are driven by efficiency trends in the residential construction industry to build houses with less lumber per square foot of floor area and reduce waste at the jobsite. It is going to be tough to make money in the commodity lumber business for the foreseeable future.

IMPLICATIONS FOR COMPONENT INDUSTRY

Margin squeezes and consolidation in the primary industry means:[1]

- Change is inevitable. If you are not willing to change at some point in time, you will become irrelevant. Those who embrace change and find opportunity will be the leaders of an industry.
- When you are a big industry, sometimes it is easy to become complacent and think that the way it has been is the way it will always be. Introspection, humility and improvement are the creators of success.
- Be creative or risk losing market share.
- Improve your product. Give buyers a new and better reason to pay more.
- Be unique. Make a product that no one else makes and price it competitively.
- Listen closely to your customers and serve their needs. Buyers do not need suppliers to tell

them what to do and do things for them; they need suppliers to work with them and serve them as members of their support team.

To that end, in 2001 WTCA and SLMA met and came up with thoughts on changing the way the softwood lumber industry and the component industry transact business through a new industry partnering concept (for full text see December 2001 "Knowledge Is Power" column in SBC Magazine). See Figure 3 to see that this concept would look like graphically.

The goal of the concept is to encourage a team approach to selling homebuilders so that all of the members of the team can contract for delivering their products in a manner that is mutually beneficial to each business' long-term profit goals and return on investment.

For this to work, the goal must be to develop long-term team, partnering or alliance-type relationships between the individual component manufacturer and lumber manufacturer.

This is particularly attractive for housing developments that extend on for more than six months. The goal is to reduce the volatility/uncertainty in the cost of lumber for those creating a team-type approach, while at the same time creating a win-win solution to meeting the component manufacturer customer needs that include:

- Lowest in-place cost possible for the products purchased
- Cost stability
- Construction cycle time reductions
- Labor efficiency improvements
- Labor availability improvements or labor replacement
- Durability and quality—no call-backs

Partnering will allow the lumber company to get out of the pain of the commodity marketplace and into a marketplace that, with creative marketing and listening closely to customer needs, will add value and a consistent gross margin. Over time, it is certainly possible to create products that are unique and specific to your partner's needs, yielding better margins for both partners.

Some analysts, this one included, think the industry needs to "grow the pie" by developing markets outside residential construction (Schuler, A. and C. Adair, Engineered Products—an Opportunity to Grow the Pie. In proceedings, 37th International Wood Composite Materials Symposium. April, 2003. Pullman, WA.). This is another area where partnering between lumber suppliers and component manufacturers could have a very large impact, given that the non-residential market has a longer gestation period than residential construction. Hence, lumber price volatility can kill a project before it starts.

Change is inevitable and for those that continually assess change, opportunities always present themselves. Some will consider getting into the component manufacturing business making panelized wall and engineered floor systems, in addition to considering the truss business and any other opportunities to insulate themselves from pure price competition of commodity lumber.

In today's economic environment, there is great opportunity to get much closer to current and potential customers than ever before, listen closely to their needs (like supplying specific quality products such as cut-to-size material and better seasoned products) and fill them. In today's market, buyers need suppliers to work with them and serve them as members of their support team. Close collaboration often benefits both companies.

How will this process evolve? Some will buy existing component companies; some will form strategic alliances with the component industry; and some will create brand new component manufacturing facilities. The next few years will be full of significant changes and the component industry should plan for both opportunities and threats.

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[1] Adapted from the December 2001 "Knowledge Is Power" column in SBC Magazine.

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