FUTURES MARKET MAY OFFER SHELTER FROM UNCERTAINTIES IN VOLATILE COMMODITIES

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Suppose you were a Canadian sawmill operator whose quota of tariff-free shipments to the U.S. under the U.S.-Canada softwood lumber agreement was 14.7MMBF. That comes to about 282MBF weekly. But suppose by January 1, 1999, three-quarters through the quota year, your actual weekly shipments averaged 300MBF. Simple arithmetic tells you that your remaining tariff-free allotment allows you to ship only 230MBF per week for the last three months. Anything in excess would incur fees ranging from $50-$100, as stipulated by the agreement. Current prices are under $300, enough to cover costs but with not much left over. Paying the tariff would mean taking a loss on the affected volume. Thus, your most likely option is to take two to three weeks of downtime when your quota is exhausted meaning a shortfall in weekly supply of about 70MBF.

You know this. Your customers know this. The market knows this. So on or around the end of the year, buyers start bidding up the price of the available lumber. By mid-January, the market has rallied over $50. If you now ship more than your quota, the higher price at least allows you to recover most of the cost of the duty. But is that as good as you can do? Is there some other way to ship the extra volume while keeping the higher prices?

Table 1. Relationships of ⅞ in. OSB sheathing weekly prices in different regions relative to the North Central price for 1994-1998.

Region	Correlation in trend	Correlation in change	Average premium	Standard Deviation
E. Canada	0.994	0.882	-14	6
Northeast	0.993	0.904	-8	7
Southeast	0.986	0.867	6	10
Southwest	0.983	0.851	6	10

(Data courtesy of Crows.)

In a word, yes. As prices rally, you can limit your sales for immediate shipment to me tariff-free amount. The excess is temporarily stored in your yard, but pre-sold at current high prices on the Chicago Mercantile Exchange (CME) futures market for March delivery. That contract expires on March 15. By the rules of the CME, you have until the end of that month to declare your intention to deliver. Within two days of giving this notice, the buyer has to provide shipping instructions, after which you have seven days to ship. This timeline means that you can defer shipments into the new quota year when your allotment restarts from a base of zero, but locked in at prices that prevailed when the market recognized and reacted to the looming shortage.

In fact a similar scenario unfolded as the quota year unwound this spring. Attentive market observers will have noted that the open interest (the number of outstanding futures contracts) rose by about 1,750 in the two weeks following January 5 when the March contract rose in price from $308 to over $360. Thus, almost 150 million additional feet of lumber was potentiaily obligated against futures contracts. mostly for March. Very little lumber was actually delivered because the contract's price fell as expiration neared, allowing sellers to cover their positions profitably and sell the wood normally in the cash market. But this illustrated the potential value to marketers of forward pricing where such an option exists.

Is there a similar option available to producers of oriented strandboard? Yes, but only in theory. The OSB contract was first listed for trading on November 8, 1996, but has languished ever since with minimal activity. The lack of interest among producers is puzzling considering the nature of the product. Sheathing OSB is a standardized, fungible commodity. Little differentiates one producer's board from another's: they all conform to the same product standards, bear the same grade stamps and, aside from minor variances in color and density, look and feel alike. Thus price is the major consideration in its marketing.

But pricing in OSB is exceptionally volatile stemming in part from the inelastic nature of its demand and supply. Most OSB is used in home construction, where its share of total costs is small. Consequently, OSB prices are not decisive in homebuilding decisions and builders will demand it within a broad band that is limited on the upside by the price of plywood, its principal substitute, whose price generally fluctuates around $300.

On the supply side, it's easier to stop the Exxon Valdez than a $100 million OSB plant. Only when prices fall below manufacturing costs do production curtailments get serious considera-

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tion. In round numbers, that lies around $150. In between those extremes, prices can rattle around like a loose bolt on an airplane in turbulence in response to new supplies (new plants coming on stream) or changes in demand (housing start fluctuations, hurricanes, etc.) with little more than inventories in the system to buffer their momentum.

Futures markets are most useful precisely in such circumstances. Because they involve longer time horizons than the spot market, they allow sellers or buyers to lock in sales or purchases at known prices, thus reducing the uncertainty stemming from unexpected future events.

The OSB contract is configured much like its more highly traded lumber counterpart. The delivery time sequence is identical. The pricing is different, being based on delivery to the switching yards in Chicago rather than f.o.b. at the plant. The contract is slightly larger at 100,000 square feet and calls for the delivery of 7/16 in. thick sheathing manufactured to product standards specified in PS-2-92, Performance Standard for Wood-Based Structural-Use Panels.

So why then have OSB producers not used this market more? One reason cited is that, unlike lumber, much of the OSB is marketed under long-term contracts that guarantee outlets for most of the output. However, unless the contracts specify a price, they provide no protection against price changes.

Another suggested reason is the limiting of deliveries to Chicago. Mills are scattered across the continent and freight costs to Chicago vary. A futures price that may be attractive to a mill in Wisconsin may be less so to a mill in Texas. Local market conditions may also differ, leading to the possibility that prices in Chicago may go one way while prices near a plant go another, the financial equivalent of the splits.

However, OSB is often delivered outside of local territories as market conditions dictate. When regional prices are compared we find that their movements mirror each other's closely **(Table 1).** On a trend basis, correlations are nearly perfect. Week-to-week price changes are also highly correlated. Thus, even mills in remote locations can have high confidence that their exposure to diverging price trends is small.

Moreover, while for many plants physical delivery to Chicago may be unattractive, so-called "ex-pit" transactions offer an economic alternative. In such instances, sellers and buyers located close to each other can agree to liquidate their contracts before expiration by exchanging the physical product on mutually acceptable terms. This allows them to avoid the cost of a superfluous detour to and from Chicago. The brokers on the exchange floor are not involved as the parties themselves execute the transactions.

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The low trading volume is also a barrier to wider participation. This, however, is a chicken-and-egg situation that can't be resolved until somebody gets the activity going. Since plants have not taken the lead, the CME is considering rule changes to extend delivery privileges, allowing anyone to deliver against the contract from certified warehouses in the Chicago area. Whether this will jump-start trading remains to be seen.

Trading in futures markets is an experience that, for the average person, comes closest to replicating a tiger hunt armed only with a blunt lance. A moment's reflection, on the other hand, should convince most that for bona fide hedgers (producers or users of a commodity), the futures market is something else, offering shelter from the uncertainties inherent in volatile commodity markets.

A well used futures market is useful as a vehicle for price discovery, as a market safety valve and as a revenue smoothing mechanism. Hedging programs can be used as a means to lock in prices that make sense given what is known about the industry's costs, capacity and demand. In much the same way that plant personnel optimize press schedules to achieve best results, hedging programs can be fine-tuned using computers to verify strategies against historical data. Then, with disciplined execution of the strategy, a futures market can also serve as a revenue-enhancing tool.

There are some who can't resist the temptation to use futures markets as a vehicle for speculation and end up increasing their market risk with potentially costly consequences. For those, perhaps the best strategy is to take their chances in the spot market alone. But in either case, the OSB industry should think through the desirability of a viable futures market as part of its marketing toolbox because as the saying applies: use it or lose it. **PW**