

## MERCHANDISERS' CORNER

By Diana Klemme

# Makin' Money

It's a crisp morning with a hint of autumn in the air. Mike pulls up to the elevator in his pickup and shuts off the engine, pausing before climbing out to open the office and start another harvest day. As the trucks and wagons begin to arrive and farmers stop in for some morning coffee, Mike sits in his office looking over the year-to-date financials. Volume looks promising — he expects local crops will overrun the capacity of area elevators this harvest — but Mike wishes the fiscal year grain results were better. Soybean merchandising revenue has been surprisingly good given the extreme volatility in basis and the summer's huge futures inverses. But corn has been a challenge in recent months. The ethanol plants drained volume from the co-op and farmers held stubbornly as futures prices declined. Now Mike wonders how

this crop year will turn out. The co-op's board wants to see a bigger return but the nearby ethanol plant outbids Mike. At least the co-op's interest expense has declined this year!

Mike switches on his computer and opens a spreadsheet. He wants to look at this situation objectively. Mike is already working on ways to reinforce relations with farm customers, and he thinks that will help maintain volume. But does matching the competitor's bids also make sense? Despite the big crops, Mike is still concerned he'll lose volume this fall if he doesn't cut his margin a little and raise his bids. But could he possibly come out ahead by handling less volume at a bigger margin?

He pauses and jots on a notepad the numbers he needs to consider:

- estimated volume at different handling margins

- possible handling margins
- variable cost of handling a bushel
- other income from volume

Figuring the variable cost is difficult. Mike thinks to himself for a moment, *"What costs do I incur only when I put grain through this house. Let's see . . . I'll figure the fixed costs first: electricity to turn on the lights, wages for the guys who work 8 to 5 even when we're idle, insurance, depreciation, vehicles, office staff, etc. So what's left must be mostly the variable costs: electricity to run the legs and conveyors, repairs, any overtime labor, fuel for trucks, fumigants and so on. These costs are hard to break out, so I need to run scenarios using two or three different variable costs per bushel and see a range of outcomes. I also know that some variable costs (per bushel) decline a little on higher volume but I can only tweak this so far."*

Ques: What is the impact on revenue if I raise or lower my bid margin and change my handling volume?

Volume Bu.	Bid Margin	Gross \$	Variable handling cost per bushel		
			\$0.040 Variable cost total	\$ towards fixed costs	
1,000,000	X \$0.060	= \$60,000	- \$40,000	= \$20,000	+
900,000	X \$0.065	= \$58,500	- \$36,000	= \$22,500	+
800,000	X \$0.070	= \$56,000	- \$32,000	= \$24,000	+
700,000	X \$0.075	= \$52,500	- \$28,000	= \$24,500	+
600,000	X \$0.080	= \$48,000	- \$24,000	= \$24,000	+
500,000	X \$0.085	= \$42,500	- \$20,000	= \$22,500	+
400,000	X \$0.090	= \$36,000	- \$16,000	= \$20,000	+
300,000	X \$0.100	= \$30,000	- \$12,000	= \$18,000	+

Variable numbers are shaded in green or yellow.

Ques: What if I can hedge and hold the grain and earn basis revenue (after interest)?

Volume Bu.	Bid Margin	Gross \$	Net basis gain/bu.		Total	per bu.
			\$0.15 Est. net basis return	\$0.05 Alternate net basis gain/bu.		
1,000,000	X \$0.060	= \$60,000	+	\$150,000	\$170,000	\$0.170
900,000	X \$0.065	= \$58,500	+	\$135,000	\$157,500	\$0.175
800,000	X \$0.070	= \$56,000	+	\$120,000	\$144,000	\$0.180
700,000	X \$0.075	= \$52,500	+	\$105,000	\$129,500	\$0.185
600,000	X \$0.080	= \$48,000	+	\$90,000	\$114,000	\$0.190
500,000	X \$0.085	= \$42,500	+	\$75,000	\$97,500	\$0.195
400,000	X \$0.090	= \$36,000	+	\$60,000	\$80,000	\$0.200
300,000	X \$0.100	= \$30,000	+	\$45,000	\$63,000	\$0.210

He enters a starting volume number (see above table) of 1 million bushels, some possible handling "back to back" margins, and an estimated variable cost to handle each bushel. Next he varies his expected volume as he raises the bid margin.

Mike sets up the spreadsheet so he can easily change the margins and the impact on volume. He quickly determines that if working on a slightly higher margin may cost him some volume, it won't cost him dollars in this scenario. Higher volume would bring in more gross dollars, but depending on the variable cost per bushel and the impact on volume, Mike's net revenue may be better at lower volumes. In this situation Mike defines "net" as the revenue left after variable costs; the revenue available to cover fixed and other overhead costs, and provide a return for the business.

His scenario shows that handling 1 million bushels at a 6¢ "back to back" margin earns him less than handling 600,000 bushels at an 8¢ margin, assuming a 4¢/bushel variable cost.

There's more to consider, however. At harvest Mike fills bins and holds grain (hedged) for basis appreciation. He figures this year basis gains should net (after interest) about 15¢ per bushel. So Mike adds some columns to the spread-

sheet to factor in that revenue. He also adds columns where he can plug in higher or lower numbers for basis appreciation.

The preliminary results show that reducing his back to back margin to get more volume is effective when filling bins with company-owned grain (But only if he would have missed the bushels otherwise. see chart above). The dollars earned from the basis appreciation quickly offset the reduced revenue from the lower handling margin. It isn't logical to cut margins just to fill faster than his competitor, however.

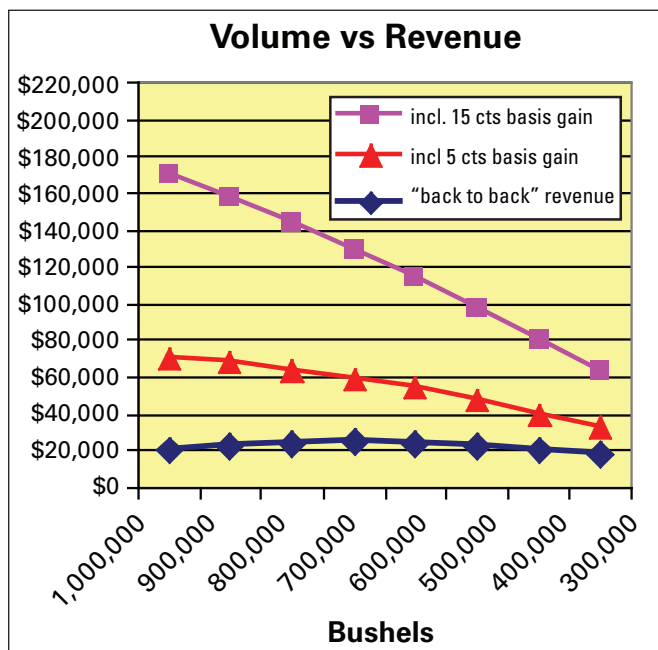
Mike suddenly stops: "What if the basis doesn't pay a good carry?" He lowers his estimated basis gain from 15¢ to 5¢ (net of interest) just to see the impact and is shocked that the higher volume then only nets a few thousand extra dollars.

Mike quickly realizes that he needs to be more cautious once the bins are full and

he can't earn basis appreciation, or if market carries disappear. At that time he should widen his bid margin on grain he'll have to ship immediately, even though he may risk losing a few bushels.

He's also shocked to see just how little revenue his "back to back" margin really brings to the business. If he handled 5 million bushels at a 6¢ gross margin and 4¢ variable cost, it still only brings \$200,000 towards fixed costs. But these situations assume nothing goes wrong — no quality loss, no excess shrink, and so on. Mike's 1,000,000 bushel scenario nets just \$20,000, a margin of 2½¢/bushel. No wonder the financials aren't showing better returns.

The challenge is to find the



point where increasing the “back to back” margin doesn’t cost the elevator too much volume. When crops are wet there will be drying revenue. Mike also sells fertilizer and feed and wants to retain those customers as well as keep the farmers coming for future grain business. Feed margins are very good and Mike wonders if losing grain bushels might mean losing feed business. Who knows, maybe the farmers will bring their grain in regardless of price, because of the co-op’s excellent service and quality of feed products.

Mike pushes back from his desk, resolved to do this more often. Quantifying possible scenarios and outcomes has cleared his thinking. He’s resolved to stand the line more and not push bids so readily, and to focus even more on maximizing basis gains.

Mike also makes a note to himself to create another spreadsheet to analyze storage, DP, and drying rates and revenue. He wonders if he’ll see comparable results.

Some may look at this spreadsheet and see a different story: that the higher volume still brings at least some dollars to the table as long as you cover variable costs. Then you can focus on the related revenue and benefits. Some elevators make much of their money on “mix and blend,” for example, and volume can help that.

Running an elevator costs a lot of money – far more than in the past. Prior to 2008 the grain industry had long been noted for its fear of missing volume. Many facilities chased competitors and pushed bids to the point where the handling revenue wasn’t enough to sustain the business and suc-

cess depended on service charges and hedging/basis revenue. That meant that when carrying charges vanished, so did elevators’ profits. Mike vows to make sure this co-op can survive volatility and maximize revenue. ■

**Footnote:** *The handling margins and basis appreciation figures shown in the tables are strictly for illustration. These numbers should not be taken as a recommendation for any individual business.*



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